Pepperdine University

Graduate School of Education and Psychology

RECOGNITION AND RESPONSE: EARLY LITERACY IN AN INCLUSION-BASED PRESCHOOL PROGRAM

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Education in Leadership, Administration and Policy

by

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November, 2014

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DEDICATION

Pursuing a doctorate in education was truly a journey, and it would not have been possible without the ongoing support and patience of my family.

To my husband, John, who read every word of this dissertation more than once. Your talents as a writer and communicator inspired me to keep revising until I had it right. Thank you for your love, support, and patience especially during the last three years.

To my children Rene, Amanda, and Jonathan, who gave me the hugs and smiles when I needed them the most. Your love carried me through this process. I am looking forward to having weekends back so we can have fun together.

To my parents, Irene and Miguel, for always believing in me and for instilling a strong work ethic that guides my belief that effort creates ability. Finally, to Justin, my godson who inspired me to select this topic and to learn more about how recognizing and responding to early literacy needs at the preschool level makes a difference in our youngest students.

ACKOWLEDGMENTS

Pursuing a doctorate in education was a huge endeavor, and I could not have made it without my Pepperdine Cohort Nine friends. Thank you to Dawn, Ann, Shelley, Tiffany, Charles, Bill, Victoria, Matt, Erika, Richard, Ashley, and Suzanne for making this program the most impactful educational experience I have ever encountered. The conversations we engaged in have made me a better educator. Suzanne, thank you for assisting me with my data collection and for always being a text away- I am so happy we took this journey together.

During my coursework at Pepperdine, I have learned that I can become a more effective change agent to ensure equity for all students. I am so very fortunate to have three of my most inspirational professors on my dissertation committee. Dr. McCabe, thank you for making me think differently through the participatory action research project. As you said, it was messy but, as a result, I will problem solve in a very different way. Dr. Lund, thank you for imparting on me how essential it is to look through many lenses when guiding a school or district. You have taught me to pause and to think strategically about the development and implementation of a school or district vision.

Dr. Purrington, you are the one who had the faith in me and accepted me into this program. To have you guide me as my dissertation chairperson has been a priceless gift. I can say without question that your ongoing support, guidance, and time made all of the difference in this process.

Finally, I want to thank my niece, Kristen, who spent hours and hours coding data with me. You are such a thoughtful and intelligent young woman, and I know you will accomplish great things.

VITA

Academic Preparation

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ABSTRACT

The purpose of this case study was to investigate and describe Recognition & Response (R & R) practices, a model of early literacy Response to Intervention, utilized by multidisciplinary staff teams in a purposively selected, inclusion-based preschool program in Southern California. Investigated R & R practices included: (a) recognition of student needs through assessment, (b) collaborative problem-solving as a process to plan and evaluate next steps for students, and (c) response through a multi-tiered instructional approach.

The researcher utilized a qualitative case study design. The single district preschool program selected is comprised of ten inclusion-based classrooms located on two elementary school sites. The four-year old classrooms within this program were purposively selected for this study. The researcher designed an interview protocol, an artifact review form, and a classroom observation tool.

The findings of the study were synthesized into four overall conclusions. First, informal assessment is critical for providing intentional early literacy experiences to students. Second, informal problem solving between members of a multidisciplinary team is essential in planning an instructional response to support student early literacy needs. Third, a core literacy program that reflects agreed-upon literacy targets through thematic units and a range of learning formats across classroom is key to recognizing student early literacy needs. Fourth, the embedded use of multi-tiered instruction is a means of providing students with access to core literacy curriculum.

One policy implication is related to the current funding model for public preschool programs. The restrictions can serve as obstacles for implementing the practices described in this study. Three practice implications include the development of leadership and vision for early

childhood programs, investment in the professional learning of early childhood education teams, and the allocation of time for teachers and support staff to engage in critical conversations.

Future studies that may benefit the early childhood profession include a longitudinal study of the program and a study of longevity of staff who serve on multidisciplinary teams. A third recommended area of study is to explore how, if at all, prompts support or hinder student independent use of learned skills in early childhood classrooms.

Chapter 1

Background of the Study

Literacy in a global society is critical to college and career readiness in the United States. The literacy skills required to successfully enter college and career reflect the literacy skills students are expected to have mastered through their cumulative educational experiences at the secondary, elementary, and preschool levels. As students matriculate through school, literacy gaps can widen, spurring interest in early intervention. Recognizing and responding to literacy gaps is a nationwide focus. States and local education agencies seek to address these literacy gaps across grade level spans. Legislative and reform efforts and an emphasis on 21st century skills have become particularly dynamic at the early childhood level. Additionally, professional organizations guide efforts to continuously improve early intervention.

The year 2010 marked the adoption of Common Core State Standards (CCSS) by 45 states and demonstrated a nationwide focus to prepare students for college and career readiness through consistent English Language Arts and Math standards. This multistate initiative seeks to increase overall student performance and reduce achievement gaps among diverse student groups (National Governors Association Center for Best Practices, 2010). The CCSS consists of high academic standards and 21st century skills needed to be successful in the United States and abroad, developing students capable of successfully competing in the global economy. The Partnership for 21st Century Skills (2013) describe student outcomes as a blend of core subjects with learning and innovation skills including information, media, and technology skills.

The CCSS draws upon college and career readiness standards expecting students to demonstrate independence, critical thinking, and analysis skills in comprehending and critiquing literature and non-fiction texts. These rigorous expectations require an integrated approach to

literacy instruction as well as alignment across grade levels, starting when a child begins their educational journey, so that students build on prerequisite skills from year to year (National Governors Association Center for Best Practices, 2010).

Future success in high school and beyond can be predicted by student performance in the elementary grades. Hernandez (2012) found that students who do not master reading by the end of third grade continue to struggle in the later grades and are at risk for dropping out of high school. The process of becoming a fluent reader and writer is an accumulative process that begins prior to formal reading instruction in the early elementary grades.

As students enter kindergarten, differences exist in terms of foundation for learning. Kindergartners who enter school without a strong foundation in early literacy are at risk for later reading difficulties and referrals to special education (Whitehurst & Lonigan, 1998). Furthermore, early literacy skills are predictive of future reading and writing success, making it essential to recognize early literacy gaps and to craft an instructional response (Cunningham & Stanovich, 1997).

As researchers continue to learn about the importance of a student's reading trajectory from the first day of school through high school, policy makers, professional organizations, and educators encourage families to enroll their three to five year olds in preschool as a way to prevent academic deficits prior to entering kindergarten (Beauchat, Blamey, & Walpole, 2009; US Preventive Services Task Force, 2006). While the percentage of children attending preschool has grown, the achievement gap continues to exist across K-12 schools, creating a paradigm shift in the way preschool teachers approach early literacy (Greenwood et al., 2012).

The CCSS established expected learning outcomes for students. However, educators continue to grapple with how to recognize learning gaps and respond strategically when students

do not reach expected outcomes through the core instruction. On a national level, the Response to Intervention (RTI) framework has gained momentum and results, particularly at the elementary level. The RTI framework is a systems-based approach for improving the academic or behavioral success of students. The National Center for Response to Intervention (NCRTI) identified four essential components of RTI: (a) a preventative school-wide, multi-level instructional and behavioral system; (b) universal screening; (c) progress monitoring; and (d) data-based decision making for instruction, movement within the multi-tiered system, and disability identification in accordance with state law (National Center on Response to Intervention, 2010).

The California Department of Education (CDE) further defined RTI as a systematic and data-driven approach to differentiating instruction based on identified student needs. CDE includes a second "*I*" for instruction, using the acronym RTI^2, for Response to Instruction and Intervention, so that the range of instruction, from general to intensive, is underscored (California Department of Education, 2013b).

Although RTI research and resources can be easily found at the elementary level, a gap in the literature exists at the preschool level (Ball & Trammell, 2011). In an effort to provide preschool educators with RTI resources, the Center for Response to Intervention in Early Childhood (CrtiEC) was established. The CrtiEC is a national network committed to conducting research to further support RTI for three to five year olds. For example, CrtiEC developed a list of research priorities which includes a focus on research-based early literacy instructional interventions and progress monitoring assessment tools (Center for Response to Intervention in Early Childhood, n.d.). In an effort to increase learning and reduce achievement gaps early on,

there is a need to better bridge the transition from preschool to kindergarten with further study of RTI oriented practices at the preschool level.

Problem Statement

Previous studies indicate that students who struggle as readers in elementary school have not mastered early literacy skills, including phonemic awareness and vocabulary; and yet young children have the capacity to build early literacy skills in preschool (McGee & Ukrainetz, 2009; Wasik, 2001). The alignment of early literacy instructional and assessment practices is fundamental in preventing future reading difficulties in elementary school and beyond.

An RTI framework offers K-12 educators a framework for systematizing instruction, assessment, and support. The emergence of preschool RTI models indicates an effort to better align instructional and assessment practices from preschool to kindergarten. M. R. Coleman, Buysse, and Neitzel (2006) proposed a model called Recognition and Response (R & R) which can be applied independent of a prepackaged curriculum. The 2009 R & R pilot included 350 four-year old preschoolers with results suggesting that children who received the targeted interventions made gains in letter naming, vocabulary, sound awareness, and print knowledge (Ramaswami, 2010).

However, the application of the R & R model is emerging, and additional research is needed to guide early childhood educators in selecting assessment tools, collaborative problem solving, and multi-tiered instructional practices to respond to early literacy gaps. A review of the literature suggests that the R & R model provides a framework of promising practices that can guide preschool teachers in responding to early literacy needs.

Therefore, an opportunity exists to further examine R & R practices in collaborative preschool programs, where multidisciplinary teams work together to differentiate early literacy experiences to meet the needs of students with and without disabilities.

Purpose Statement

The purpose of this case study was to investigate and describe Recognition & Response (R & R) practices, a model of early literacy Response to Intervention, utilized by multidisciplinary staff teams in a purposively selected, inclusion-based preschool program in Southern California. Investigated R & R practices included: (a) recognition of student needs through assessment, (b) collaborative problem-solving as a process to plan and evaluate next steps for students, and (c) response through a multi-tiered instructional approach.

Importance of Study

R & R practices are emerging, and little research exists on the application of these practices in early literacy in different preschool settings. The outcomes of this study can add to the literature, have practical implications for preschool program directors and staff teams, and may lead to significant benefits for students.

First, outcomes of this study can inform the way directors select and communicate a vision for early literacy, determine staffing, and plan professional development priorities and local policies related to R & R practices.

Second, the outcomes of this study can potentially lead to the replication of strategies by collaborative preschool teams who also want to improve early literacy in their students related to recognition of student needs through assessment, collaborative problem solving, and response through an instructional tiered approach in early literacy. The outcomes of this study can also

inform the way preschool staff and service providers communicate around best practices for supporting students in early literacy.

Third, the outcomes of this study can benefit students. This study can inform preschool staffs as they utilize R & R practices to recognize and respond to the early literacy needs of students with and without disabilities. Additionally, the outcomes of this study can lead to an increase in early literacy skills for our youngest students, better preparing them for the elementary grades, high school, college, and career.

Definition of Terms

California Preschool Learning Foundations: The three volumes of the Preschool Learning Foundations "describe the competencies, knowledge, and skills that most children can be expected to exhibit in a high-quality program as they complete their first or second year of preschool" (California Department of Education, 2008, p. 11).

California State Preschool Program: California State Preschool Programs are part-day and full-day educational programs for low-income or otherwise disadvantaged three- and four-year old children (California Department of Education, 2010b, p. 4).

Collaborative Problem Solving: A practice of teachers, parents, and specialists working together to plan levels of instruction while assessing how well children respond to the instruction (V. Buysse & Peisner-Feinberg, 2010).

Curriculum Based Measurement (CBM): Quick assessments that measure expected learning outcomes are called Curriculum-Based Measurements (CBM). CBMs are used to monitor students' individual and class-wide progress towards targeted long term goals (Stecker, Fuchs, & Fuchs, 2008).

Data-Driven Decision Making: Mandinach (2012) defines data-driven decision making (DDDM) as a "…systematic collection, analysis, examination, and interpretation of data to inform practice and policy in educational settings" (p. 71).

Desired Results Developmental Profile- PS (2010): "The DRDP-PS is designed for teachers to observe, document, and reflect on the learning, development, and progress of all children in an early care and education program" (California Department of Education, 2010c, p. 4).

Early Literacy Skills: These skills describe what skills three to five year olds should master prior to entering kindergarten. The Center for Response to Intervention in Early Childhood (CrtiEC) has identified four major domains in this area: phonological awareness, print awareness/alphabet knowledge, vocabulary, and comprehension (Center for Response to Intervention in Early Childhood, n.d.).

Early Childhood Educator (ECE): A teacher assigned to teach in a preschool or child care setting. In the State of California, preschool teachers are required to hold a valid Child Development Permit-Early Childhood/Preschool (State of California Commission on Teacher Credentialing, 2011).

Early Childhood Special Education Teacher (ECSE): A teacher assigned to teach children ages birth to five, with mild/moderate or moderate/severe disabilities, in an early childhood setting. In the State of California, early childhood special education teachers are required to hold a valid Education Specialist Instruction Credential and the additional ECSE authorization (State of California Commission on Teacher Credentialing, 2012).

Embedded Learning Activities: Experiences designed to practice skills taught in Tier 2 outside the small-group time, such as during free choice or centers (V. Buysse & Peisner-Feinberg, 2010).

Fee-Based Preschool Program: California State Preschool program directors may assess full-time or part-time fees based on the family's size and income eligibility, program type, and the number of hours per day the child is enrolled (California Department of Education, 2011).

Head Start Preschool Program: The program is prominent in California, and is a full-day federally-funded preschool program. Head Start was established in 1965 with the intention of providing young children from lower socio-economic backgrounds with a rich educational experience so that they are prepared to enter kindergarten (Zigler & Styfco, 2000).

Inclusion: Planned social and academic opportunities for students with disabilities to engage with students without disabilities. Educators in these settings make modifications as necessary so that students can participate (Fisher, Frey, & Thousand, 2003).

Individualized Education Program (IEP): Each child who receives special education and designated instructional services (DIS) in a public school system must have an Individualized Education Program (IEP). The development of an IEP affords teachers, parents, school administrators, DIS providers, and students (when appropriate) to work together to plan a program to maximize the educational results for students with identified disabilities (National Center for Learning Disabilities, 2007).

Los Angeles Universal Preschool Program (LAUP): Local education agencies may seek partnerships with non-profit organizations. In Southern California, the Los Angeles Universal Preschool program (LAUP) mission is "to provide access to quality early childhood education programs in Los Angeles County" (Los Angeles Universal Preschool, 2013).

Multidisciplinary Team: In an inclusion-based preschool program, a multidisciplinary staff, including preschool staff, speech and language pathologists, and other specialists, is assigned to serve identified students who have speech or language impairments, fine or gross motor delays, or other special needs (Ritzman, Sanger, & Coufal, 2006).

Multi-tiered Instructional Approach: A tiered model of instructional practices teachers use with all students as the core while making accommodations, modifications, and differentiating based on the individual needs of the student (D. Fuchs & Fuchs, 2009).

Progress Monitoring: The term applies to assessment tools used to measure an individual students' responsiveness to core instruction (D. Fuchs & Fuchs, 2009).

Research-based Curriculum: A high quality curriculum that is comprehensive, age-appropriate, covers all domains of learning, and is deemed effective based on research (V. Buysse & Peisner-Feinberg, 2010).

Recognition and Response (R & R): R & R is an emerging practice in early childhood based closely on the principles of RTI but adapted for younger children enrolled in various types of early care and education programs, including programs that serve children with and without disabilities (V. Buysse & Peisner-Feinberg, 2010).

Response to Intervention (RTI): A framework used to provide an integration of a multi-tiered instructional approach, assessment system, and intervention to prevent future learning difficulties. The application of RTI may vary based on school setting (D. Fuchs & Fuchs, 2009).

Scaffolding: Teacher's use of scaffolds is a strategy to temporarily provide support to a learner and then gradually withdraw this support as the learner can perform the skill independently (McGee & Ukrainetz, 2009).

Speech and Language Pathologist: Therapists with expertise in language and communication development who serve individual students and consult with classroom teachers (Sanger, Mohling, & Stremlau, 2012).

Tier 1: This tier of instruction is the adoption of a comprehensive, evidence-based core curriculum. Class interventions such as increasing the engagement level, activity extensions, or slowing down the flow of the lesson are considered class-wide interventions that are part of this tier (Barnett, VanDerHeyden, & Witt, 2007).

Tier 2: This tier of instruction includes additional classroom-based interventions and support for children not responding to the core classroom curriculum. Tier 2 instruction occurs in small group or is embedded within classroom routines or centers (Barnett et al., 2007).

Tier 3: This level of instruction involves more frequent progress monitoring and intensive, individualized interventions, modeling, and teacher supports. Tier 3 instruction occurs within small groups or a one-to-one basis (Barnett et al., 2007).

Universal Screening: This term applies to assessment tools administered to identify students who are reaching key benchmarks and those who have not (FPG Child Development Institute at University of Chapel Hill, 2006).

Conceptual Framework

The National Center for Response to Intervention (NCRTI) identified four essential components of RTI: "(a) a preventative school-wide, multi-level instructional, and behavioral system; (b) universal screening; (c) progress monitoring; and (d) data-based decision making for instruction, movement within the multi-tiered system, and disability identification (in accordance with state law) (National Center on Response to Intervention, 2010). Within an RTI framework, two components include recognizing student needs through assessment practices. All students

are screened at predetermined times of the year to ensure progress towards expected outcomes. Additionally, the screening will identify students who are not making the expected progress. Assessment will occur more frequently for these students, using progress monitoring tools (National Center on Response to Intervention, 2010). A third component identified by NCRTI is data-driven decision making in collaborative teams. Team members bring unique perspectives and expertise to the discussion. Members include the general education teacher, special education teacher, service providers (i.e. speech and language pathologist), and parents. The fourth component of RTI is an adopted school-wide, multi-tiered model of instruction. This approach improves instructional quality for all children and is responsive to the students' cultural and linguistic backgrounds. Core curriculum, supplemental, and intensive strategies are research-based (National Center on Response to Intervention, 2010). The California Department of Education published its philosophy of RTI, adding a second I for instruction. RTI^2 consists of ten components which expand on the NCRTI definition with the four components being further defined. RTI has been found to be effective in the K-5 setting. Early childhood educators are considering how this framework can be applied at the preschool level.

Emerging RTI Preschool Models and a Unified Theory of Practice

Lieberman-Betz, Vail, and Chai (2013) conducted an extensive review of 28 articles to examine the application of an RTI framework in early childhood programs. The authors recognized that RTI in early childhood was not simply a downward extension of RTI, but would need to be tailored to guidelines deemed appropriate by early childhood organizations. For that reason, authors selected RTI models that were aligned with Odom & Wolery's (2003) *Eight Tenets of Early Intervention and Early Intervention/Early Childhood Special Education*

Programs (EI/ECSE). The eight tenets are linked with belief statements from both the National Education of Young Children (NAEYC) and the Council for Exceptional Children (CEC).

Using these criteria, the authors identified five early childhood RTI models aligned with EI/ECSE tenets. The three developmental-based RTI models examined included *Achieving Science-Based Practice Through Response to Intervention* (Barnett et al., 2007), *The Pyramid Model* (Fox, Carta, Phillip, Dunlap, & Hemmeter, 2010), and *Response to Intervention: Implications for Early Childhood Professionals* (Jackson, Pretti-Frontczak, Harjusola-Webb, Grisham-Brown, & Romani, 2009). Two academic-based RTI models examined were the *Exemplary Model of Early Reading Growth and Excellence (EMERGE)* (Gettinger & Stoiber, 2008) and *Recognition and Response (R & R)* (V. Buysse & Peisner-Feinberg, 2010).

The R & R model is one of the two academic models found to be aligned with recommended components and the EC/ECI eight tenets. R & R is emerging and suggests that there are promising practices that guide preschool teachers in recognizing and responding to students' early literacy needs. R & R is designed to address academic-based skills and can be applied independent of a prepackaged curriculum.

The eight tenets of EC/ECI (Odom & Wolery, 2003) give credence to the R & R model. For example, one tenet, "children learn through acting on and observing their environment" (p. 167) is aligned with the R & R instructional practice of embedding learning opportunities within daily routines and activities. A second tenet, "adults mediate children's experiences to promote learning" (p. 168) and a third tenet, "children's participation in more developmentally advanced settings, at times, with assistance, is necessary for successful and independent participation in those settings" (p. 168) are aligned with the instructional practice of scaffolding. A fourth tenet, "EI/ECSE practice is individually and dynamically goal oriented" (p. 169) is aligned with the R

& R practice of collaborative problem solving and using the results of assessments to determine goals for students.

Recognition and Response Model (R & R)

In this study, the researcher examined early literacy practices within inclusion-based preschool programs using an emerging early childhood RTI conceptual framework called Recognition & Response (R & R) which mirrors the NCRTI recommended components and early childhood intervention best practices (Lieberman-Betz et al., 2013). R & R will served as the conceptual framework to investigate how collaborative preschool teams recognize students' early literacy needs, engage in collaborative problem solving to decide how to best meet the child's needs, and respond through a multi-tiered model of instruction.

Research Questions

In one purposively selected Southern California preschool program that is inclusion-based, has multidisciplinary staff teams of early childhood education teachers, early childhood special education teachers, and speech and language pathologists, and has been identified as utilizing the three practices of recognition of students' early literacy needs through assessment, collaborative problem solving, and multi-tiered instructional strategies:

1. What informal and formal progress monitoring assessment tools and practices, if any, are utilized by staff teams for the purposes of recognizing when a student is not making the expected progress in early literacy?
2. What collaborative problem solving practices, if any, are utilized by staff teams to plan next steps when a student is not making the expected progress in early literacy?
3. What multi-tiered instructional practices, if any, are utilized by staff teams to respond when a student is not making the expected progress in early literacy?

Limitations

There were three limitations to the study that can impact the interpretation and generalization of findings to populations other than the study population. First, the study included a small sample size of four classrooms within a single district preschool program. Second, the number and length of the classroom observations provided snapshots of the instructional practices utilized in the classrooms and may not have fully captured all of the instructional practices that teachers might utilize to recognize and respond to students' early literacy needs. Third, students in this selected state and fee-based program may be different socio-economically, ethnically, and performance-wise than students in non-fee based programs.

Delimitations

There were four delimitations to the study that can limit generalization to other programs. First, the four preschool classrooms included in this study are delimited to the four-year old portion of a single district inclusion-based preschool program. Second, the participants are delimited to two early childhood educators, two early childhood special educators, and one speech and language pathologist who serve on a multidisciplinary team. Third, the location of the preschool program is delimited to Southern California. Fourth, the timeframe for data collection was delimited to the last two months of the school year.

Assumptions

There were two assumptions in this study. The first assumption is that the participants are knowledgeable regarding early literacy practices and were honest and candid through the interview process. The second assumption is that classroom activities and strategies observed were representative of typical daily instruction and activities.

Organization of the Study

This study is organized into five chapters. Chapter one provides a background of the study purpose, theoretical framework, and an introduction to the research questions. Additionally, the significance of the study is presented.

Chapter two provides a summary of the historical background and conceptual framework. Additionally, a review of literature is summarized. R & R practices examined in the literature review include the recognition of student needs through assessment, collaborative problem-solving for planning and evaluating next steps for students, and responding through an instructional multi-tiered approach in early literacy.

Chapter three revisits the problem statement research questions and the conceptual framework. The rationale for selecting a qualitative case study design is explained. Sources of data and sampling methods are defined.

Chapter four presents the themes that emerged from textual coding of the focus group interview transcripts, classroom observations, and artifact reviews. Research questions are analyzed, and findings from the data are shared. Chapter five closes with a discussion of the key findings and study conclusions. Implications for policy and practice and recommendations for further study are offered.

Chapter 2

Introduction

Alignment of early literacy instructional and assessment practices are fundamental in preventing future reading difficulties in elementary school (Gettinger & Stoiber, 2008). Kindergartners who enter school without a strong foundation in early literacy are at risk for later reading difficulties and referrals to special education (Whitehurst & Lonigan, 1998). Response to Intervention (RTI) offers K-12 educators a conceptual framework for systematizing instruction, assessment, and support. The application of an RTI approach in early childhood education is emerging, and additional research is needed to guide early childhood educators in designing responsive learning experiences in early literacy for young children (Barnett et al., 2007).

This chapter presents a review of the literature that is organized into eight major sections and concludes with a chapter summary. The first section addresses the historical background and context of preschool programs with the following themes: (a) legislation and (b) professional organizations. The second major section addresses the California State Preschool Program with the following themes: (a) Head Start Preschool, (b) Los Angeles Universal Preschool (LAUP), (c) self-contained design, (d) collaborative design, and (e) paradigm shift.

The third major section addresses the Response to Intervention (RTI) conceptual framework with a description of Response to Instruction and Intervention (RTI^2) in California. The fourth major section addresses emerging RTI models in preschool with the following themes: (a) RTI developmental-based skills preschool models, (b) RTI academic-based skills preschool models, and (c) challenges and opportunities in RTI preschool models. The fifth major section addresses the Recognition and Response (R & R) conceptual model for preschool. This is followed by three additional major sections pertaining to the R & R practices.

The sixth major section addresses recognition of student needs through assessment with the following themes: (a) universal screening, (b) Desired Results Developmental Profile-Preschool (DRDP-PS), (c) curriculum-based measurements, and (d) progress monitoring. The seventh major section addresses the collaborative problem solving with the following themes: (a) multidisciplinary collaboration, (b) roles and responsibilities, and (c) data-driven decision making (DDDM). The eighth major section addresses response through instruction with the following themes: (a) early literacy skills, (b) Tier 1 core instruction, (c) Tier 2 embedded learning and small group instruction, and (d) Tier 3 intensive scaffolding strategies.

Each section of the literature review concludes with a theoretical discussion and connects to the relevancy of the study. The seminal and contemporary literature provide a background for understanding the study problem. Peer-reviewed dissertations, journals, legal citations, and national and state education websites are included in this literature review. Search engines used to locate literature include ProQuest, EBSCO, and ERIC.

Historical Background and Context

Families, community members, and educators hope to prepare all PreK-12 students with the knowledge, skills, and disposition necessary to lead happy and successful adult lives. However, an achievement gap has been documented to exist between student groups. For example, there is a trend of lower academic performance on standardized measures within the lower socio-economic status groups and from African American and Hispanic student groups. For example, by three years of age, significant socioeconomic-related disparities in vocabulary knowledge already exist and can impact student reading comprehension in future years (Christ & Wang, 2011; National Association for the Education of Young Children, 2009).

Legislation. There were five legislative acts that have influenced preschool and special education programs over the time period of 1965 to 2004. The first series of impactful legislation reforms occurred between 1965 and 1975 and included federal legislation enacted to provide preschool for children from at-risk backgrounds and equal access for students with disabilities.

In 1965, President Lyndon B. Johnson established the "War on Poverty" program (Zigler & Styfco, 2000). The impetus of this work was to give lower socio-economic status (SES) families the opportunity to achieve better working conditions, education, and success. As a result of this program, Head Start preschool programs were developed to support the needs of lower SES students and to strengthen students' school readiness skills prior to entering kindergarten. These school readiness skills, defined as both social-emotional skills and pre-academic skills, were integrated at school and through parent partnership within the home (Currie, 2001).

In 1975, the Education for All Handicapped Children Act (EAHCA) was enacted by Congress so that all children with disabilities would be provided equal educational opportunities. States maintained autonomy in eligibility determination, and local education agencies had decision-making authority over program design (Egnor, 1996).

A second series of legislation reforms were impactful between 1990 and 2004 as federal legislation was enacted to address the achievement gap through prevention. In 1990, the EAHCA act was renamed the Individuals with Disabilities Act (IDEA) and in Part B, Section 619, mandated that states expand special education services to preschool age students (Danaher, Shackelford, & Harbin, 2004).

Additionally, 1990 brought efforts to further invest in the education of young children. President Bush and state governors established a goal that all kindergarten students would enter school ready to learn by the year 2000. This unified goal prompted states to model State

Preschool programs after Head Start, due to the strict high-quality guidelines required of the federally-funded preschool model (Zigler & Styfco, 2000). Benefits for students enrolled in Head Start or State Preschool programs included improved health, nutrition, and child care in a school setting. Additionally, prevention of both grade level repetition and special education eligibility were noted as benefits of Head Start and State Preschool programs (Currie, 2001; Zigler & Styfco, 2000).

In 2004, IDEA was revised and named the Individuals with Disabilities Education and Improvement Act (IDEIA). Prior to this revision, students could be failing for years before being identified as having a specific learning disability. With this 2004 revision, U.S. Congress added fiscal support for schools that adopted an approach for intervening early and assessing how well students responded to instruction (Yell, 2010). Another notable difference in this revision was the emphasis on accountability and results. With this emphasis on results, there was cause for early childhood special educators to reflect on their role in the general education program. Professional preparation and philosophical approach vary among special educators which influence the serve delivery model within preschool programs (DeVore, Miolo, & Hader, 2011; Hebbeler, Spiker, & Kahn, 2012). Additionally, there was cause for state departments of education to determine how these legislative mandates, along with early childhood organization guidelines, influence public preschool offerings. In the State of California, it has been manifested as a State Preschool Program.

Professional organizations. Early childhood and special education professional organizations recognize the potential to reduce learning gaps beginning at the preschool level. Two organizations that have led the way in promoting developmentally appropriate and research-based practices in diverse and inclusive environments are The National Association for the

Education of Young Children (NAEYC) and The Council for Exceptional Children (CEC). These organizations contribute to the field of early childhood and early childhood special education through their continuing research on high-quality programs, teacher preparation, and collaboration with families and the K-12 community.

The National Association for the Education of Young Children (NAEYC), established in 1926, is the largest national early childhood professional organization. NAEYC's position statement outlines their efforts to meet the needs of students, families, and educators. The organization first published a position statement in 1986 and revised the statement in 1996 and again in 2009. NAEYC's primary effort is to ensure that "all children have access to safe and accessible, high quality early childhood education" (National Association for the Education of Young Children, n.d.-a). The NAEYC maintains a comprehensive website with policy statements on assessment, Common Core State Standards, accreditation and program quality indicators, and professional development resources (National Association for the Education of Young Children, n.d.-b). Local chapters of NAEYC use these guidelines and resources as a framework for designing developmentally appropriate preschool programs. Five overarching guidelines for effective teaching include: "(a) creating a caring community of learners, (b) teaching to enhance development and learning, (c) planning curriculum to achieve important goals, (d) assessing children's development and learning, and (e) establishing reciprocal relationships with families" (National Association for the Education of Young Children, 2009, para.2). The focus on collaborative relationships, assessment, instruction, and goal setting are in alignment with the recommendations from special education organizations.

The Council for Exceptional Children (CEC) is an international organization committed to "improve, through excellence and advocacy, the education and quality of life for children and

youth with exceptionalities and to enhance engagement of their families" (Council for Exceptional Children, 2011). In 2002, the CEC conducted a comprehensive literature review of early intervention and early childhood special education, which led to the development of a *Unified Theory of Practice in Early Intervention/Early Childhood Special Education (EI/ECSE): Evidence-Based Practices* (Odom & Wolery, 2003). The eight tenets are as follows:

> (a) families and homes are primary nurturing contexts, (b) strengthening relationships is an essential feature of EI/ECSE, (c) children learn through acting on and observing their environment, (d) adults mediate children's experiences to promote learning, (e) children's participation in more developmentally advanced settings, at times with assistance, is necessary for successful and independent participation in those settings, (f) EI/ECSE practice is individually and dynamically goal oriented, (g) transition across programs are enhanced by a developmentally instigative adult, and (h) families and programs are influenced by the broader context (Odom & Wolery, 2003, p. 166).

The NAEYC and CEC professional guidelines and philosophical underpinnings have influenced legislation pertaining to early childhood programs intended to address the achievement gap between students from higher socio-economic families and students from lower socio-economic families. Conversely, legislative efforts on a national, state and local level to address the achievement gap among high risk groups, including children with disabilities, have influenced professional guidelines and program design.

California State Preschool Program

The California State Preschool Program (CSPP) is the largest state-funded program, committed to serving preschool children with a focus on supporting children from low-income families(California Department of Education, 2013a). Through the State Preschool Program, a

combination of State and Federal funds are available to public and private agencies that provide high-quality educational programs for preschool age children. Federal funds through IDEIA Part B are combined within the general fund allocation, requiring local education agencies (LEAs) to develop a plan for providing programs to meet the needs of preschool age students with disabilities. These plans include a range of program options to meet the students' needs within State Preschool programs and/or within self-contained special education preschool classrooms designed by the LEA (California Department of Education, 2013d).

California State Preschool Programs (CSPP) are "part-day and full-day educational programs for low-income or otherwise disadvantaged three- and four-year old children" (California Department of Education, 2010b, p. 4). In order to maintain funding from the State, preschool programs must engage in a program quality review and monitoring process which includes standardized self-evaluation tools and staff and parent surveys (California Department of Education, 2010b). California State Preschools look to National Early Childhood organizations and CDE resources to inform program design and ensure a high quality preschool experience for three to five year olds.

The California Department of Education (CDE) provides guidance to LEAs in designing high quality early childhood programs with expected learning outcomes to ensure that students are prepared to enter kindergarten. The CDE maintains a website with a wide-range of resources including publications to guide educators as they bridge the California Preschool Learning Foundations (CPLF) with Kindergarten California Common Core State Standards English Language Arts standards (CCSS-ELA).

The California Department of Education defines the Preschool Learning Foundations as a description of the knowledge and skills most students will gain in a high-quality preschool

program and with appropriate support. Nine preschool learning foundational domains are detailed in three volumes of the California Preschool Learning Foundations include: (a) Social-Emotional Development, (b) Language and Literacy, (c) English-Language Development, (d) Mathematics, (e) Visual and Performing Arts, (f) Physical Development, (g) Health, (h) History-Social Science, and (i) Science (California Department of Education, 2008, 2010a, 2012b). Student progress in each domain is measured through the Desired Results Developmental Profile-Preschool (DRDP-PS) in all California State Preschool programs (California Department of Education, 2008, 2010a).

Head Start Preschool Program. One example of a full-day federally-funded preschool program prominent in California is the Head Start program. Since 1965, student learning outcomes and program design have continued to evolve. The intention of Head Start is to provide young children from lower socio-economic backgrounds with a rich educational experience so that they are prepared to enter kindergarten. Since the 1990s, Head Start program goals, quality requirements, staff professional development, and student assessments have emphasized clear goals within multiple domains of student development (Zigler & Styfco, 2000). Additionally, Head Start mandates programs to serve at least 10% of students with disabilities (Purcell, Horn, & Palmer, 2007). LEAs determine how they meet this mandate through program design and recruitment within and outside of their community.

Los Angeles Universal Preschool (LAUP) Program. Within the California State Preschool Program (CSPP), LEAs maintain oversight over program design and may seek partnerships with additional non-profit organizations. An example in Southern California is the Los Angeles Universal Preschool program (LAUP) whose mission is "to provide access to quality early childhood education programs in Los Angeles County" (Los Angeles Universal

Preschool, 2013). LEAs choosing to establish LAUP programs are also required to maintain high quality standards and measure program effectiveness using a rating scale. The funding provides professional development for staff and helps fund preschools to ensure access for all families.

Fee-based preschool program. California State Preschool program directors may assess full-time or part-time fees based on the family's size and income eligibility, program type, and number of hours per day the child is enrolled (California Department of Education, 2011).

Self-contained design. Once funding is secured, LEAs make decisions about preschool program design. Self-contained design can be applied in both general and special education programs. General education self-contained programs serve typically-developing or general education preschoolers. These programs are usually staffed with an early childhood education (ECE) teacher authorized to teach in a preschool or child care setting. In the state of California, preschool teachers are required to hold a valid Child Development Permit-Early Childhood/Preschool (State of California Commission on Teacher Credentialing, 2011). The adult to child ratio in a self-contained design preschool setting is eight students to one adult and one teacher to a group of 24 children (California Department of Education, 2010b) which means that a class of 16 will have a certificated preschool teacher and an assistant while a class of 24 would be staffed with one teacher and two assistants. Interaction with students with identified disabilities or special education students may take place if a self-contained special education classroom is in the vicinity and is prearranged between staff.

A self-contained design can be applied in special education preschool settings. These classrooms are designed to address the unique needs of students within special education. For example, students with moderate or severe needs may be enrolled in a class designated as a life-skills self-contained program. An early childhood special education (ECSE) teacher is assigned

to teach children ages birth to five, with mild/moderate or moderate/severe disabilities, and in an early childhood setting. In the State of California, early childhood special education teachers are required to hold a valid Education Specialist Instruction Credential and the additional ECSE authorization (State of California Commission on Teacher Credentialing, 2012). An observer in a self-contained special education classroom can expect to see additional staff called designated instructional service providers (DIS). An example of a DIS provider is a speech and language pathologist, defined as a therapist with expertise in language and communication development who serve individual students and consult with classroom teachers (Sanger et al., 2012). Opportunities to interact with general education students are limited to the availability of a self-contained general education preschool classroom and are prearranged between staff.

Collaborative design. Inclusion-based models continue to emerge due to their emphasis on collaborative relationships between ECE and ECSE staff and families; a shared vision about the benefits of inclusion; and through the support of federal and state policies that support inclusion. Vakil, Welton, O'Connor, and Kline (2008) defines collaborative preschool design as a team of teachers, service providers, and parents who work together to best meet the needs of students. In a collaborative preschool program, the staff to child ratio can be reduced with combined general and special education staff. Furthermore, DIS providers are present in collaborative classrooms to support the needs of students in special education as well as consult with teachers about general education students. Willis (2009) asserts that collaborative programs allow for a team problem-solving approach. Within this collaboration, staff and families identify when a strategy works, and they make changes when a strategy does not work. In order for inclusion-based models to be successful, ECE and ECSE staff blend their areas of expertise and design learning activities that support all students' access to the core curriculum. Inclusion offers

students with and without disabilities the opportunity to learn side by side and with the added benefit of a multidisciplinary team of staff planning learning experiences (Vakil et al., 2008).

Paradigm shift. A historical perspective of both professional guidelines and legislation illustrate a paradigm shift in preschool design and learning outcomes. Preschool continues to serve as an opportunity to address the achievement gap before it begins. Programs have evolved from a singular focus on social-emotional skill development and play-based learning to a blend of social-emotional and academic learning opportunities and expected outcomes. Furthermore, the inclusion of academic learning outcomes, as well as growing interest in Response to Intervention (RTI) as a conceptual framework across grades K-12, has grown and is emerging at the preschool level.

Response to Intervention (RTI) Framework

The purpose of Response to Intervention (RTI) is to ensure high levels of learning for every child through a timely and systems-based assessment and instructional approach. An RTI approach requires collaborative problem-solving to determine the academic and/or social emotional needs of the individual child and a unified belief that all students can learn at high levels (Buffum, Mattos, & Weber, 2012). Response to Intervention (RTI) is a conceptual framework which has gained momentum across the nation over the past ten years.

Utilizing a collaborative problem solving approach and tiered instructional model to respond to student needs have developed in pockets of the United States (Kovaleski, 1999). In the late 1980s, Pennsylvania piloted collaborative problem-solving models including Teacher Assistance Teams and Instructional Consultation Teams in an effort to address the over-identification of students as learning disabled. From1990-1997, the Pennsylvania State Board of Education led efforts to build on these pilot models and institutionalize Instructional Support

Teams (ISTs) at all 500 elementary schools (Kovaleski & Glew, 2006). Academic gains were noted for students whose schools implemented ISTs with a high level of fidelity. Essential elements of ISTs were noted as ongoing data collection to inform decision-making. Additionally noted as critical to the IST process was the collaboration of support staff and teachers to help hone selected strategies (Kovaleski, 1999). Pennsylvania's collaborative problem-solving models have helped to pave the way for a nationwide RTI effort.

Local and state efforts to address the achievement gap and the over-identification of students as learning disabled continue to influence federal legislation. In 2004, the reauthorization of the Individuals with Disabilities Education Improvement Act (IDEIA) permitted states to institutionalize an RTI approach to determine a student's eligibility for special education services under the specific learning disability (SLD) classification. Prior to the 2004 reauthorization, states relied on a severe discrepancy model (SD) where students were determined eligible as having an SLD based on a comparison of a student's cognitive ability and achievement using standardized assessment tools. In response to the reauthorization, states across the nation continue to make decisions and engage in discussions about what RTI means in their local special education and intervention practices. States vary in their adoption of RTI as a mandatory approach for special education identification in SLD. In 2009, twelve states mandated an RTI approach in SLD identification, wherein five of these states prohibited the severe discrepancy (SD) model approach, and four of these states allowed a combination of RTI and the SD model while three partially allowed RTI to be used for SLD identification (Zirkel & Thomas, 2010).

The literature suggests that the impact of a comprehensive RTI approach is far-reaching and goes beyond special education identification. The IDEIA promotes the development of early

intervention of both school readiness and early literacy skills. An RTI framework can guide schools in data-driven decisions to prevent and intervene when a student demonstrates difficulty in academic or behavior-based skills, rather than just applying an RTI framework to make special education eligibility decisions (Barnett et al., 2007).

The National Center on Response to Intervention (NCRTI) published the Essential Components of RTI handbook (2010). NCRTI maintains that the components include "(a) a school-wide, multi-level instructional and behavioral system for preventing school failure; (b) screening, (c) progress monitoring; and (d) data-based decision-making for instruction, movement within a multi-level system, and disability identification in accordance with state law"(National Center on Response to Intervention, 2010, p. 1). Individual states and local education agencies have further defined RTI within their own local context using the four components as a guide.

Response to Instruction and Intervention (RTI^2) in California. In accordance with the IDEIA (2004) and national research on RTI, states and education agencies have connected RTI with their own local policies and practices. The California Department of Education (CDE) published a philosophy statement about RTI and California initiatives. The CDE states that "RTI provides a basis for understanding a systematic, data-driven approach to instruction believed to benefit every student..." (California Department of Education, 2013b) and added a second *I* for instruction, approaching this framework as Response to Instruction and Intervention (RTI^2). The focus on high quality instruction for all students, whether they are striving to approach proficiency or have reached mastery and are moving beyond, moves the emphasis beyond disability identification.

In an effort to support local education agencies in using an RTI K-12 framework to best support students, the CDE identified ten core components of RTI^2: "(1) high-quality instruction, (2) high expectations, (3) assessments and data collection, (4) problem-solving systems approach, (5) research-based interventions, (6) positive behavioral support, (7) fidelity of program implementation, (8) staff development and collaboration, (9) parent and family involvement, and (10) specific learning disability determination" (California Department of Education, 2013c). While the four essential components recommended by NCRTI are present in California's RTI^2 , the CDE's first, second, fifth, sixth, and seventh components further define a multi-tiered instructional approach, emphasizing the second *I* for instruction (California Department of Education, 2013e). Preschool RTI models emphasize the same components while aligning the components with established early childhood best practices.

Emerging RTI Models in Preschool

In 2006, the first preschool model to mention RTI as a framework was published (M. R. Coleman et al., 2006), and preschool RTI models continue to emerge. Lieberman-Betz et al (2013) conducted a comprehensive literature review of RTI models designed to serve three to five year olds. Out of 28 initial literature/studies, five comprehensive models were identified for further examination. The five models reflected the core elements of RTI such as the integrated instructional approach, timely identification, use of authentic assessments, and inclusion of professionals and families. An additional criterion used to identify RTI models for further examination was the model's alignment with Odom & Wolery's (2003) Eight Tenets of Early Intervention/Early Childhood Special Education Programs (EI/ECSE). The five models represent current application of RTI in preschool; each model emerging between 2006 and 2010. The

selected models applied an RTI framework for supporting developmental-skill based and academic-skill based supports (Lieberman-Betz et al., 2013).

Developmental-based skills. The Teaching Pyramid (Fox et al., 2010) applies an RTI framework in supporting the social-emotional-based skills in three to five year olds. In each of the three tiers, instruction intensifies from embedded to explicit. Professional and parent collaboration is maintained through each tier and parent involvement increases through communication, coaching, and partnership in behavior support plans.

Barnett et al. (2007) offers a more general approach to RTI in preschool programs and describes a model for addressing behavior-based skills through a positive behavior support model. Components include a multi-tiered instruction system ranging from class-wide to embedded instruction to intensive one to one support. One notable aspect of this model is the differentiated approach to family involvement based on the needs of the student.

Jackson et al. (2009) proposes four components to their RTI preschool model. These components included assessment, a clearly-defined curriculum scope and sequence for both behavior-based and academic-based skills, and progress monitoring system. A leadership team engages in professional collaboration and data-based decision making when determining to increase the intensity of instructional support or to taper the support. In this model, specific roles were defined for each team member, including speech and language pathologists.

Academic-based skills. Gettinger and Stoiber (2008) apply an RTI framework in addressing early literacy skills in preschoolers from low socio-economic backgrounds. The model is federally funded and named the Exemplary Model of Early Reading Growth and Excellence (EMERGE). The curriculum is deemed evidence-based with assessments to guide data-driven decision making. Collaboration between staff and parents is emphasized.

V. Buysse and Peisner-Feinberg (2010), described an academic-based skill model called Recognition and Response (R & R). This model was developed to support the academic-based needs of students with and without disabilities. R & R infused RTI practices such as recognizing student needs through universal screening and progress monitoring, responding through multi-tiered targeted instructional strategies, and collaborative problem-solving systems that include planning with teachers, specialists, and parents. The R & R model is not tied to a specific curriculum; rather, it emphasizes the alignment of learning outcomes within key domains of learning, assessment, and instructional practices.

Challenges and opportunities. While the five RTI models present systems for recognizing and responding to the individual needs of three to five year olds, challenges are noted in the literature about the application of an RTI framework in preschool settings. First, educators may find it difficult to simply apply RTI elementary or secondary school practices at the preschool level. An RTI preschool model requires an alignment with established early childhood best practices. For example, interventions should also be planned and implemented within a child's natural school and home environments (V. Buysse & Peisner-Feinberg, 2010; Danielson, Doolittle, & Bradley, 2007). Second, preschools vary in their curricular methodology. Agreeing on a research-based core curriculum is necessary prior to developing a multi-tiered instructional approach (Barnett et al., 2007; Danielson et al., 2007). Third, additional research is needed to develop universal screening and progress monitoring tools to measure academic and social skills that are authentic and match early childhood learning outcomes (Barnett et al., 2006; V. Buysse & Peisner-Feinberg, 2010; Danielson et al., 2007). Fourth, leadership from policymakers, district leaders and program directors in RTI will require a clear vision and communication about the RTI model and can take years to accomplish (Danielson et al., 2007;

Greenwood et al., 2011; McClain, Schmertzing, & Schmertzing, 2012). Fifth, collaboration between teachers, specialists, and families is essential in the problem-solving process, and dedicated time is needed for this collaboration (Barnett et al., 2007; V. Buysse & Peisner-Feinberg, 2010).

Proponents of RTI in preschool recognize the challenges but offer the following rationale for further examination of RTI as a promising practice at the preschool level. First, RTI is an approach that is consistent with early intervention and early childhood practices. Learning experiences should provide opportunities for children to thrive socially, emotionally, and academically (Barnett et al., 2007; Odom & Wolery, 2003). Second, RTI offers opportunities to provide multi-tiered instruction and practice within typical preschool routines and structures, and the pedagogical alignment of RTI with differentiated instruction in preschool classrooms (Ball & Trammell, 2011; Barnett et al., 2007). Third, proponents of RTI suggest that RTI in early childhood could address delays in literacy and behavior at an early age and prevent disability identification later with a focus on prevention rather than labeling (Barnett et al., 2007; Gettinger & Stoiber, 2008). Fourth, RTI has the potential of improving preschool education for all students as teachers develop a deeper knowledge of children's background through frequent communication with parents and collaboration with special education service providers (Gettinger & Stoiber, 2008; McClain et al., 2012).

Recognition and Response (R & R) Conceptual Model for Preschool

The National Center on Response to Intervention (2010) maintains that there are four overarching RTI components. The CDE (2013) further defines these components and has adopted a Response to Intervention and Instruction (RTI^2) philosophy. After a comprehensive review of preschool RTI models, five emerged as reflecting the RTI components of universal

screening and progress monitoring, data-driven collaborative problem solving practices, and multi-tiered instructional experiences while maintaining fidelity to early childhood tenets (Lieberman-Betz et al., 2013).

The researcher has identified the R & R conceptual model as a lens for this study for two reasons. First, the key features of R & R are in alignment with national and state recommended RTI components. Table 1 illustrates the features of R & R and its overlap with key RTI components identified at the national and state level.

Table 1

Comparison of R & R Key Features and NCRTI, RTI^2 Essential Components

Recognition and Response (R & R)	**National Center on Response to Intervention (NCRTI)**	**Response to Instruction and Intervention in California (RTI^2)**
1) Recognition: Universal screening and progress monitoring	1) Screening 2) Progress monitoring	1) Assessments and data collection
2) Response: Curriculum, intentional teaching, and targeted interventions	3) A school-wide, multi-level instructional, and behavioral system for preventing school failure	2) High-quality instruction 3) High expectations 4) Fidelity of program implementation 5) Research-based interventions 6) Positive behavioral support 7) Staff development and collaboration
3) Collaborative problem solving: A process by which teachers, parents, and specialists can work together to plan various levels of instructional supports and assess how well children respond to them	4) Data-based decision-making for instruction, movement within a multi-level system, and disability identification in accordance with state law	8) Parent and family involvement 9) Problem-solving systems approach 10) Specific learning disability determination

Note. Adapted from "Recognition and Response to Intervention for PreK,"by Buysee & Peisner-Feinberg, 2010; "California Philosophy and Definitions RTI^2," CDE, 2013; "Essential Components of RTI- A Closer Look at Response to Intervention," NCRTI, 2010.

Second, the R & R model is designed to address academic-based skills, a focus of this study. A review of the literature identified the lack of consistent core curriculum as a potential challenge (Barnett et al., 2007; Danielson et al., 2007). This led the researcher to select a model that can be applied independent of a prepackaged curriculum. With California's 2010 adoption of preschool learning outcomes and a common universal assessment, there is an opportunity to examine the alignment of these learning outcomes and assessment with instruction and collaborative practices, through an R & R perspective.

The R & R model developed by V. Buysse and Peisner-Feinberg (2010) describes essential practices to guide the work of preschool educators in recognizing and responding to the individual needs of students:

> R & R consists of three key components present in all three tiers: (a) recognition, which involves gathering assessment information by screening all of the children and periodically monitoring the progress of some who need targeted interventions; (b) response, which includes providing an effective core curriculum, intentional teaching, and targeted interventions linked to assessment results; and (c) collaborative problem solving; which offers a process by which teachers, parents, and specialists can work together to plan and evaluate instruction at all three tiers. (p. 4)

The R & R practices to be examined in this study are recognition through assessment, response through instruction, and collaborative problem solving.

Recognition of Student Needs through Assessment

Assessment practices are critical for planning instructional experiences for students and moving students between instructional tiers (Ball & Trammell, 2011; McConnell, McEvoy, & Priest, 2002). The use of universal screening, progress monitoring tools, and curriculum-based measurements each serve a purpose in R & R assessment practices. When these tools are part of an ongoing assessment approach, they can provide timely information which can help prevent students from requiring more intense intervention later on (D. Fuchs et al., 2007). Furthermore, it is essential that the assessments selected are aligned with expected outcomes for preschool students. CDE (2012) describes these outcomes as foundations that preschool children develop when provided with a high quality, developmentally appropriate, and differentiated learning experiences (California Department of Education, 2012a).

While individual preschool programs vary in their approach, the field of early childhood education has made a concerted effort in determining the learning outcomes across domain areas for preschoolers (McConnell et al., 2002). For example, the Individual Growth and Development Indicators (IGDIs) were developed through the Early Childhood Research Institute on Measuring Growth and Development from 1998-2000. These IGDIs were developed to guide the early literacy assessment and instructional planning for preschoolers (Roseth, Missall, & McConnell, 2012). The developers strived to ensure that the IGDIs were "easy to use…provided direct assessment of growth …adaptable across children, programs and purposes…and supported by empirical evidence of reliability and validity" (McConnell et al., 2002, p. 4). Since the development of the IGDIs, curriculum-based assessment tools such as Get Ready to Read! (GRTR) and Get it, Got it, Go! (GGG) have been created with IGDIs in mind. These tools have

been used to measure students' early literacy skills within RTI preschool models, including the EMERGE model (Ball & Trammell, 2011; Gettinger & Stoiber, 2008).

In 2008, the California Department of Education (CDE) continued its effort to strengthen preschool programs and students' readiness level entering kindergarten. Through the leadership of the CDE Child Development Division, preschool competencies within seven domains were fleshed out and published to guide California State Preschool Programs. These outcomes were named the California Preschool Learning Foundations (2008) and it is expected that all students attending a California State Preschool will make progress within these foundational outcomes. The work group involved in writing the California Preschool Learning Foundations (CPLF) engaged in an extensive review of the research, integrated Head Start guidelines, and sought to bridge these foundations with the Kindergarten California Common Core State Standards (CCSS). Volume One of the foundations document was released in 2008, Volume Two in 2010, and Volume Three in 2013. CPLF Volume One describes the learning outcomes within four domains, including Language and Literacy Development (LLD). Early literacy skills in LLD are described within three strands and unpacked further within sub-strands. For example, in the Listening and Speaking strand, sub-strands include language use and conventions, vocabulary, and grammar. After the adoption of the California Preschool Learning Foundations, the CDE began work on the development of a universal screening instrument to measure student progress in all seven domains (California Department of Education, 2010c).

Universal screening. Ball and Trammell (2011) found that a critical element of the assessment process includes universal screening for all students at least three times per year. The reason for screening throughout the year is that a student may demonstrate a certain skill level at the beginning of year but then fall behind at the mid- year. Administering a universal screening

to the entire class provides information about the rate of learning within the class towards meeting end of the year goals (Ball & Trammell, 2011). Additionally, universal screening provides information about individual students and their trajectory towards meeting expected outcomes (Barnett et al., 2007). Preschool is an ideal time to begin screening for early literacy deficits and can provide information to guide classroom interventions (Lazarus & Ortega, 2007). It is also recommended that preschool programs, at the beginning stage of applying a preschool RTI model such as R & R, begin with a universal screening assessment and alignment with an evidence-based Tier 1 core curriculum (Ball & Trammell, 2011; V. Buysse & Peisner-Feinberg, 2010; Greenwood et al., 2011).

What is not known about universal screening is the readiness level of preschool programs to systematize these within their program. Implementing a universal screening component can pose challenges in preschool programs due to the dearth of available and reliable assessment tools and insufficiently trained personnel (Ball & Trammell, 2011; Lieberman-Betz et al., 2013).

Conflicting information exists in the role of informal and teacher-created assessments as a universal screening measure. Considering the lack of valid and reliable universal screening tools available at the preschool level, Ball and Trammell (2011) suggest that informal assessments can help teachers identify the lowest performing 25% of the class and then provide these students with intervention. Informal assessment can also be used to scaffold an activity for a student as the teacher uses the student response to increase or decrease the difficulty level of the task (Lonigan, Allan, & Lerner, 2011). At the same time, educators are cautioned that informal assessments may lack the accuracy required to identify the discrete skills that serve as a focus for Tier 2 or Tier 3 intervention.

Desired Results Developmental Profile- Preschool (DRDP-PS). California State Preschools are required to meet program quality indicators. The Desired Results (DR) system was designed to ensure a high quality early childhood experience for all children. The DR system includes an ongoing program self-evaluation tool, parent survey, and environment rating scales. "California is one of the very few states in the nation that has developed its own system designed specifically for measuring child progress toward desired outcomes" (California Department of Education, 2010c, p. 4). The DRDP-PS is aligned with California Preschool Learning Foundations and Kindergarten CCSS (California Department of Education, 2010c).

There are three versions of the DRDP assessment which include infant/toddler (DRDP-IT), preschool (DRDP-PS), and school age (DRDP-SA). Preschool staff is required to administer the DRDP-PS to each child during the first 60 days of a student's entrance date and at least once every six months thereafter. Students with identified disabilities can receive accommodations and adaptations during the assessment or be administered the DRDP- PS *Access* version. General education and special education staff are encouraged to work together to determine which assessment version is most appropriate and what accommodations may be needed (California Department of Education, 2010c). In an effort to build communication with families and assist the child in their transition to kindergarten, preschool staff is required to give a copy of the assessment results to the parent and, with permission, may pass the results on to the child's elementary school so that the child's kindergarten teacher can have this information in planning for the child (California Department of Education, 2010b).

There are 43 measures that focus on specific competencies within seven domains. These domains are assessed through a developmental approach, rather than by age. Teachers are allowed to use other informal assessments they have gathered and to seek the input of other staff

who work with the child and the parents. The competencies listed in the DRDP-IT (2010) fall within seven domains composed of

- Self and Social Development (SSD);
- Language and Literacy Development (LLD);
- English Language development (ELD);
- Cognitive Development (COG);
- Mathematical Development (MATH);
- Physical development (PD); and
- Health (HLTH) (California Department of Education, 2010c, p. 6).

The DRDP-PS handbook defines each of the domain areas. The measures included in the LLD domain are designed to assess "children's progress in developing foundational language and literacy skills" (California Department of Education, 2010c, p. 10). Preschool staff document students' LLD using ten measures. Examples include language in conversation, letter and word knowledge, and emergent writing.

Teachers are required to administer the DRDP-PS within the first 60 days of the student's enrollment and every six months thereafter. There were recommendations in the handbook for administration about how DRDP-PS can be used to make instructional decisions (California Department of Education, 2010c). In a review of a number of studies, it was found that, oftentimes, teachers do not use the information gathered from universal screening to adjust their instruction (Stecker, Fuchs, & Fuchs, 2005). Additionally, a review of the literature did not result in the location of any studies that indicate how California State preschool teachers are using this assessment information to plan instructional experiences. In the DRDP-PS handbook directions, preschool teachers are encouraged to consult with support staff, special education service

providers, and parents so that they can provide feedback about the child's growth along the continuum, but this is a recommendation and not a requirement of the DRDP-PS (California Department of Education, 2010c). What could not be found in the literature was to what extent this exchange of information occurs in California State Preschools. Finally, it is recommended that staff monitor student progress between DRDP-PS administrations. The researcher did not find any studies related to the role of informal assessments or artifacts and the DRDP.

Curriculum-Based Measurements (CBMs). Within an R & R framework, assessments that measure expected learning outcomes are called Curriculum-Based Measurements (CBM). CBMs are pertinent within universal screening and progress monitoring assessment practices as both are used to monitor students' individual and class-wide progress towards targeted long term goals (Stecker et al., 2008).

Assessment developers are tasked with designing easy to use tools that can reliably measure a child's growth through observable behaviors (McConnell et al., 2002). CBMs are designed to be quick, short assessments that are administered with frequency based on the needs of the child (Lazarus & Ortega, 2007; Stecker et al., 2005). For example, a CBM in early literacy will measure a preschooler's ability to recognize beginning letter sounds.

The R & R preschool model emphasizes the need for screening and ongoing assessment to ensure the efficacy of the core and interventions within each tier (Bayat, Mindes, & Covitt, 2010; Ramaswami, 2010). Some researchers caution early childhood educators to ensure a balance between assessing developmental based skills and academic based skills when selecting ongoing assessment tools (Lazarus & Ortega, 2007).

Progress monitoring. Progress monitoring is a practice of continuously documenting a student's rate of progress and then using this information to develop an instructional plan for the

child (Ball & Trammell, 2011). “Progress monitoring tools differ from typical screening and benchmark assessments in terms of duration of assessments, frequency of administrations, consistency and equivalence of content assessed, and usefulness of information for determining both level and rate of academic growth” (Stecker et al., 2008, p. 2).

Progress monitoring tools should be user-friendly and informative and have parallel versions so that the teacher or support staff member can monitor frequently (Lonigan et al., 2011). Additionally, progress monitoring provides ongoing snapshots of the individual student’s growth within a specific skill area, guiding teachers to recognize whether or not a child is on track for attaining the long-term literacy goals. Progress monitoring of the entire class should be a part of the RTI assessment practice. This information can assist in determining if any adjustments should be made to Tier 1 core instruction (Stecker et al., 2008).

The use of CBMs, as progress monitoring tools, can assist teachers in timely identification, to ensure appropriate instruction and support (Lieberman-Betz et al., 2013), and guide movement in and out of the tiers of instruction (McAlenney & McCabe, 2012). Learning outcomes serve as crucial functions for development of any progress monitoring system (McConnell et al., 2002). For this reason, progress monitoring tools are considered CBMs and reflect the narrow, discrete skills needed to meet the long-term learning goals(McAlenney & McCabe, 2012).

Pierce, Summer, and O'deKirk (2009) agreed that preschool assessments for students with or without disabilities need not be tied to one curriculum but to literacy outcomes. CBMs can provide valuable information to monitor a child’s progress. At the same time, the assessment approach should include authentic, observation-based data collection methods within naturalistic settings.

At the preschool level, CBM progress monitoring tools primarily exist as part of a prepackaged program. According to Lonigan et al. (2011), "there are currently no widely available progress-monitoring assessments for preschoolers' early literacy skills. Most such assessments are developed for specific applications, such as a curriculum or for a specific program" (p. 7). More information is needed about progress monitoring tools currently in use at the preschool level. Furthermore, end of the year expected outcomes do not inform teachers what students should know at a given point in time. Ball and Trammell (2011) state "…we have little idea of how many initial letter sounds a preschool should be expected to identify on the GGG [Get it, Got it, Go!] to be considered on track in the development of phonological awareness..." (p. 8).

In reviewing the literature, RTI preschool models such as EMERGE provide extensive staff training on administering assessments (Gettinger & Stoiber, 2008). However, it has also been found that a lack of staff training was a challenge in administering assessments and that staff training was an integral component of the RTI implementation (Greenwood et al., 2011). In an R & R model, CBMs are not tied to a specific curriculum. This may present a challenge for staff as they seek out CBMs that are aligned with state expected learning outcomes.

Similar to universal screening, there is disagreement among researchers about the role of standardized assessment versus informal progress monitoring. For example, an ongoing play-based authentic assessment along with support staff and parent observations can be used to monitor a student's progress towards their individual goals within the school and home environments (Bayat et al., 2010; M. Coleman, Roth, & West, 2009).

Gathering assessment information about a class or individual child's progress in early literacy is only one component of an RTI model. Accurate universal screening and progress

monitoring tools that are aligned with learning outcomes can translate into specific instructional modifications and supports (Lonigan et al., 2011).

Collaborative Problem Solving

Within the Recognition and Response (R & R) model, student needs are recognized through the gathering and analysis of assessment information. Once student needs are identified, an instructional response is developed for some students. The planning and evaluating process that leads to an instructional response is determined by a collaborative problem solving team. V. Buysse and Peisner-Feinberg (2010) defined collaborative problem solving as "…a process by which teachers, parents, and specialists can work together to plan various levels of instructional supports and assess how well children respond to them" (p. 8). The collaborative problem solving team determines when the team will reconvene and what evidence will be gathered and shared with the staff, parents, and specialists.

The collaborative problem solving team is a decision-making group that engages in a cyclical problem-solving process. The first step in the process is defining the problem based on information gathered, including student assessment information, classroom observations, and family interviews. Second, the team analyzes the data to inform an instructional response. The response may involve adaptations such as adjusting learning activities and materials. Third, the team develops and implements a modified instructional plan for some children according to the tiered instructional approach of the R & R model. Finally, the team evaluates these modifications by implementing a plan for monitoring children's progress, collecting the assessment data and making further instructional adjustments, as needed, based on the analysis of the data. The collaborative problem solving team engages in this cyclical process at agreed upon intervals,

based on the student's needs. Figure 1 provides a graphic representation of the four distinct steps in the collaborative problem solving process.

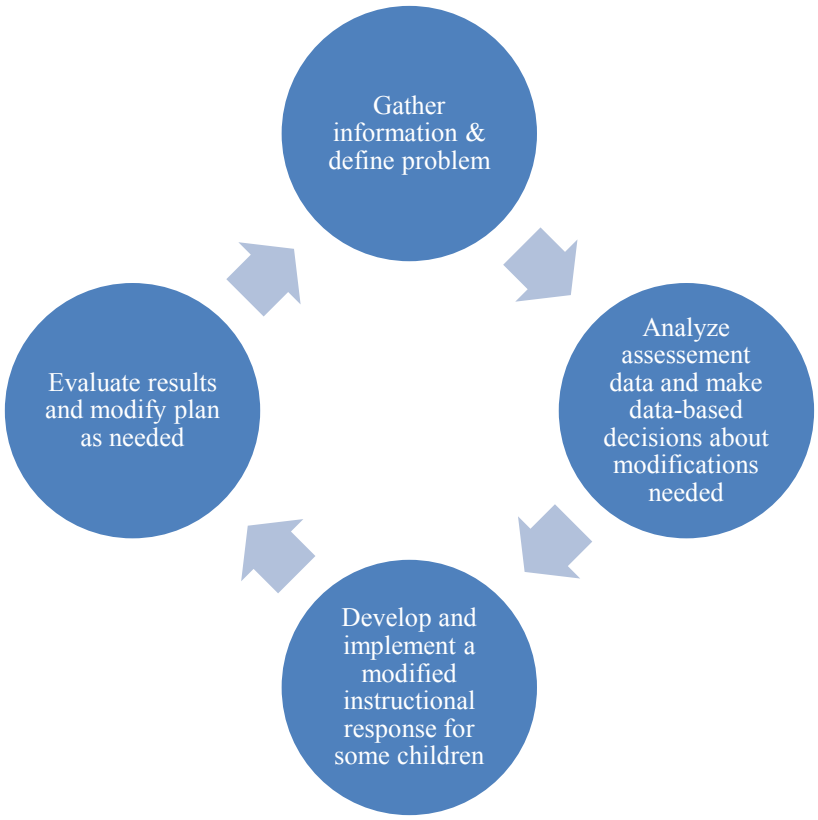

Figure 1. Collaborative problem solving cycle within the Recognition and Response framework.

Multidisciplinary collaboration. At the heart of collaborative problem solving, is the opportunity for staff members to bring together their individual areas of expertise to make instructional decisions for students. Collaboration within job-alike colleagues offers extended learning within the team's area of expertise. Telzrow, McNamara, and Hollinger (2000) found that unlike consultation between teachers, "… many of the problem-solving models described during the past decade have involved a multidisciplinary team" (p. 444). A multidisciplinary team with various perspectives and areas of expertise can further add to the problem solving process when identifying a student's area of need and an instructional response.

What is known about collaboration is that there are essential ingredients that contribute to an effective collaborative relationship. Collaboration relies on a positive and productive relationship which can be built through informal and formal conversations (Ritzman et al., 2006; Wesley & Buysse, 2006). Classroom visits provide opportunities for informal conversations to take place. In an inclusion-based preschool program, a multidisciplinary staff is assigned to serve identified students who have speech or language impairments, fine or gross motor delays, or other special needs. The presence of this diverse team brings opportunities for collaboration among general and special educators. Ritzman et al. (2006) published findings from their case study which examined effective ways classroom teachers and speech and language pathologists collaborated. The authors found that successful collaboration is built on a trusting relationship that grows through continued collaborative experiences. Furthermore, collaborative relationships evolved in response to the changing needs of students and team members. Miller and Stayton (1998) found that collaboration led to personal and professional growth and the reduction of a separatist identity.

A second essential ingredient to effective collaboration is communication. When specialists and teachers develop shared goals, maintain regular opportunities to dialogue, share ideas, observe, and utilize each other's expertise, they strengthen the likelihood that students will generalize skills learned from the service provider sessions into the classroom (Bauer, Iyer, Boon, & Fore Iii, 2010; V. Buysse & Wesley, 2004). Furthermore, collaborative teams who have a foundation of trust and regular communication develop a shared responsibility and shared language around student needs and strategies (Miller & Stayton, 1998; Trainor, 2008). Trust and communication can also lead to growth in the capabilities of teachers and service providers.

What is also known, is that staff and students benefit from effective multidisciplinary staff collaboration. Preschool teachers are prepared for their role by engaging in coursework with a focus on child growth and development of typically developing children. Conversely, early childhood special educators and service providers are prepared through coursework in how to educate students presenting with delays such as in speech and language development. Previous studies have revealed that multidisciplinary collaboration can lead to a transfer of expertise between general education and special education staff and a reduction to the number of special education referrals (Telzrow et al., 2000). Consultation and collaboration with specialists allow for opportunities to exchange knowledge from general educator to specialist and vice-versa within the teaching context. Wesley and Buysse (2004) examined the comfort level of preschool teachers in delivering specialized instruction to students. When preschool teachers had access to experts and resources, their comfort level increased. Furthermore, preschoolers with or without disabilities are provided the majority of their learning experience from the general education preschool teacher. Increasing the general education teacher's expertise through collaboration can reduce barriers to providing inclusive care and will support children's access to the general education curriculum (Dinnebeil, Pretti-Frontczak, & McInerney, 2009; Sadler, 2005). Service providers increase their knowledge and capability in working with preschool age students as they collaborate with preschool teachers who have expertise in early childhood education.

Effective collaboration improves the core curriculum for all students. When specialists model how to embed specialized instruction within daily routines, general educators can better support the development of students with and without special needs in inclusion-based preschools (Dinnebeil et al., 2009; Miller & Stayton, 1998). Modeling specialized instructional strategies in the classroom offers insight to the service provider about the effectiveness of

strategies used in the individual session and the level of successful generalization in the context of the classroom. Although preschool teachers are generally accepting of the inclusion of students with special needs, what remains to be answered is how successful collaborative problem solving teams address obstacles to collaboration.

Hindrances to effective collaboration emerged through the literature review and can be categorized into four areas. Staff beliefs were the first obstacle to emerge to effective collaboration (Dinnebeil et al., 2009; McNamara, Rasheed, & Delamatre, 2008; Trainor, 2008; Wesley & Buysse, 2006). These beliefs include teaching philosophy, student expectations, and teacher confidence in having the ability to ensure student access. Second, the lack of professional development opportunities on topics such as instructional strategies and collaborative processes, particularly for preschool teachers, was noted as an obstacle to effective collaboration (Dinnebeil et al., 2009; Trainor, 2008). The third category is the quality of interactions between team members (Dinnebeil et al., 2009; McNamara et al., 2008) including the level of facilitation skills and quality of the data based decision making processes and preparedness of the team members to apply these processes. Finally, time and scheduling were identified as obstacles for effective collaboration (Bauer et al., 2010; Miller & Stayton, 1998). For example, an itinerant specialist with a large caseload presents an obstacle to scheduling time for collaboration.

Roles and responsibilities. Individuals who are members of an effective collaborative problem solving team share responsibility for the learning of all students. Nellis (2012) stated that an effective decision-making team is assembled based on a common purpose, clear objectives, and goals. Once a team is assembled, team members spend time getting to know one another, clarifying roles, and developing communication systems (Baxter, Brookes, Bianchi, Rashid, & Hay, 2009; DeVore et al., 2011). The common purpose guides each meeting time,

allows for professional discourse, and maintains a mantra that the children are not *my* students but *our* students.

Collaborative problem solving teams generate creative solutions to address mutually defined problems. The solutions are different from those that can be developed by an individual. Team members are responsible for maintaining fidelity to the co-constructed and agreed upon instructional plan (Ritzman et al., 2006). The instructional plan integrates the best thinking that team members bring to the decision-making process and comes from experience and evidence-based practices for the preschoolers (Wesley & Buysse, 2006). The collaborative problem solving team gathers information as the instructional plan is implemented so that the team can evaluate and adjust as needed.

Marston, Muyskens, Lau, and Canter (2003) found that in a collaborative problem solving team, the role of the general educator is one that involves responsibility for differentiation of instruction, data collection, and progress monitoring. In the preschool classroom, the teacher plans learning activities to support social and academic learning outcomes of all students. Through the collaborative problem solving process, a preschool teacher may also co-construct a modified instructional plan with strategies suggested by the speech and language pathologist to meet the needs of a student not making expected progress in language or literacy. Maintaining fidelity to these instructional strategies and monitoring the student's response to the instruction is an additional responsibility of the general education preschool teacher.

The role of the service provider is that of a specialist who shares expertise with general education staff (Marston et al., 2003). In a collaborative problem solving team, this role expands the service provider's traditional role from one of providing pull out services to eligible students to a role of problem solving and offering suggestions for students who are not eligible for special

education. Sanger et al. (2012) stated that a speech and language pathologist's expertise "…extends beyond language and communication disorders to include literacy, curriculum, and learning in school…the expertise of the speech and language pathologist in serving children with language and literacy problems suggests that clinicians should be primary stakeholders in RTI" (p. 3). Furthermore, the role of the service provider is to understand the preschool teacher's goals and core curriculum while simultaneously enabling teachers to differentiate their instructional approach so that it matches the unique abilities and needs of the student child (Case-Smith & Holland, 2009; Ritzman et al., 2006). General and special education staff play critical roles in the collaborative problem solving process. In order to fulfill their responsibilities, structures are needed to support the team's work.

Sadler (2005) suggested that when meeting structures are carefully selected, and team members consistently use agreed-upon protocols, preschool teachers and service providers further develop their expertise in meeting the needs of their students. It is the role of the principal or program director to safeguard time and structures for teams to meet and share ideas. McNamara et al. (2008) determined that "…teams that are organized, committed, and task focused, and whose members observed agreed-upon protocol, were viewed by school staff as more desirable in terms of membership and as more effective in achieving successful student outcomes" (p. 23). The administrative support and established protocols reaffirm the validity of the meeting structure.

Case-Smith and Holland (2009) added that when service providers are given flexibility in scheduling, they can adapt their service delivery to best meet the needs of students within the classroom environment and gain a better understanding of teacher's concerns about a student's

progress. Principals and program directors can support this work by allowing for flexibility in scheduling and service design.

What remains to be answered is how successful, collaborative, problem solving teams have addressed the obstacles that hinder the fulfillment of their roles and responsibilities. McNamara et al. (2008) noted challenges to problem solving teams, such as insufficient training and lack of readiness or skill in applying the problem solving process. Moreover, the skills necessary to implement some of the components of a problem solving process, such as data analysis, are more complex (Telzrow et al., 2000). Insufficient time for service providers to support the implementation of strategies within the classroom was also identified as a challenge for fulfillment of roles and responsibilities. Study participants requested more time with the speech and language pathologist (SLP) and advocated for the placement of a single SLP at the school site (Bauer et al., 2010; Baxter et al., 2009). These two obstacles mirrored two of the four noted as obstacles to collaboration.

A third obstacle to fulfilling roles and responsibilities on a collaborative problem solving team was the general education preschool teacher's unfamiliarity and lack of awareness with what service providers do. Baxter et al. (2009) noted that teachers were unfamiliar with the type of instruction provided outside of the classroom, with the data collected during these sessions, and its application to the classroom. Collaborative problem solving teams engage in an analysis of data to make decisions about next instructional steps, making familiarity with assessments essential. A fourth obstacle, programmatic policies, funding, and lack of principal or program director support emerged as administrative obstacles for fulfillment of roles and responsibilities of the collaborative problem solving team (V. Buysse & Wesley, 2004; Marston et al., 2003; Sanger et al., 2012).

Data-Driven Decision Making (DDDM). Mandinach (2012) defined data-driven decision making (DDDM) as a "…systematic collection, analysis, examination, and interpretation of data to inform practice and policy in educational settings" (p. 71). As a decision making group, the collaborative problem solving team moves through a cyclical process that involves collecting and analyzing data, applying the results through an instructional response, and looping back to collecting data and evaluating results.

In DDDM, team members select and use a variety of sources of data to inform their action steps. Sources of data include the minute by minute observations of students, informal checks for understanding and misconceptions, and the examination of student work. Furthermore, educators understand and recognize which data source will best help them identify a student learning problem and then transform those data into understanding student needs and actionable instructional steps (Mandinach, 2012). Understanding how to select, analyze, and apply data is essential for DDDM to be effective.

Throughout the collaborative problem solving process, team members engage in DDDM as they ask questions through an analysis of the data. Use of a protocol with guiding questions can be used to help maintain a systematic problem solving approach (McCart, Wolf, Sweeney, & Choi, 2009; Ventura County Office of Education & California Department of Education, 2011). Furthermore, teachers can learn from one another about how to respond to the needs of students by grappling with these guiding questions and engaging in professional discourse about possible solutions (Mandinach, 2012).

What is not known about DDDM, is how collaborative problem solving teams develop data literacy when there is a lack of informal and formal preparation for educators to build capacity in the use of data to inform instruction (Dunn, Airola, Lo, & Garrison, 2013;

Mandinach, 2012; Volante & Fazio, 2007; Wayman, 2005). In addition, Dunn et al. (2013) documented that teachers in their study reported lower levels of confidence in engaging in DDDM due to their limited understanding of statistics, data systems, and technology. Once collaborative problem solving teams use and apply what they learn from data, they can craft an instructional response tailored to the needs of identified students.

Response through Instruction

The third practice of the R & R model is *response through instruction*. V. Buysse and Peisner-Feinberg (2010) define the instructional response component as "the core instruction offered to all children as well as the more targeted interventions that are provided for some children who require additional help to learn" (p. 6). In R & R and other RTI models, the manner in which staff design the core plus targeted interventions is referred to as a multi-tiered approach to instruction. A multi-tiered model is a tiered model of instructional practices teachers use with all students as the core while making accommodations, modifications, and differentiating based on the individual needs of the student (D. Fuchs & Fuchs, 2009). The use of this multi-tiered approach offers preschool staff members a framework in which to provide the core early literacy instruction to all students while simultaneously differentiating the learning experiences for some students.

The multi-tiered approach consists of three tiers referred to as Tier 1, Tier 2, and Tier 3. Barnett et al. (2007) proposed definitions for each of the three tiers. Tier 1 instruction is defined as the adoption of a comprehensive, evidence-based core curriculum. This core curriculum reflects agreed-upon learning outcomes for students. Tier 2 is defined as instruction that includes additional classroom-based interventions and support for children not responding to the core classroom curriculum. An observer might see small group or embedded learning opportunities

within classroom routines or centers at the Tier 2 level. Finally, the Tier 3 level of instruction involves more frequent progress monitoring and intensive, individualized interventions, modeling, and teacher supports. Tier 3 instruction occurs within small groups or a one-to-one basis. Prior to describing the approach to targeted interventions in each of the tiers, it is necessary to define expected outcomes for all preschoolers in the early literacy.

Early literacy skills. Whitehurst and Lonigan (1998) defined early literacy as consisting of "…the skills, knowledge and attitudes that are developmental precursors to reading and writing" (p. 848). After reviewing the literature on early literacy skills, agreement exists around the key learning domains for preschoolers that are predictive of later reading success. All 50 states have developed or are in the process of developing and publishing preschool learning outcomes using current research on early literacy (California Department of Education, 2008).

In 2008, the California Department of Education (CDE) published the first of three volumes of the California Preschool Learning Foundations (CPLF) based on research, practitioner's expertise, and alignment with kindergarten standards. The introduction in volume one states that "The preschool learning foundations are a critical step in the California Department of Education's efforts to strengthen preschool education and school readiness and to close the achievement gap" (p. 9). CPLF Volume One (2008) includes outcomes in four domains including Social-Emotional Development, Language and Literacy, English-Language Development, and Mathematics.

The Language and Literacy domain reflects current research on early literacy skills and outlines three strands and sub-strands to guide preschools in designing literacy-rich programs. These strands are: (a) listening and speaking with sub-strands in vocabulary, grammar, language use, and conventions; (b) reading with sub-strands in concepts about print, phonological

awareness, alphabetics, word/print recognition, comprehension and analysis of age-appropriate text, and literacy interest and response; and (c) writing with a sub-strand in writing strategies (California Department of Education, 2008). A review of the literature confirms that skills within these strands and sub-strands are predictive of later reading success.

The Listening and Speaking Strand includes vocabulary, grammar and language use, and conventions. The literature in the Listening and Speaking Strand area validates that vocabulary is a key area of focus for preschoolers. Researchers agree that children who enter elementary school with large vocabularies can continue to learn new words easily and are more effective readers as they progress in school (Beauchat et al., 2009; M. C. Bradley et al., 2011; V. P.-F. Buysse, Ellen, 2013; California Department of Education, 2008; Callaghan & Madelaine, 2012; Christ & Wang, 2011; Dickinson, Anastasopoulos, McCabe, Peisner-Feinberg, & Poe, 2003; Justice, McGinty, Ying, & Moore, 2009; Whitehurst & Lonigan, 1998). Grammar and oral language have also been identified as key early literacy skills. Researchers have found that a child's grammar and oral language development impact listening and reading comprehension as they engage in dialogue around a text and answer questions posed by the teacher (Beauchat et al., 2009; M. C. Bradley et al., 2011; Chandler et al., 2008; van Kleeck, Vander Woude, & Hammett, 2006).

The Reading Strand includes "concepts about print, phonological awareness, alphabetics, word/print recognition, comprehension and analysis of age-appropriate text, and literacy interest and response" (California Department of Education, 2008, p. 51). An early literacy skill for young children is the understanding of how print works. Beauchat et al. (2009) described concepts about print as the understanding of directionality of reading, i.e. from left to right, recognizing the difference between a letter and a word, and recognizing the features of a text

such as the cover and title. A second reading strand skill is phonological awareness. California Department of Education (2008) defines phonological awareness as "the development of phonological awareness typically moves along a continuum in which children progress from sensitivity to larger concrete units of sound to sensitivity to smaller abstract units of sounds" (p.80). The ability to manipulate these smaller units of sound is referred to as phonemic awareness, which has been found to be one of the strongest predictors of later reading success (Lonigan & Whitehurst, 1998; Wasik, 2001). Alphabetics and word/print recognition are additional skills within the reading strand. Once formal reading instruction begins, students can more readily decode text if they come with the necessary phonological skills including letter-sound correspondences (Callaghan & Madelaine, 2012). Finally, literacy interest, analysis, and comprehension of text are early literacy skills within the reading strand. Van Kleeck (2007) stated that "…we need to think about fostering reading comprehension long before children act actually read" (p. 32). The reading strand reflects the many skills that have been established to be foundational to later reading comprehension.

The Writing Strand includes writing strategies. Preschoolers notice signage in their classrooms, home, and community. In the preschool classroom, an emergent writer may use scribbles or random letter strings to represent their own name or an idea. As students develop their understanding of the relationship between sounds and letters, writing moves from emergent writing to conventional spelling (Chandler et al., 2008; Whitehurst & Lonigan, 1998). The three strands and sub-strands within the Language and Literacy Domain guide preschools as they plan early literacy experiences through a multi-tiered instructional approach.

Tier 1 core instruction. Researchers agree that early literacy gaps can be prevented when learning experiences are integrated within the classroom context, connected to students'

lives, and tailored to meet students' developmental needs. Additionally, designing these experiences using a theme-based approach and planning learning opportunities where preschoolers learn through different modalities can address knowledge gaps (Christ & Wang, 2011; Horn & Banerjee, 2009; Spencer, Goldstein, & Kaminski, 2012).

Learning formats used within Tier 1 instruction include play-based centers such as a class library, writing area, puzzles and games, and building areas. Additionally, Tier 1 instruction is provided through whole group and small group activities, and daily routines. Throughout the day, preschoolers have opportunities to acquire vocabulary, grammar, and language skills as they engage in formal and informal conversations. For example, a formal conversation can occur during a whole group or small group shared reading experience. Shared reading is defined as an opportunity for adults to read to the whole class, small groups, or individuals pausing to engage in discussion including, "…the story and pictures and words and letters-outside the text-responses and connections to experiences" (Beauchat et al., 2009, p. 27). Shared reading is an instructional strategy that has the potential of addressing multiple literacy targets such as oral language (i.e. teachers use open-ended questions allowing for multiple responses), vocabulary development and exposure (i.e. selecting and teaching target words explicitly), comprehension development (i.e. students listen to the story and engage in conversation around a text), phonological awareness (i.e. rhyming), and print awareness (i.e. teacher models tracking (Beauchat et al., 2009; Christ & Wang, 2011; Spencer et al., 2012). Informal language opportunities for listening and speaking occur during snack or free play (Beauchat et al., 2009; M. C. Bradley et al., 2011; Chandler et al., 2008).

Opportunities for intentional teaching of early literacy skills arise during teacher-directed and child-directed learning opportunities. Teacher-directed activities and routines that promote

literacy include shared reading and center-based lessons such as cooking or science. Teachers can pre-select vocabulary to model or select specific question types. Teachers can also model oral and written language and use peer modeling to reinforce these skills (Beauchat et al., 2009; Chandler et al., 2008; Spencer et al., 2012; Whitehurst & Lonigan, 1998). Child-directed activities typically encountered in a preschool setting include play-based centers including dramatic play and block building. Opportunities for intentional teaching of early literacy skills can be planned and presented in a fun and developmentally appropriate manner through play activities such as dramatic play or building blocks (Callaghan & Madelaine, 2012; Paciga, Hoffman, & Teale, 2011).

As described in the *recognition through assessment* section, staff members administer universal screenings throughout the year to monitor class progress as a whole. At the Tier 1 level, staff members may decide that a whole class intervention is appropriate. Examples of whole class Tier 1 interventions include strategies for increasing the engagement level, activity extensions, or slowing down the flow of the lesson. Through informal and formal assessments, the collaborative problem solving team may determine that some students require the core plus additional intervention through Tier 2 and/or Tier 3 instruction.

Tier 2 embedded learning and small group instruction. Through universal screening and the collaborative problem solving process, common needs shared by some students emerge. The team develops a Tier 2 instructional plan to best support these students and considers adjustments to the learning environment and level of adult support.

At the Tier 2 level, learning opportunities are designed that can be embedded within typical routines and activities. Chandler et al. (2008) defined embedded learning as "…identifying when goals will be addressed during the day and developing strategies for

achieving goals that can be integrated into classroom activities and routines" (p. 7). Researchers have advocated for naturalistic approaches that are embedded in instruction because they are minimally intrusive and brief (Grisham-Brown, Schuster, Hemmeter, & Collins, 2000; Horn & Banerjee, 2009). Embedding interventions during naturalistic times of the day such as mealtimes allow for more flexibility and range of topics of conversations (B. A. Bradley & Reinking, 2011). Additionally, staff may determine that the use of small group structure can facilitate needed instruction to address the common needs of a small group of students. For example, book sharing is a typical activity experienced by the whole group as a part of Tier 1. However, a book share can also be used as a Tier 2 strategy within a small group with increased adult support. For example, the teacher may use a think aloud to model a response to a question or ask a student follow up question to increase their mean length of utterance. A teacher may also pause during a whole group shared reading activity when using a target vocabulary word and explain the meaning in context (Christ & Wang, 2011).

Spencer et al. (2012) stated "to teach vocabulary well, teachers must prepare in advance, carefully selecting words to teach and design instruction that provide information about the meaning of the words and creating opportunities to practice using these words" (p. 22). At the Tier 2 level, word selection is based on the needs of the small group of students at the Tier 2 level and additional embedded opportunities are designed.

Additionally, at the Tier 2 level, staff may increase the frequency of intentional teaching throughout the day during both child-initiated and teacher-initiated learning opportunities. Finally, team members can use these additional embedded and small group learning opportunities to monitor student progress, collect data, and adjust the instructional response accordingly.

Tier 3 intensive scaffolding strategies. Through the collaborative problem solving process, it may be determined that a student requires additional instructional opportunities and modifications within the learning environment and adult support. At the Tier 3 level, students experience Tier 1 core learning experiences with all students, Tier 2 small group instruction with students of similar needs, and embedded learning opportunities to practice these skills throughout the day. Additionally, students at the Tier 3 level experience individualized instructional opportunities and an increase in adult support within their learning environment.

Learning formats utilized in Tiers 1 and 2 continue to include embedded learning, small group, and whole group. However, the amount of adult support in scaffolding instructional activities for students, as well as the individualization of target skills, increases at the Tier 3 level. A teacher's use of scaffolds is a strategy to temporarily provide support to a learner and then gradually withdraw this support as the learner can perform the skill independently. Researchers found that scaffolding enables teachers to provide children with the necessary amount of feedback and prompts, and is an especially useful strategy to employ with preschoolers considered social disadvantaged and/or lacking in early literacy skills (McGee & Ukrainetz, 2009; Pentimonti & Justice, 2010). Examples of scaffolds include co-participating, eliciting, and reducing choices.

Embedding learning instruction has been found as an effective strategy to continue to use at the Tier 3 level to teach a range of skills to children, with or without disabilities, in inclusive preschool classrooms. Furthermore, the authors found that embedding instruction throughout the day increases the likelihood of the generalization of skills across settings (Grisham-Brown et al., 2000; Rakap & Parlak-Rakap, 2011). During small or whole group activities, adult support increases through the use of wait time and prompting. For example, van Kleeck et al. (2006),

found that shared book reading with embedded questions that target both literal and inferential language skills can result in an increase of receptive and expressive language for students, particularly with speech and language impairments. Adults can use a think aloud strategy when sharing story books and take into account a child's prior knowledge and experience when deciding which literal and inferential questions to pose. Spencer et al. (2012) agreed that students at the Tier 3 level require more intensive and individualized support, particularly in the area of vocabulary development. A collaborative problem solving team can determine how to best support a vocabulary development based on the individual child's needs. Perhaps it is determined that a focus on familiar or functional vocabulary words, with increased frequency and adult scaffolding support, is the best course of action for one student to access daily routines where another might need targeted vocabulary instruction to access a text. Additionally, Spencer et al. (2012) noted that support at this level will necessitate the expertise of classroom general education and special education teachers and speech pathologists in the planning and modeling of the strategies.

Three themes emerged as challenges faced in responding through a multi-tiered instructional approach: (a) reliance on multi-disciplinary collaboration; (b) strengthening preschool staff member's instructional capacity for differentiation; and (c) philosophical challenges in the manner in which adults support students in a preschool classroom. Multi-disciplinary collaboration is needed to implement a multi-tiered instructional approach. If preschool teachers and staff are to implement multi-tiered instructional strategies in early literacy with fidelity, there is a need for speech and language pathologists to work closely with general education staff within the classroom (Chandler et al., 2008; Horn & Banerjee, 2009). This collaboration includes problem-solving, planning, and modeling of instructional strategies.

Strengthening preschool staff member's instructional capacity for differentiation emerged as a second challenge faced in responding through a multi-tiered instructional approach. Dickinson and Porche (2011) found one of the reasons we do not see the expected progress in preschoolers' language development is that we need to change the capacity of our preschool teaching staff. However, researchers have found that preschool staff can build their capacity to reliably implement scaffolding and other instructional strategies when they are taught within the context of their preschool classroom, have the opportunity to see these strategies modeled, and receive feedback as they implement (Beauchat et al., 2009; Grisham-Brown et al., 2000).

Philosophical challenges related to how adults support children in a preschool setting emerged as the third theme. Philosophical challenges exist as instruction becomes more explicit and adult supported at the Tier 2 and 3 levels. Callaghan and Madelaine (2012) reported that explicit literacy instruction may be viewed by early childhood educators to be in conflict with a play-based, child-centered learning environment. However, the authors agreed that "… a focus on systematic explicit instruction in early literacy skills is likely to lead to improve literacy skills overall" (p. 14) and has a place in the preschool classroom.

Summary

Early Childhood programs in the United States originated as a result of legislative efforts to address the learning gap of young children entering the K-12 school system and to level the playing field for students from at risk sub-groups. Legislative efforts and professional organizations have influenced the rising development of preschools across the country.

Legislative efforts signify a nationwide focus on early childhood programs and preparation for kindergarten. Two key examples include the War on Poverty Act of 1965 which led to the founding of the Head Start preschool program, and states followed by further

developing a combination of federal and state-funded preschool programs. A second example is the nation's education goals of 1990, which included a goal for all kindergarteners to enter school ready to learn by the year 2000.

Legislation to support early intervention and special education continued to evolve from 1975 through 2004. The Education for All Handicapped Children Act of 1975 (EAHCA) was enacted to provide specialized services and access to education for students identified with disabilities. In 1990, EACHA was renamed the Individuals with Disabilities Education Act (IDEA), and Part B of this act mandated states to expand special education services to preschool age students (Danaher et al., 2004). The 2004 revision, named the Individuals with Disabilities Education and Improvement Act (IDEIA), promoted the implementation of a Response to Intervention (RTI) approach to catch students with special needs early on and reduce future grade level retention or special education eligibility. While legislative efforts have led to an increase in the availability of federal and state-funded preschool programs, professional organizations, whose goals are to support high quality preschool programs, continue to shape preschool programs.

Two national organizations committed to high quality early childhood programs, intervention, and special education across the United States include the National Association for the Education of Young Children (NAEYC) and the Council for Exceptional Children (CEC). These organizations contribute to the field of early childhood and early childhood special education through their continuing research on instructional practices, teacher preparation, and collaboration with families, special educators, and the K-12 community.

In the State of California, these same legislative efforts and professional organizations influence the program quality guidelines and learning foundations for the California State

Preschool Program (CSPP). Local education agencies use these guidelines to design self-contained and collaborative inclusion-based models where staff members bring a variety of expertise to the classroom to meet the needs of diverse learners. Although these models were intended to reduce the learning gap, the preschool community is looking to the RTI framework in K-12 as a potential model for supporting the developmental-based skills and academic-based skills of young children.

Research conducted by the National Center on Response to Intervention (NCRTI) suggests that the application of a Response to Intervention (RTI) framework at the elementary level has been successful in addressing the learning needs of students through four essential components (National Center on Response to Intervention, 2010). These elements have influenced state departments of education as they seek to address the 2004 IDEIA recommendations and respond to students' needs as early as possible. The California Department of Education further defined RTI by publishing its own philosophy of RTI with the addition of a second *I* for *instruction*(RTI^2) and fleshing out the details of the four components into ten (California Department of Education, 2013b). While K-12 school systems utilize the RTI^2 framework in California, preschool models are emerging.

The first mention of RTI in preschool was in 2006 (M. R. Coleman et al., 2006). Since then, national organizations, including the Center for Response to Intervention in Early Childhood (CrtiEC), continue to research and provide resources on their website. Recently, Lieberman-Betz et al. (2013) conducted a comprehensive review of the RTI models in preschool that reflected the core elements of RTI and Odom & Wolery's (2003) Eight Tenets of Early Intervention/Early Childhood Special Education programs (EI/ECSE). The selected models

applied an RTI framework for supporting developmental-based skills and academic-based skills (Lieberman-Betz et al., 2013).

V. Buysse and Peisner-Feinberg (2010), described an academic-based skill model called Recognition and Response (R & R). This model was developed to support the academic-based needs of students with and without disabilities. R & R is aligned with RTI components recommended by the National Center on Response to Intervention (NCRTI) and California's Response to Instruction and Intervention (RTI^2). R & R reflects RTI practices such as recognizing student needs through universal screening and progress monitoring, responding through multi-tiered targeted instructional strategies, and collaborative problem-solving systems that include planning with teachers, specialists, and parents.

The first R & R practice, *recognition through assessment*, consists of universal screening for all students three times per year and progress monitoring for some students as frequently as once per week. Curriculum–based measurements (CBM) are quick probes designed to measure discreet skills and can be administered frequently to ensure that students are on track for meeting benchmarks throughout the year (McAlenney & McCabe, 2012). In California, state preschool programs use a universal screening tool called the Desired Results Developmental Profile-Preschool (DRDP-PS). The DRDP includes Language and Literacy Development (LLD) measures which reflect the learning outcomes from the California Preschool Learning Foundations (CPLF) document (California Department of Education, 2008). The literature revealed that progress monitoring tools are sparse, leaving preschool teachers to determine how to measure students' progress through informal assessments. Furthermore, the researcher did not find literature related to how progress monitoring occurs between DRDP universal screening administrations.

Collaborative problem-solving is a process where a multidisciplinary team provides a variety of expertise to inform instructional decision-making to meet the needs of the class, some students, and individuals. The literature revealed essential ingredients to successful collaboration which included trust and communication. Additionally, the literature revealed obstacles to collaboration including philosophical beliefs, lack of professional development around collaborative processes and data literacy, quality of interactions between team members, and scheduling time to meet (Bauer et al., 2010; V. Buysse & Wesley, 2004; Dinnebeil et al., 2009; McNamara et al., 2008; Miller & Stayton, 1998).

A multi-tiered *response through instruction* approach refers to the core instruction as well as instruction tailored to meet the needs of small groups and individual students. After reviewing the literature on early literacy skills, agreement exists around the key learning domains for preschoolers that are predictive of later reading success. All fifty states have developed, or are in the process of developing and publishing, preschool learning outcomes using current research on early literacy (California Department of Education, 2008). In a multi-tiered approach, the early literacy skills of students are met through varied learning formats, instructional strategies, and adjusted adult support. Learning formats described included teacher-directed activities such as whole group and child-directed activities such as free play. Instructional strategies infused across Tiers included shared reading and embedded learning opportunities, where early literacy skills can be applied within daily routines and activities (B. A. Bradley & Reinking, 2011; Chandler et al., 2008). Adult support is adjusted to meet the needs of the students. Examples included scaffolding through vocabulary selection and questioning strategies (McGee & Ukrainetz, 2009; Pentimonti & Justice, 2010; Spencer et al., 2012).

The literature review provided the researcher with a foundation to pursue this study. The review of seminal and contemporary literature led to the formulation of research questions that have yet to be answered in the literature.

Chapter 3

Introduction

The purpose of this case study was to investigate and describe Recognition & Response (R & R) practices, a model of early literacy Response to Intervention, utilized by multidisciplinary staff teams in a purposively selected, inclusion-based preschool program in Southern California. Investigated R & R practices included: (a) recognition of student needs through assessment, (b) collaborative problem-solving as a process to plan and evaluate next steps for students, and (c) response through a multi-tiered instructional approach.

The researcher examined the following three research questions in one purposively selected Southern California preschool program that is inclusion-based, has multidisciplinary staff teams of early childhood education teachers, early childhood special education teachers, and speech and language pathologists and has been identified as utilizing the three practices of recognition of students' early literacy needs through assessment, collaborative problem solving, and multi-tiered instructional strategies:

1. What informal and formal progress monitoring assessment tools and practices, if any, are utilized by staff teams for the purposes of recognizing when a student is not making the expected progress in early literacy?
2. What collaborative problem solving practices, if any, are utilized by staff teams to plan next steps when a student is not making the expected progress in early literacy?
3. What multi-tiered instructional practices, if any, are utilized by staff teams to respond when a student is not making the expected progress in early literacy?

This chapter begins with a description of the research design and rationale for its selection. Next, the setting, population, sampling procedures, and human subject considerations

are presented. This is followed by a description of the instrumentation, data collection, management, and analysis. Finally, the researcher provides a positionality statement on this research topic.

Research Design

A qualitative case study design was used for this study. Richards and Morse (2013) proposed that qualitative methods can serve as the best way to address certain types of research purposes and questions. The same authors stated "…if the purpose is to understand an area where little is known or where previously offered understanding appears inadequate (thin, biased, partial), you need research methods that will help you see the subject anew and will offer surprises" (p. 27). The literature on this study is sparse; therefore, a qualitative approach was utilized.

Qualitative methods can serve a variety of study purposes. For example, this method can lead to an understanding of complex situations, how participants experience a phenomenon, or lead to the construction of a theory (Richards & Morse, 2013). A range of qualitative methods were considered to address the study purpose and research questions. The researcher identified the case study methodology as the best fit. Creswell (2013) defined the features of case study methodology as the identification of a case, establishment of the intent of the study, and the opportunity for in-depth examination of a single or multiple cases.

The case study design served as the ideal approach for the study of emerging Recognition and Response (R & R) practices. The case study design allowed for the collection of data from multiple classrooms and provided opportunities for various sources of data and information from different teaching contexts to be represented in the written report.

Design Validity

Anderson, Herr, and Nihlen (2007) proposed five types of validity or trustworthiness to be considered in a qualitative study: (a) outcome, (b) process, (c) democratic, (d) catalytic, and (e) dialogic. In this case study, three of the five validity types were integral to the research methodology. First, outcome validity is inherent to the research design as the research questions were selected to address gaps in the literature and can lead to a "…deeper understanding of the problem and how to go about resolving it in the future" (p. 40). Second, process validity was present through data triangulation and brought a variety of perspectives to the examination of the issue of R & R practices in early literacy through focus group interviews, classroom observations, and an artifact review. Anderson et al. (2007) supported the use of triangulation and adds "…the notion of triangulation, or the inclusion of multiple perspectives, guards against viewing events in a simplistic or self-serving way" (p. 41). Third, dialogic validity was addressed through peer review at various stages of the research including the site identification criteria, vetting of instrumentation, and coding of data.

Setting

This case study took place in a Southern California school district. The program was established in 1998 with three small classes with five to ten students in each class. The program was established to meet the needs of students with special needs.

Currently, the district's inclusion-based preschool program serves approximately 180 preschoolers in 10 classrooms at two elementary school sites. All preschool classrooms use the California Preschool Learning Foundations (CPLF) to plan learning experiences, assess students' progress through informal and formal assessments, and have collaborative structures in place. This single district utilizes a blended funding model through the use of California State

Preschool Program funds, district general funds, and family fee-based tuition based on income eligibility. The program is free to students identified with disabilities. Preschool classrooms are designed as inclusion-based. Students, ages three to five, are served within the ten preschool classrooms in this district program. Table 2 presents the classroom designs utilized and offered by this school district program.

Table 2

Classroom Designs Offered by the Southern California District Preschool Program

Classroom Design	Students Served	Staffing	Number of Classes
Early Childhood Education (ECE) Class: Two-thirds of students typically developing and one-third identified as having special needs.	Four-year olds	Primary taught by ECE teacher with consultation with (ECSE) teacher and other service providers.	2
Early Childhood Education (ECE) and Early Childhood Special Education (ECSE) 50/50 Class: Half of students typically developing and half identified as having special needs.	Four-year olds	Primarily taught by ECSE teacher in collaboration with an ECE teacher. Consultation with service providers.	2
Early Childhood Education (ECE) Class: Two-thirds of students typically developing and one-third identified as having special needs.	Three-year olds	Primary taught by ECE teacher with consultation with (ECSE) teacher and other service providers.	1
Early Childhood Education (ECE) and Early Childhood Special Education (ECSE) 50/50 Class: Half of students typically developing and half identified as having special needs.	Three-year olds	Primarily taught by ECSE teacher in collaboration with an ECE teacher. Consultation with service providers.	2

(Continued)

Classroom Design	Students Served	Staffing	Number of Classes
Intensive Class: All students in the classroom are identified as having special needs. Mainstreaming opportunities, as appropriate.	Three and Four-year olds	Primarily taught by ECSE teacher with mainstreaming opportunities with an ECE class. Consultation with service providers.	1
Speech and Language Based Class: Half of the students are identified with speech or language impairments and half are typically developing students.	Four-year olds	Co-taught by ECSE and speech and language pathologist (SLP).	1
Speech and Language Based Class: Half of the students are identified with speech or language impairments and half are typically developing students.	Three-year olds	Co-taught by ECSE and speech and language pathologist (SLP).	1
			10 classes total

Through purposive sampling, the four-year old preschool program located at one of the elementary school sites was selected for this case study. As shown in Table 2, the four-year program is comprised of two 50/50 Early Childhood Education/Early Childhood Special Education (ECE/ECSE) classrooms and two Early Childhood Education (ECE) classrooms.

Student demographics within each of the four preschool classrooms, selected for this study, are presented below. Table 3 presents the student demographics in the four preschool classrooms by ethnicity. Table 4 presents student demographics in the four classrooms by group, and Table 5 further defines the students with disabilities group into special education eligibility areas.

Table 3

Student Demographics by Ethnicity: Four-Year Old Program

	White	Hispanic	Asian	Multiracial	Other
Class A	10	1	4	3	2
Class B	12	0	4	1	1
Class C	13	1	3	1	2
Class D	13	0	0	1	2

Table 4

Student Demographics by Group: Four-Year Old Program

	ED	EL	SWD	Male	Female
Class A	0	2	10	13	7
Class B	0	0	6	10	8
Class C	0	1	6	11	9
Class D	0	0	10	11	5

Note. ED=Economically Disadvantaged, EL=English Learner, SWD= Students with Disabilities

Table 5

Student Demographics by Identified Disability

	SLI	AUT	OHI	DHH	OI
Class A	6	4	2	0	0
Class B	2	1	1	1	1
Class C	6	0	0	0	0
Class D	4	5	1	0	0

Note. SLI= Speech or Language Impaired, AUT=Autism, OHI=Other Health Impairment, DHH= Deaf or Hard of Hearing, OH=Orthopedic Impairment

Population

The researcher used purposive sampling to select this single district program and the classrooms within this program for this case study. The criteria used to identify the program for this case study required that the program: (a) utilize the California Preschool Learning Foundations (CPLF) to guide curriculum development, (b) be inclusion-based, and (c) be staffed as a multi-disciplinary team. For the purpose of this study, a multidisciplinary team is defined as including an early childhood education teacher (ECE), an early childhood special education teacher (ECSE), and a speech and language pathologist (SLP). Potential participants for this study were identified using the following inclusion criteria: (a) currently provide services to three to five year old students within the same program for at least two years; (b) serve as part of a multidisciplinary team; and (c) hold the required California certification as an early childhood educator, early childhood special educator, or speech and language pathologist.

Sampling Procedures

First, the researcher sought out expert recommendations from district program directors and early childhood education program professors from the local community college to identify potential cases. Second, the researcher contacted potential district preschool programs to confirm the programs utilize the practices of assessment, collaborative problem solving, and multi-tiered instructional strategies. Three district programs were identified in this preliminary search for programs meeting the criteria.

The number of potential cases was narrowed further for two reasons. In the instance of one district, the researcher was not granted access to see if the program met the inclusion criteria. In the instance of the second district, the program had formal evidence of student success and

met the established inclusion criteria; however, the researcher's position in the district would have restricted her from observations.

Sample

The single district identified for this study is recognized by experts as utilizing the three practices of the R & R model: (a) recognition of student needs through assessment, (b) collaborative problem-solving as a process to plan and evaluate next steps for students, and (c) response through a multi-tiered instructional approach. The program met the inclusion criteria for the study and provided greater access in regards to permission and cooperation from the program director and district designee. Ten classrooms exist in the preschool program. In consultation with the preschool director, four classrooms were purposively selected as classrooms for this study.

The identified staff participants within the four classrooms currently provide services to four-year old students within an inclusion-based preschool classroom. The potential participants for this study met the inclusion criteria as they have been a part of this inclusion-based preschool program staff for a minimum of two years, serve on a multidisciplinary team, and meet California certification requirements. The participants provided the following descriptions of their experience and certifications:

Teacher A has served as an early childhood special education (ECSE) teacher for 13 years within this program. Teacher has served as a mentor teacher and was part of the local county of education (LCOE) and special education local planning area (SELPA) preschool curriculum committee. Teacher A holds a Master of Education degree in Early Childhood Special Education with an endorsement in Visual Impairments from the University of Utah and a Bachelor of Science degree in Early Childhood Education. Teacher A holds an Education

Instruction Specialist Credential in Early Childhood Special Education and Cross-cultural, Academic, and Language Development Certificate (CLAD) certification.

Teacher B has served as an early childhood education (ECE) teacher for six years within this program. Teacher B holds a Master in Education/Early Childhood Education degree. Teacher B holds a California Site ECE Supervisor Permit. Teacher B has taught in ECE inclusion-based classes for over 20 years and taught traditional preschool in the private sector for nine additional years. Teacher B has also served as a mentor teacher for eight years.

Teacher C has served as a staff member in this program for three years; one year as an ECE teacher and two years as a classroom assistant. Teacher C has three additional years of experience teaching elementary primary grades at another school site. Teacher C holds a California Clear Teaching Credential in Elementary and a Bachelor of Arts degree in Child Development.

Teacher D has served as an ECSE teacher in this program for 13 years. Teacher D holds a Master of Arts degree in Early Childhood Special Education, a Bachelor of Arts degree in Fine Art, a certificate in early childhood development, a California ECSE credential, and is certified as a behavior intervention case manager.

The Speech and Language Pathologist (SLP) reported that she has been working as an SLP for nine years within this program. She holds a Master of Science degree in Speech Pathology and a California State Licensure in Speech Pathology. The SLP serves as the district speech and language chairperson.

Human Subjects Considerations

The identified program is located within a single district on an elementary school campus. For this reason, the researcher sought three levels of permission including the district

designee, program director, and site administrator. Permission to conduct the study was sent electronically to the individual administrators. The director of the preschool program facilitated the gathering of signatures from the assistant superintendent and site principal. Once these two signatures were collected, the director included her signature, scanned the permission to conduct the study on district letterhead, and returned it electronically to the researcher. Once the formal permission and access was granted by the local education agency, the researcher submitted the Institutional Review Board (IRB) application, and the study was approved by Pepperdine's Institutional Review Board (IRB) on May 1, 2014. (Appendix K).

Next, potential participants were recruited by email invitation. This invitation provided a description of the study's purpose, type of data to be collected, and time commitment involved. Participants were informed of all aspects of the study including that participation was voluntary.

The researcher arranged a time to meet with the preschool staff teams to discuss the research study purpose and why their experience and perspectives were valuable to the study and field of early childhood education. A consent form (Appendix A) was secured for each teacher and the speech pathologist who agreed to participate in the study. One of the data collection strategies used in this study was classroom observation of instructional strategies utilized by teachers and speech and language pathologists. For this reason, additional consent forms were secured from classroom assistants in the classroom (Appendix B) and parent consent for students in the classrooms (Appendix C) since they will be in the classroom during the observation. In consultation with the preschool program director, the parent consent forms did not require translation into any other language as all families spoke English. An alternative activity was provided for one student whose parents did not consent to the classroom observation.

The researcher completed the Social and Behavioral Research Course (Appendix H) and applied the principles of this course to ensure minimal risks to participants. Minimal risks to participants included: (a) time collecting artifacts and participating in a focus group and (b) comfort level during classroom observations and while being interviewed. Potential benefits to the participants included professional learning through the focus group interview process. This information can be used to inform program design and support for collaboration. Remuneration was in the form of twenty-five dollar gift cards for each participating teacher and speech and language pathologist in appreciation of their time and contribution to the study. Potential benefits to society include the sharing of findings with the broader early childhood community to inform program design and support for collaboration.

Confidentiality was maintained throughout the data collection and analysis process. Data was accessed solely by the researcher and was maintained on the researcher's computer in a password protected file. Pseudonyms have been used when referring to the district, site, and participants. Data will be kept a minimum of three years following the study conclusion.

Instrumentation

In this case study, the researcher utilized three data collection instruments to address the research questions. First, an interview protocol was used to conduct a focus group interview with multidisciplinary teams that included classroom teachers and speech pathologists. Second, an original field note form was utilized during classroom observations. Third, an artifact review form was used to review artifacts such as lesson plans, assessment tools, and instructional materials.

Focus Group Interview Protocol. According to Creswell (2013), focus groups can provide helpful information when interviewees are interacting in the group interview process.

Collaborative problem solving within multidisciplinary teams is one of the essential R & R practices examined in this study. The purpose of this semi-structured focus group interview instrument was twofold: first, to capture the collaborative problem solving dynamic within staff teams; second, to capture staff's perceptions on how progress monitoring tools are used, ways in which problem solving occurs, and the extent to which instructional strategies are designed collectively.

An original protocol was designed by the researcher and reflects the themes from the literature and research questions of the study. The protocol included twelve questions which were posed to the group with an opportunity to share artifacts (Appendix D). Participants received the interview questions two weeks prior to the interview. The twelve interview questions were aligned with themes from the literature and the research questions (Appendix E). The researcher validated the interview protocol and questions in two ways. First, the questions were vetted through an Early Childhood Special Education Professor at a local community college. Second, the researcher vetted the interview protocol with a non-participating inclusion-based preschool team. Based on this feedback, the researcher made three changes to the focus group interview protocol. First, the order in which the focus group questions would be asked was adjusted to promote a smoother flow. Second, the language used in some of the questions was adjusted to make the questions more user-friendly. Third, it was recommended that additional time be allocated for the interview.

Artifact Review Form. This original tool was designed by the researcher to capture evidence of progress monitoring tools, collaborative problem solving structures, and multi-tiered instructional strategies (Appendix F). Examples of potential artifacts were listed in the focus group protocol which was given to participants in advance. The researcher validated the artifact

review form through an Early Childhood Special Education Professor at a local community college and with a non-participating inclusion-based preschool team. As a result of their feedback, additional examples of possible artifacts were provided to participants.

Observation Field Note Form: An original field note form was designed by the researcher. The researcher utilized this field note form to gather information during two classroom observations in each classroom. The purpose of this field note form was to gather anecdotal evidence of multi-tiered instructional strategies (Appendix G). After vetting the observation form with the Early Childhood Special Education Professor and the non-participating inclusion-based team, they did not recommend any adjustments to the form. However, their final recommendation was to adjust the title of the study from *collaborative* preschools to *inclusion-based* preschools. These experts felt that collaborative was defined in a variety of ways in the field whereas inclusion-based would be understood by all in the profession.

Data Collection

Three data collection strategies were utilized by the researcher. Alignment between the research questions and data collection strategies can be found in Table 6. The data collection strategies were implemented in three phases.

Table 6

Research Questions and Data Collection Strategies

Research Question	Focus Group Interview	Artifact Review	Classroom Observation
What informal and formal progress monitoring assessment tools and practices, if any, are utilized	X	X	X

(Continued)

Research Question	Focus Group Interview	Artifact Review	Classroom Observation
by staff teams for the purposes of recognizing when a student is not making the expected progress in early literacy?			
What collaborative problem solving practices, if any, are utilized by staff teams to plan next steps when a student is not making the expected progress in early literacy?	X	X	
What multi-tiered instructional practices, if any, are utilized by staff teams to respond when a student is not making the expected progress in early literacy?	X	X	X

Note. Table 6 describes the data collection methods and alignment to research questions.

Focus group interviews. During the first phase of data collection, focus group interviews were held with each multidisciplinary staff team and took place in May, 2014. Participants in each focus group included an ECE teacher, an ECSE teacher, and a speech and language pathologist who work in the same preschool classroom. The researcher took the following steps prior to the focus group interview session.

First, the researcher secured an agreed upon location to hold the focus group interview session and allocated approximately 60-75 minutes per focus group interview. Second, interview questions were provided to the staff two weeks in advance with a request to bring artifacts to the interview session that represent the three practices of recognition of student need through assessment, collaborative problem solving, and multi-tiered instructional strategies. Third, the researcher facilitated the focus group and recruited an interview recorder to monitor the audio recording and take additional notes by hand. The interview recorder holds a current Social and Behavioral Research Certificate (Appendix I).

During the focus group session, an interview protocol (Appendix D) was utilized by the researcher. Information about the purpose of the study was reviewed with the participants at the beginning of the interview. At the end of the interview, the researcher thanked the participants for their time and informed them of the following next steps.

During the second phase of the data collection process, the researcher arranged for the transcription of the interviews once the focus group interview data had been recorded. The researcher provided a copy of the team's transcript to the participants interviewed and invited individuals to clarify or elaborate on anything missed. Providing the transcripts to the participants, individually ensured accuracy and representativeness. The participants were reminded that they may contact the researcher to provide additional artifacts and that the researcher may contact individuals to clarify or ask for elaboration on the information gathered through the focus group interview process. The researcher did contact participants by email to clarify and elaborate on the information gathered through the focus group interview process.

Artifact review. Within each phase of the data collection process, participants were invited to share artifacts during and after the focus group session. Artifacts selected for review captured evidence of progress monitoring tools, collaborative problem solving structures, and multi-tiered instructional strategies. The researcher used the artifact review form to record evidence of these three practices (Appendix F). Prior to the focus group interview, participants received a request to bring artifacts to the focus group. A list of artifact examples was provided. Participants were invited to share artifacts during and after the focus group interviews between May and June, 2014.

Classroom observations. During the third phase of the data collection process, the researcher completed two 30-minute classroom observations in each participating classroom.

The researcher utilized an original field note form (Appendix G) to collect observational evidence of multi-tiered instructional and informal assessment strategies in the classroom. The classroom observations took place in May, 2014. As shown in Table 7, the data sets provided the researcher with two transcribed interviews, eight field note observation forms, and a review of eleven artifacts.

Table 7

Data Methods and Sets

Methods	**Location**	**Duration**	**Data Sets**
Focus Group Interviews	Classroom after dismissal	50-75 minutes each	Two transcribed interviews
Artifact Review	During and after the focus group interview	3-5 minutes per artifact	Eleven artifacts
Classroom Observations	Four preschool classrooms	Two 30 minutes sessions in each classroom	Eight observation field note forms

Data Management

Focus group interview transcripts, classroom observations, and artifact review forms were managed by the researcher. Electronic data was accessed solely by the researcher and was maintained and backed up on a computer in a password protected file. All informed consent forms and printed data collection were stored in a locked file cabinet. Confidentiality was maintained throughout the data collection and analysis process. Pseudonyms were used when referring to the district, site, and participants in data collected and reporting. Upon completion of the study, records will be maintained for three years and then will be destroyed.

Data Analysis and Reporting

The researcher applied the data analysis process outlined in the text, "Qualitative Inquiry and Research Design: Choosing Among Five Approaches" by John W. Creswell (2013). Creswell (2013) states, "The processes of data collection, data analysis, and report writing are not distinct steps in the process- they are interrelated and often go on simultaneously in a research project" (p. 182). During the data collection stage of the study, the researcher used *memoing* in the margins of transcripts, artifact review forms, and field note observation forms to jot down ideas, thoughts, or questions about what was collected. Using this process, as the data was initially explored, helped the researcher break down the larger data set to initial categories.

In the second stage of the data analysis process, the researcher took the information from the *memoing* and raw data, then described and categorized the data using a codebook for the purpose of creating additional codes. Creswell (2013) defines coding as "…aggregating the text or visual data into small categories of information, seeking evidence for the code from different databases being used in a study, and then assigning a label to the code" (p. 184). The researcher engaged in the coding process with a codebook that included a list of 18 a-priori codes based on the Recognition and Response (R & R) model. The list of codes expanded to 27 as they emerged through the reading and re-reading of the transcripts, field notes, and artifact review form notes. A second coder was recruited to cross-check the codes to ensure the reliability of the codes that emerged from the contextual analysis. The second coder holds a current Social and Behavioral Research Certificate (Appendix J).

In the third stage of the data analysis process, the researcher took the codes and identified themes. Creswell (2013) defines themes in qualitative research as "…broad units of information that consist of several codes aggregated to form a common idea" (p. 186). Finally, the researcher

used these themes to report a detailed description of the three R & R practices found within the classrooms in this study.

Procedural trustworthiness of this qualitative data analysis was established in three ways. First, the focus group interview protocol, artifact review form, and observation field note form were crafted based on the literature review (Appendix E) and were vetted through an Early Childhood Special Education Professor and a non-participating inclusion-based team. The instruments were revised prior to use in this study. Second, the assistance of an interview recorder during the interviews and the use of a second coder as a cross-checker of the coding ensured the reliability of the codes that emerged from the contextual analysis. Finally, findings emerged through the triangulation of data through the analysis of three data sets, including interview transcripts, artifact review form notes, and classroom observation field notes, and built validity to the study.

Positionality

I began my career in education as a paraprofessional in an inclusion-based preschool program. This first experience in the education profession inspired me to pursue a teaching credential and administrative credential. I served as a site administrator for an elementary school with a range of preschool and special education programs.

These experiences inform how I make sense of this topic through the lens of a paraprofessional, teacher, and administrator who has witnessed first-hand the impact early childhood programs can have on students identified with special needs at an early age. I hope that the study outcomes will bring new insight into the use of assessment and collaboration to inform instructional decisions at the preschool level.

Chapter 4

Introduction

The purpose of this case study was to investigate and describe Recognition & Response (R & R) practices, a model of early literacy Response to Intervention, utilized by multidisciplinary staff teams in a purposively selected, inclusion-based preschool program in Southern California. Investigated R & R practices included: (a) recognition of student needs through assessment, (b) collaborative problem-solving as a process to plan and evaluate next steps for students, and (c) response through a multi-tiered instructional approach. In this chapter, the results of the data collection for each of the research questions are presented and summarized.

The researcher examined the following three research questions in one purposively selected Southern California preschool program that is inclusion-based, has multidisciplinary staff teams of early childhood education teachers, early childhood special education teachers, and speech and language pathologists, and has been identified as utilizing the three practices of recognition of students' early literacy needs through assessment, collaborative problem solving, and multi-tiered instructional strategies:

1. What informal and formal progress monitoring assessment tools and practices, if any, are utilized by staff teams for the purpose of recognizing when a student is not making the expected progress in early literacy?
2. What collaborative problem solving practices, if any, are utilized by staff teams to plan next steps when a student is not making the expected progress in early literacy?
3. What multi-tiered instructional practices, if any, are utilized by staff teams to respond when a student is not making the expected progress in early literacy?

Research Design

The researcher utilized a qualitative case study design for this study. The single district preschool program selected for this case study is comprised of ten inclusion-based classrooms located in two elementary school sites. The four-year old classrooms within this program, which include four classrooms on one school site, were purposively selected for this study.

Two of the classrooms are designated as Early Childhood Education (ECE)-Early Childhood Special Education (ECSE) classrooms, also called "50/50" classrooms, where half of the students are identified with special needs and have individualized education programs (IEPs), and the other half of the students are considered typically developing students. In this study, Class A and Class D are designated as ECE-ECSE classrooms. Two additional preschool classrooms are part of the four-year old program and are designated as Early Childhood Education (ECE), where two-thirds of the students are considered typically developing preschoolers, and one-third are students identified with special needs and have IEPS. Class B and C are designated as ECE classrooms.

The participants in this study were selected using purposive sampling. Participants make up two multidisciplinary teams. Team ABS includes Teacher A (ECSE teacher), Teacher B (ECE teacher), and a speech and language pathologist (SLP). Team CDS includes Teacher C (ECE teacher), Teacher D (ECSE teacher), and a speech and language pathologist (SLP). The same SLP is a participant on both Team ABS and Team CDS.

Three data collection instruments were designed to address the research questions. The researcher designed the instruments to reflect the themes which emerged from literature review. The instruments included an interview protocol, an artifact review form, and a classroom observation tool. The interview protocol consisted of twelve questions. The questions were

shared with participants two weeks prior to the interview. The researcher requested that participants bring artifacts to the focus group interview session that represented the three practices of recognition of student need through assessment, collaborative problem solving, and multi-tiered instructional strategies. The researcher invited participants to submit artifacts throughout the data collection process; before, during, and after the focus group interviews and classroom observations. An original artifact review form was completed for each artifact submitted.

During the first phase of data collection, focus group interviews were held with both multidisciplinary staff teams. All members of Team ABS were present for their focus group interview. Before the Team CDS focus group interview began, the SLP was pulled to attend to one of her duties and was unable to attend the Team CDS interview. During the focus group interviews, participants were invited to share artifacts related to the three practices.

Next, the researcher arranged for the transcription of the interviews and provided a copy of the team's transcript to the participants interviewed, inviting individuals to clarify and/or elaborate on anything missed. Since the SLP was unable to attend the Team CDS focus group interview, a copy of the transcript from this team's interview was reviewed with the SLP, and she added to the team's responses. The participants were reminded that they could contact the researcher and provide additional artifacts.

In the final phase of data collection, the researcher conducted eight classroom observations; two thirty minute observations in each of the four classrooms. The first classroom observation was scheduled during whole group instruction. The second observation was scheduled during small group centers. An original observation field note form was used for each observation. Table 8 summarizes the data collection sets and participating staff members.

Table 8

Summary of Data Collected and Participants

Data Collection Method	Duration	Participants
Focus group interview	72 minutes	Teacher A, Teacher B, SLP
Focus group interview	54 minutes	Teacher C, Teacher D, SLP[a]
Class observation-group	30 minutes	Teacher A
Class observation-centers	30 minutes	Teacher A, SLP
Class observation-group	30 minutes	Teacher B
Class observation-centers	30 minutes	Teacher B
Class observation-group	30 minutes	Teacher C
Class observation-centers	30 minutes	Teacher C
Class observation-group	30 minutes	Teacher D
Class observation-centers	30 minutes	Teacher D, SLP

[a] Speech and Language Pathologist was unable to participate in the Team CDS focus group interview. The researcher scheduled a separate time to review the Team CDS focus group interview transcript with the SLP and integrated the SLP's responses.

Presentation of Findings

The findings of the study are organized according to the research questions. The findings are presented first by themes that emerged from the focus group interviews, artifact review, and classroom observations. This is followed by an analysis of the themes found in each data set in an effort to triangulate the findings from each data set.

Research Question One

RQ 1: What informal and formal progress monitoring assessment tools and practices, if any, are utilized by staff teams for the purposes of recognizing when a student is not making the expected progress in early literacy?

Data collected to address this research question included participant responses from four questions from the focus group interview protocol (questions 6A, 7, 8 and 10), a review of nine artifacts, and eight classroom observations. The artifacts were collected during and directly after the interview.

Focus group interview results. Question 6A asked participants, *"What type of informal and formal assessments do you use to learn about your students' early literacy skills?*" The question was formulated to determine which, if any, early literacy tools or assessments were used by the two multidisciplinary teams within the preschool program. Table 9 presents the types of informal and formal assessments that emerged from interview question 6A.

Table 9

Reported Use of Informal and Formal Assessments to Monitor Students' Early Literacy Skills

Types of Informal and Formal Assessments	Coded Responses for Team ABS	Coded Responses for Team CDS
Student Work Portfolios	2	2
Desired Results Developmental Profile (DRDP)	2	1
Anecdotal Notes	1	2
Classroom Observation	2	2
Brigance Inventory of Early Development	0	1

Note. Teams ABS and CDS included a special education preschool teacher, general education preschool teacher, and speech and language pathologist (SLP).

During the interview, participants described the types of tools used to monitor students' early literacy skills. The four teachers utilized student work portfolios as a way of informally monitoring student progress over time. The portfolios contained monthly directed draws, student dictations and illustrations created in response to a story, and student application of sequencing

of a story through a fine motor cutting and pasting activity. Three teachers mentioned the purpose of the portfolios as a way to monitor an individual student's progress. Below is a quote from Teacher D from the Team CDS focus group interview:

> I just think portfolios are really powerful because you can look at where a child started at the beginning of the school year, and see the progress they've made to the end of the school year….we did something called name puzzles where we wrote the kid's names, and initially, all I had them do is, we cut the letters apart, and they just had to sequence their name in order. Then we got to the point where they had to cut it, but we wrote the letters in the squares and they had to match the letters and the squares. Then they had to do the whole thing by themselves. And it was fun to see that they could do it, which was huge.

Participants added, by sharing, the purpose of using the tools selected. All four teachers expressed that the portfolio was as a way to measure the effectiveness of core instruction. Below is an excerpt from Teacher B from the Team ABS focus group transcript:

> It's more for me. It's more for my own peace of mind I want to say, and really to help me figure out if I have an entire group of kids that still is not getting a certain concept- that's on me. That's not on the kids. That's on me and I'm not presenting it appropriately. It's also RTI for the teacher.

Interview question 7 asked participants, "*In what ways do the informal and formal assessments align with the California Preschool Learning Foundation*s?" This question was included to determine how, if at all, assessments are aligned with expected early literacy outcomes for four-year old children. The outcomes in the CPLF in Language and Literacy are

categorized within three strands: (a) listening and speaking, (b) reading, and (c) writing. Table 10 presents the categories that emerged from interview question 7.

Table 10

Reported Alignment of Assessments and the California Preschool Learning Foundations in Literacy (CPLF)

Alignment of Assessments with CPLF	Number of Coded Responses for Team ABS	Number of Coded Responses for Team CDS
Student writing samples in portfolio	2	2
Data sheets with CPLF standard reference	1	0
Desired Results Developmental Profile (DRDP)	2	1

Three of the four teachers described the connections between the student work samples and the CPLF. The name puzzle example referenced in RQ 1 was used to describe the alignment with the writing and reading strand. Below is a quote from Teacher A from the Team ABS focus group interview as she shared teacher-created data sheets with CPLF standard references and the stages of development found within the Desired Results Developmental Profile (DRDP):

> It's exactly ... It's standard by standard. It's just data sheets and it has the name of the activity at the top. If I do those activities at least three at a time during the collection period at least we'll space it out and then I have solid data that supports whether they're in the building stage or they're emerging or what number, so when I'm filling it out I can go back and look at it.

During the Team CDS focus group interview, Teacher D described the student work selection and its alignment with CPLF outcomes in writing:

That's a huge thing that we can assess them by how they're writing their names. If the kids starting out at the beginning of the year writing their name across the whole paper because they don't have the fine motor to write it smaller, or they need the squares to make it smaller but they're still writing all capitals, and by the end of the year, hopefully they're writing their name small enough without the boxes, without any line or help, all lowercase except for the first letter.

Interview question 8 asked participants, "*In what settings does the progress monitoring of students' early literacy skills occur? (i.e. Do opportunities to assess exist during small group time, free –choice, and center time?)* This question was included to determine what authentic and/or naturalistic opportunities exist, if any, to progress monitor students' early literacy skills. Table 11 presents the findings from interview question 8.

Table 11

Reported Settings for Assessment within the Classroom Environment

Settings in which assessment of students' early literacy skills take place	**Number of Coded Responses for Team ABS**	**Number of Coded Responses for Team CDS**
Structured individual or small group activity	1	3
Embedded during the day	6	4

Teacher A shared an example of assessment which occurs in the moment. Both teachers A and B agreed that the snapshot affords them the opportunity to try a new strategy to better support their students.

Teacher A- Yeah. Some of it is more reactive. We were noticing for example mine was more reactive. You say, "Okay we read this. It's happening spur of the moment," I'm

reacting to it. Sometimes we're proactively planning it because we knew they had a problem so now we're going to-

Teacher B-Figure out how to do it.

Teacher A-Yeah, play out some strategies to them and then go back.

Teacher C shared how she monitors students' listening and speaking, and reading skills as she embeds questioning within story and share time as a way to check for understanding. Below is an example shared during the Team CDS focus group interview:

I ask a lot of the questions, comprehension, constantly during the day as we're reading a story, as we're doing share I'll ask one of the kids, "So why do you think that so-and-so..." I don't know what the question is, but we were doing share today, I do share Thursday and Friday, and I'll ask the kids about the story "Is this real? Is this make-believe or pretend?" I do a lot of vocabulary, a lot of emergent language, but a lot of questions, just a lot of comprehension questions. The *who, what, where* questions, the sequencing of a story.

Interview question 10 asked participants, "*How, if at all, does the assessment data gathered inform your instructional planning for the whole group? For some students? For individual students?"* This question was posed to determine how, if at all, snapshots of student progress are used to inform instructional planning and to monitor the progress of individuals and the whole group. Table 12 presents the findings from interview question 10.

Table 12

Reported Use of Snapshots of Student Progress to Inform Instruction

(Continued)

Snapshots of Progress to Inform Planning	Number of Coded Responses for Team ABS	Number of Coded Responses for Team CDS
For whole class	2	2
For some students	1	1
For individual students	1	2

During the Team ABS focus group interview, Teacher B shared an assessment tool she uses to capture snapshots of progress for the whole class, some students, and individual students to inform her planning. The teacher described how she enlists staff to assist in capturing data while she is instructing. Below is an excerpt from the interview transcript:

> For me it happened with [name of another staff member] and I just started doing this. It's the Classroom Dojo. I just started that. This is for every child because we have to figure out what's going on if they're not attending on carpet for a calendar or for a story ... What is it that they're not attending? Or was it an entire group of kids at that exact time that she's [staff member name] marking and now they're looking around, they're not doing this, they're not waiting for their turn to say something then that means I need to revisit what we're doing, which is why I like that percentage thing. You pull it up and get the percentage. If it's 90 percent of them were not focusing or paying attention to the carpet then that means I wasn't doing my job as a teacher, and I need to think, "What was I doing today? Was the phone ringing? Did another adult come in? Was I talking to them in the middle of a story?"

Also during the Team ABS focus group interview, Teachers A and B described how the administration of the DRDP uncovered an early literacy area of need that was presumed to have been attained by the students. Below is an excerpt from the interview transcript:

Teacher A: After I do the DRDPs I can always see where there are holes, and a lot of times it will be phonological, where it is. After I've done those especially- I can tell -as far as the whole group -if I am noticing that in every other area we're up here- but in this one all the kids are not... and it seems like a good number are not.

Teacher B: … It was when we were excusing the kids.

Teacher A: It was one of the ways we were excusing the kids, yes.

Teacher B: ... We're thinking, "They know this."

Teacher A: ... a lot of times we will dismiss the kids but if your name rhymes with *Malisha* and the kids will all answer it then you can go line up. If your name starts with an 'A' sound ... It was something basic like that that we thought maybe it was we switched the initial sound ... or the final sound. I don't remember which it was. It was something that we thought for sure they should...

Teacher B: They didn't. We were like, "What?" We really need to work on [this skill]..." It just threw them.

Teacher C described how she used anecdotal notes to capture snapshots of an individual student's fine motor skills. Next, she utilized these notes to consult with the occupational therapist and applied strategies identified in their conversation with the student throughout the day. Below is a quote from Teacher C:

I'll talk to [OT] every once in a while and say, "Hey she's still not holding the pencil the right way, what does it look like?" And then she'll remind me, the tripod, the arm down, and so I'm constantly getting the reminders, noticing if - I mean, all of my kids - if I have a kid who's still writing their name with capital letters in the middle of their name and they're a typical child, then I know I need to work on that, and I can see it as I'm looking

at their work at the end of the day, or as they're writing their name in front of me. I'm constantly observing and writing myself little notes to work with that child on a specific area during discovery, or the next time that we do centers.

Artifact review. Nine artifacts were collected during the focus group interview question 6B. Participants were asked, *"Please share any artifacts you brought that highlight how your team monitors student progress in early literacy*." Table 13 presents the categories that emerged from interview question 6B.

Table 13

Informal and Formal Assessments Artifacts Used to Monitor Student Progress

Types of Artifacts	Number of Coded Responses Team ABS	Number of Coded Responses Team CDS
Student work	2	2
Assessment tools	2	1
Instructional materials	2	0

Teachers shared artifacts that represent the way their teams monitor students' early literacy skills. The artifacts fell into three categories: (a) student work, (b) assessment tools, and (c) instructional materials.

Student work. Individual student portfolios contain monthly representative work. Work samples include monthly directed draws, student dictations and illustrations created in response to a story, and student application of sequencing of a story through a fine motor cutting and pasting activity. Two of the four teachers submitted samples of the portfolios and two of the four shared individual work samples and photos, stating that the portfolios were recently sent home with students during Open House.

Assessment tools. Teacher B shared an iPad application to track individual and whole group progress with skills such as attending to a story on the carpet. Teacher A submitted teacher-created activity data collection sheets aligned with DRDP, and Team CDS submitted a copy of the *Brigance Inventory of Early Development* protocol.

Instructional materials. The Preschool Curriculum Resource Guide created by the local county of education (COE) and special education local planning area (SELPA) offices was reviewed. The guide included instructional activities and observational assessment ideas. A second artifact in this category was the story sequencing materials which included a book and enlarged pictures from the story for student use to sequence story events were also submitted. These two artifacts were submitted by Team CDS.

Classroom observations. The researcher conducted eight classroom observations; two 30 minute observations in Classes A, B, C, and D. The researcher utilized the Observation Field Note Form (Appendix G) which included two sections to indicate evidence of informal assessment practices embedded within the students' classroom environment. The purpose of adding these sections to the classroom observation was to note how, if at all, staff informally assessed students' early literacy skills through opportunities within classroom activities.

Evidence of informal assessment embedded within circle time instruction was noted in three of the four whole group observations. Additionally, evidence of informal assessment embedded during center rotations was noted in four out of four small group observations.

Teachers and the speech and language pathologist posed questions to students that elicited responses related to the instructional content of the lesson. Staff followed up with additional questions and utilized instructional strategies including peer modeling and visuals. For example, Teacher A played a song about pet names that had the same beginning sound as the pet

name. Teacher A paused the song after a few names were sung and asked a student, "What is the hamster's name?" A child responded, "*Harry*." Teacher A asked, "What is the first sound you hear in *hamster*? What about *Harry*?" When the student successfully named the beginning sound, she continued with the song and paused to ask the next student, "What kind of pet is *Betty*?" The student could not recall the pet name. Teacher A modeled for the student, "*Betty* starts with the sound /*b*/. What pet can you think of that begins with the /*b*/sound?" When the student did not recall the pet name, Teacher A pulled three small pet figures and asked the student to say the name of each and listen for the /b/ sound. The student successfully identified *bunny* as the pet. After the song, Teacher A asked students to brainstorm a list of pets. The first four students named single word pet names and provided the beginning letter sound for each pet. One student said, "Guinea Pig" and Teacher A responded, "Wow! I didn't know you knew that letter! That pet name has two words." Teacher A asked the student to name each beginning letter sound as she wrote it on the white board.

Teacher B checked for understanding while reading The Napping House. While reading the story, Teacher B asked, "What time of the day do you think it is?" Student responded, "Night time." and Teacher B asked, "What clues in the picture tell you it is nighttime?" Student responded, "The pet is next to the bed. They're [characters] asleep."

Class D engaged in a Treasure Hunt. Students were given a map with photos of objects in the room and asked to find the objects with a partner. A student approached Teacher D and asked for help. Teacher D responded, "Let's look at your map. Where can you look?" The student shrugged. Teacher D added, "Where do we usually keep that [firefighter hat]? [Partner name], can you help [student name] find the hat?"

Triangulation of data. Data collected from two focus group interviews, eight classroom observations, and nine artifacts provided an understanding of the commonalities and differences in the tools and practices utilized by two multidisciplinary teams within the same preschool program. Three findings emerged related to common assessment practices used to recognize when a student is not making the expected progress in early literacy.

Student portfolios are used throughout the year to monitor student progress in early literacy. The use of student portfolios throughout the year to monitor student progress in early literacy was found to be a common assessment tool. For example, one monthly student work sample demonstrated the individual student's progress in listening and speaking (orally responding to prompt), reading (prompt related to read aloud), and writing (responding to the prompt with a drawing). Artifacts examined corroborated what was shared in the focus group interviews. Teachers A and B shared student portfolios for work representing every month of the year. Teachers C and D indicated that their student portfolios were sent home at Open House. However, they shared recent student work samples and photos.

Snapshots of student progress in early literacy are collected and used to inform planning. During the focus group interviews, all four classroom teachers and the SLP provided examples of how snapshots of student progress in early literacy are collected and used to inform planning. Both teams indicated the autonomy to self-select additional progress monitoring tools which provided them with snapshots of student progress. For example, Teacher A utilized an iPad application to track early literacy and student behaviors that support early literacy attainment (i.e. attending to a story on the carpet) while Teacher C regularly used anecdotal notes to track student progress.

An example shared by Teacher B captures how snapshots of student progress inform planning. A thematic unit on zoo animals included a shared reading of the book of *Polar Bear, Polar Bear, What Do You Hear?* Teacher B and the SLP noticed some students having difficulty sequencing the events of the story. Teacher B and the SLP described how they responded through the creation of large drawings on single pieces of paper that could be used for sequencing in a small group and during free choice.

The practice was further corroborated through the artifact review. Artifacts submitted by Team ABS included the instructional materials and student work utilized to monitor student understanding of sequencing events in a story previously read aloud to the class. Additionally, Team ABS submitted the Desired Results Activity sheets as an artifact. These sheets describe activities to support literacy strands from the CPLF with follow up questions that the teacher can pose to ensure understanding of the content.

A difference that emerged with this practice is the use of data collection sheets for all students, some students, and individual students. Team ABS indicated through the focus group interview and artifact submission that the Desired Results Activity sheets are collected for all students who participate in a given activity. Team CDS indicated through the focus group interview that data is collected using data sheets for students with individualized education plans (IEPs).

Naturalistic observation of students during classroom activities is used to guide selection of instructional strategies. A third finding, related to common assessment practices used to recognize when a student is not making the expected progress in early literacy, is the use of naturalistic observation of students during classroom activities to guide selection of instructional strategies. During the Team CDS interview, Teacher C offered this example:

> But I mean a lot of the questions, comprehension, constantly during the day as we're reading a story, as we're doing share I'll ask one of the kids, "So why do you think that so-and-so..." I don't know what the question is, but we were doing share today, I do share Thursday and Friday, and I'll ask the kids about the story, "Is this real? Is this make-believe or pretend?" I do a lot of vocabulary, a lot of emergent language, but a lot of questions, just a lot of comprehension questions. The *who, what, where* questions, the sequencing of a story.

The classroom observations further documented the use of naturalistic observation to guide the selection of instructional strategies. For example, staff utilized instructional strategies including peer modeling, visuals, and questioning in response to a student demonstrating difficulty with an early literacy skill. For example, in Class D, students were asked to respond to the prompt, "*I feel worried when*…" Teacher D asked each student in the small group center to share their example orally prior to drawing. Four of the five students readily provided an example. One student in the group did not provide an example. Teacher D opened the book about a giraffe who was worried about being left behind. Teacher D asked the student, "As I read this page, I want you to think about why Giraffe was worried?" Student responded, he was by himself." Teacher D followed, "You are right. Giraffe was left alone and he was worried. Why do you think he was worried about being alone?"

In seven out of the eight classroom observations, teachers and the SLP posed questions related to the content (reading, writing and/or listening and speaking) and elicited student responses. Prior to beginning a center activity, Teacher A read a story. Once the students arrived at their centers, the Speech Pathologist checked for comprehension and asked students at her center, "Tell me one thing about the story?" After each student recalled one event in the story,

the SLP introduced a pet game called *Give a Dog a Bone* and provided visual cards with pictures of dogs. SLP asked students to describe each pet dog. The SLP followed by asking specific questions about each pet. For example, "Where do you think the dog's name came from?" The student did not respond. SLP added, "Touch the picture, and show me what clue tells you why his name is *Sunshine*?" The student pointed to the sun. SLP modeled an oral response and the student repeated.

Conversations among multidisciplinary staff members about student responses were noted in each class. In Class A, the special education teacher noticed an individual student having difficulty with the directed draw and guided the instructional assistant on how to scaffold the activity. In Class C, the general education teacher facilitated share time. An individual student responded using four words in her sentence. An itinerant special education teacher in the room praised the student and consulted with the teacher after the lesson to discuss how to generalize with less prompting.

Research Question Two

RQ 2: What collaborative problem solving practices, if any, are utilized by multidisciplinary teams to plan next steps when a student is not making expected progress in early literacy?

Data collected to address this research question included participant responses from three questions from the focus group interview protocol (questions 5, 9, 12) and a review of four artifacts through interview question 11. The artifacts were collected during and directly after the interview.

Focus group interview results. Question 5 asked participants, *"In what ways does your team informally and formally communicate around students' early literacy needs?*" The question was formulated to determine how, if at all, the team engages in ongoing communication around

literacy instruction for their students. During the focus group interviews, two themes emerged related to the purpose of ongoing communication.

Lesson planning. Teams ABS and CDS agreed that the Wednesday student early-release day provided a formal block of time for theme planning and time to develop learning targets in early literacy for their students. Informal opportunities for ongoing communication around lesson planning were shared during both focus group interviews. Teacher A, Teacher B, and the SLP described before school, after school, and lunch time as additional informal times used to communicate around literacy activities to meet the specific early literacy needs of students. Teacher C and Teacher D noted texting as the informal way they communicated around class lesson ideas outside of the Wednesday block. Below Teacher D describes how she consults with the SLP about early literacy activities outside of the Wednesday block:

> [SLP] also comes in and does a small group activity, and when I'm planning cognitive activities, 90% of the time it's based around language. Or pre-literacy. Because one, we have to meet the DRDP and so I know that there's certain skills we need to teach in order to get the get the kids to where the State of California feels that they're ready for kindergarten. So there's a lot of pre-literacy, and lots of times I'll talk to her about the activity I have planned. It's like - we were trying to teach locations, and so I was talking to [SLP] about it and she goes, "Oh. Well..." And then she started giving me all these visuals I could do for where does the sun come up, and where do we keep our cereal bowls, and where do our forks come from, so she's just wonderful, I love her.

Co-teaching and feedback. Teachers A, Teacher B, and the SLP described ways that they co-teach and co-observe students to learn more about the students' early literacy needs.

Additionally, it was noted that the SLP co-teaches and co-observes in Classes A and B. Team ABS offered this example:

> Teacher A: We also combine [classes] during discovery time. Our doors are open and the kids can go back and forth. Sometimes during that time and in the morning too [Teacher B] will come in and say, "Later during the story time I worked on this with ..." she'll give me the student's name. "Can you make sure you ask the question again? At circle time about this. When we were working on "I need a clue" we had a little girl who even if she knew the answers to what we were reading about she would say, "Um, um, um," and she'd get ... We didn't know if it was anxiety or if she was really not ... was [not] processing the story or not catching the clues of what exactly was. We brainstormed the ideas and she said, "Okay well I'm trying to teach her this to see if when you do it later today if she has generalized it or if it's working." We do informal things like that almost every day.

During the Team CDS interview, examples of co-teaching and sharing of feedback were not noted between Teacher C and D. Teacher C and D both described how the student behavior needs of Class D posed a challenge this year for co-teaching. They shared that, in the past, they have co-taught more frequently. However, co-teaching examples were noted between Teacher C and the SLP and Teacher D and the SLP.

Question 9 asked participants, *"Can you describe the responsibilities of the team in collecting student assessment information and providing instructional support for any given student?* The question was formulated to determine how team members describe their role as a preschool teacher, special education preschool teacher, or speech and language pathologist in supporting students in their early literacy skills.

During the focus group interview, participants shared their roles and responsibilities in collecting student assessment data. As described in chapter 3, two of the classes are 50/50 classrooms taught by special education preschool teachers and two of the classes are taught by general education preschool teachers. All classroom teachers, SLP, and classroom assistants share responsibility for collecting informal assessment throughout the day. However, the roles and responsibilities for specific data collection are designated based on the certification, training, and supervision provided to staff. For example, the student assessment for students with IEPs is collected by the special education preschool teachers (Teacher A and D), the SLP, and Class A and D classroom assistants. Teachers A, Teacher D, and the SLP provide training and supervision to their assigned assistants in data collection. Desired Results Developmental Profile (DRDP) is collected by all four classroom teachers who have been trained to collect observational data on each student in order to determine the student's current developmental stage in any given area on the DRDP. Participants described the roles and responsibilities for planning and delivering instruction in their respective classrooms. Table 14 presents the shared responsibility between participants for instruction within the classroom.

Table 14

Reported Roles and Responsibilities of Team Members for Classroom Instruction

Shared Responsibility for Instruction	**Class A**	**Class B**	**Class C**	**Class D**
Teacher A	X	X		
Teacher B	X	X		
Teacher C			X	
Teacher D				X
SLP/SLPA	X	X	X	X

Note. X= provides instruction; SLP=speech and language pathologist, SLPA=speech and language assistant

In each of the four classrooms, the SLP or her assistant (SLPA) provided embedded classroom instruction. Below, Teacher A describes an example.

> If we're doing anything in the special event [SLP] has come in before and she'll ... a lot of times will say, “Do you want me to lead the circle time or read the story that [it] leads up to?” If we're going to have special visitors or party days... even when it's not her scheduled time, she comes in.

Teacher B and the SLP further describe the role of the SLPA during classroom activities to support listening and speaking skills.

> Teacher B: We want them [students] playing in the dramatic play area, saying things that or listening to their peers and staying on topic and being able to carry on a conversation. Having one or two phrases that they have come up with on their own and initiating with their peers. To pull them [outside of the classroom] it really doesn't work as well so we have [SLP] or her assistants [SLPAs] come in and work with our kids.
>
> SLP: I have two [SLPAs]. I have one speech and language pathology assistant and the rest are veteran and well-trained instructional assistants, just for speech. They've gotten a lot of training and could facilitate that interaction.

During the Team CDS focus group interview, participants described the way they extend on the work of the SLP and the occupational therapist (OT) who works with students on fine motor needs. Teacher C provided the example below describing how she consults with the OT to determine how she can support an individual student and all of her students with writing skills:

> Teacher C: I'll talk to [OT] every once in a while and say, "Hey she's [student] still not holding the pencil the right way, what does it look like?" And then she'll [OT] remind me, the tripod, the arm down, and so I'm constantly getting the reminders, noticing if - I

mean, all of my kids - if I have a kid who's still writing their name with capital letters in the middle of their name and they're a typical child, then I know I need to work on that, and I can see it as I'm looking at their work at the end of the day, or as they're writing their name in front of me. I'm constantly observing and writing myself little notes to work with that child on a specific area during discovery, or the next time that we do centers.

Question 12 asked participants, *"What structures do you have in place to support collaboration?* The question was formulated to identify existing opportunities that promote collaboration. Table 15 summarizes the structures that emerged during the focus group interviews.

Table 15

Reported Structures Used for Collaboration

Structures Utilized by Staff Member	**Teacher A**	**Teacher B**	**SLP**	**Teacher C**	**Teacher D**
Weekly student early-release day	Y	Y	AN	Y	Y
Before and after school time	Y	Y	Y	AN	AN
Lunch time	Y	Y	Y	AN	AN
During the school day activities	Y	Y	Y	Y	Y
Class proximity to one another	Y	Y	Y	AN	AN

Note. Y= utilized regularly; AN=utilized as needed

During the focus group interviews, participants cited five opportunities utilized to communicate around literacy instruction. Team ABS identified five structures they regularly use to communicate around literacy instruction while Team CDS reported using two ways on a regular basis and three structures as needed. Both teams cited the use of proximity and informal opportunities during the day to communicate around emerging literacy needs for the whole class

and individual students. Teacher A and the SLP offered the following example demonstrating how the SLP supports literacy instruction by being present and finding resources:

> Teacher A: Proximity is key… we are back and forth, in and out all day long.
>
> SLP: My office is just right there [points to office].
>
> Teacher A: You [SLP] are coming up all the time …if we're learning about something. [SLP] will come in and she'll pop her head and she's like, "Oh okay you're doing that thing. Great. I'm going to make sure I bring in this. When we were doing *The Very Hungry Caterpillar* you dropped in.
>
> SLP: I had a game...
>
> Teacher A: Yeah. You brought it in an iPad [with photos].
>
> SLP: Being present really helps.

During the Team CDS focus group, Teacher C described using time throughout the day to communicate with service providers on how to best support an individual student's literacy needs. Below is an example she shared:

> Teacher C: I have my student's IEP goals. If there's a student who's not doing the *g,* I will say to [SLP], "How do I work with that child? I'll run into [SLP], or she'll come in here and talk to me informally, but I'm working on the goals that are in the IEP, just by the advice that I'm given on this is how you work on that goal, or this is how you keep reinforcing the letter *k* and you point to their - you know, just the process of how it works.

All four teachers shared ways they communicate with their classroom assistants around students' early literacy needs. Teachers A, B, and D noted using before and after school to

discuss literacy targets and to review data collection. Teacher C noted that she communicates through the weekly schedule and on the spot during class time.

Artifact review. Question 11 asked participants, *"Please share any artifacts you brought that capture the way your team collaborates and makes decisions to support students' early literacy needs.* The question was included as a mechanism for collecting artifacts to support the focus group interview. Four artifacts were submitted during and directly after the interviews.

Weekly lesson plans. Team ABS and CDS submitted copies of weekly lesson plans with activities aligned with CPLF to corroborate literacy planning for the whole class. For example, the Team CDS lesson plan included "*word wall, writing words we know,*" "*drawing what we see in the classroom,*" and "*finding U words."* The Team ABS lesson plan included*, "draw a picture of your pet and tell a story"* and *"busy pets-sorting pets and answering questions."*

Weekly schedules. Team ABS submitted weekly schedules showing the roles and responsibilities of classroom team members in supporting the whole class, some students, and individual students. The Team ABS schedule includes the following notations: (a) Classroom assistant (name) is assigned to "facilitate language at table activities," (b) from 1:50-2:15 p.m. daily, "complete data collection sheets," and (c) On Wednesdays "we will be having team meetings to discuss the children's progress and to assess the effects of the intensive programs we are running with children that require more assistance." Team CDS posted a schedule on the wall but the researcher did not receive a copy to use as an artifact.

Data collection sheets. Teacher A submitted Desired Results Activity data sheets that are referenced in the Team ABS focus group interview. One example is the *Who's Here Today Nametag Activity*. The purpose of the activity is to promote the students' understanding that environmental print carries meaning; a standard is found in the CPLF Reading Strand. Classroom

assistants use this sheet to note how each student responds to the activity and checks the appropriate box: (a) respond to own name, (b) say own name, (c) say something about self, (d) number of peers child can name, and (e) makes a comparison about self and one peer. This artifact corroborates the Team ABS focus group interview.

Preschool Curriculum Resource Guide. Team ABS submitted a copy of the LCOE and SELPA Preschool Curriculum Resource Guide used to support literacy planning during the Wednesday team meeting block. Teacher C made reference to websites used for planning.

Triangulation of Data. Data collected from two focus group interviews and four artifacts provided an understanding of the commonalities and differences in the collaborative problem solving practices utilized by two multidisciplinary teams within the same preschool program to plan next steps for students not making expected progress in early literacy. Two findings emerged through the triangulation of the data collected.

Formal and informal structures are used to support co-planning, co-teaching, and consultation. During the focus group interviews, all participants noted structures used to communicate around student early literacy needs. For example, a two-hour weekly formalized time is built into the schedule to discuss student progress and to plan the upcoming unit which includes literacy learning targets and activities.

Additionally, classroom assistants are compensated to come in 30 minutes extra per day to support communication around instruction and students' needs. Participants also noted informal structures including class time as being used to observe, co-teach, and consult with colleagues. Artifacts that corroborated this finding included weekly lesson plans and staff schedules.

Collaborative problem solving relationships exist among multidisciplinary team members. During the focus group, participants shared with whom they work with to problem solve around students' early literacy needs. For example, Teacher C described problem solving with the occupational therapist (OT) around fine motor skills. Teacher D described problem solving with the SLP around language expansion. Teachers B and C provided examples of problem solving with an itinerant special education teacher around specific IEP goals for students in their classrooms.

Two differences emerged in the problem-solving relationships among participants. First, while Teachers A and B shared examples of problem solving around students' early literacy needs, Teachers C and D did not share examples. Second, Teachers A, B, and D noted the time spent with classroom assistants to discuss learning targets and data collection while Teacher C's examples highlighted one-way communication with her classroom assistants, including a posted lesson plan and on the spot feedback.

Artifacts that substantiate this finding include the Desired Results Activity data sheets utilized for problem solving in Class A and notations on the classroom schedules submitted by Team ABS. Figure 2 represents the informal problem solving relationships reported during the focus group interview.

For example, the box outside of Class A indicates that Teacher A, Teacher B, the SLP, and classroom assistants problem solve around the early literacy needs of students in Class A. The box outside of Class C indicates that Teacher C, the SLP, and the speech and language pathologist assistant (SLPA) problem solve around the early literacy needs of students in Class C.

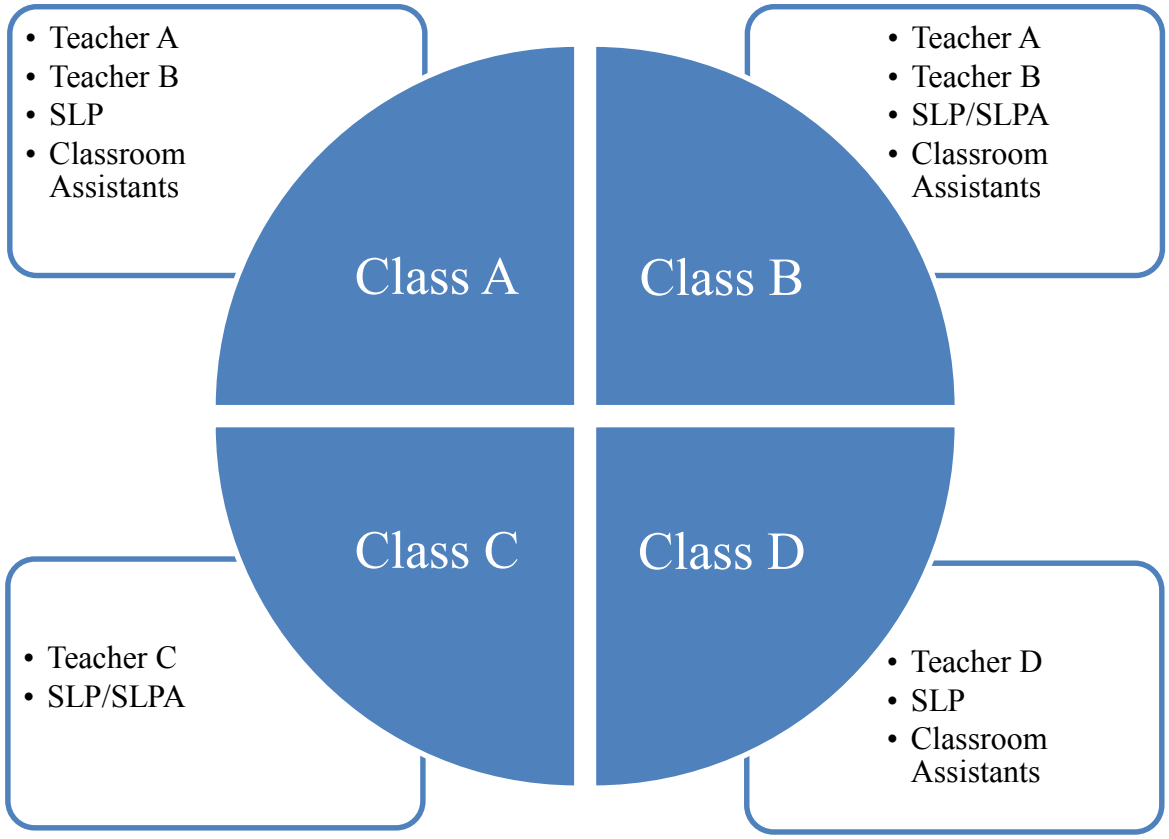

Figure 2. Multidisciplinary collaborative problem solving within preschool classrooms as reported by participants.

Research Question Three

RQ 3: What multi-tiered instructional practices, if any, are utilized by staff teams to respond when a student is not making the expected progress in early literacy?

Data collected to address this research question included participant responses to the four questions (questions 1, 2, 3, 4) from the focus group interview protocol, a review of five artifacts, and eight 30 classroom observations. The artifacts were collected during and directly after the interview.

Focus group interview results. Question 1 asked participants, *"What learning formats, routines, and groupings do you use to promote early literacy skills?* The question was

formulated to determine what opportunities exist for students to receive instruction and practice early literacy skills. During the focus group interviews, three categories emerged related to learning formats and groupings.

Whole group. Team ABS and Team CDS identified the whole group or circle time format as a way to promote early literacy. For example, both teams reported that they used the whole group circle time to read aloud books connected to the current thematic unit. The books are shared more than once, and they springboard center activities.

Small group. Team ABS and Team CDS reported the use of small groups for center rotations following a whole group activity. Team CDS further described how they form small center groupings. Teacher C noted that she uses mixed groupings and stated, "*I usually try to do mixed groups so that we have some - I don't want to say role models - but some who catch on a little bit faster, and those who might not catch on quite as fast can hear the ones who get it."* While Teacher D uses ability groupings and stated, "*I tend to do more ability grouping, mostly because I have some children that are way up here and they have different needs, and I have children that cognitively are impacted, and their needs are definitely different. So children need to feel successful in order to be driven to continue to work*." The SLP reported that she plans her center activities for the classrooms to support both individual student goals and the themes and content focus of the class as a whole.

Embedded. Team ABS and Team CDS shared examples of using unstructured embedded opportunities throughout the day to promote early literacy. Teacher A shared, "*We do some individual activities like where it might be during discovery time or like in a traditional preschool they call it free choice"* and Teacher B added, "*Even outside time. When we can read a book, talking about even something like The Very Hungry Caterpillar, Monday, Tuesday,*

Wednesday, Thursday outside we might set something up to sequence that [story]." Teacher D also referred to embedding additional literacy opportunities after reading *The Very Hungry Caterpillar* book and said, *"We're going to carry it over and teach them how to draw caterpillars and we're going to break it down so that they do circles and keep on going until they've got that caterpillar.*"

Team CDS shared how early literacy is promoted and connected across the three formats of whole group, small group, and embedded opportunities. Below is an example from their focus group interview:

> Teacher D: If we're looking at one book, we're going to start out simple. So the kids are going to answer W-H questions: who, what, why, and where questions about the book, and they're going to use the pictures and illustrations as a visual prompt to help them understand. The next day they're going to sequence the book so that they understand. That's really successful with these kids with books that have repetitive refrains - *The Very Hungry Caterpillar*, *Brown Bear*, *The Turnip*, which is a fabulous book for them. And then we have manipulatives, and so the kids use their own manipulatives and they do the sequencing so that they get it. Lastly, we start asking them a little bit more abstract questions about it. We want them to look at the illustrations, we want them to be able to draw influence from the pictures, see if they understand.

Question 2 asked participants, *"Describe how your team plans early literacy activities (that are aligned with the California Preschool Learning Foundations) for the whole class, for some students, and for individuals. Please share any resources you brought that capture the way your team plans whole class and/or differentiated early literacy activities for students."* The question was formulated to determine: (a) how teams plan literacy instruction to meet the needs

of students, and (b) in what ways, if at all, is the instruction aligned with the early literacy student outcomes recommended within the CPLF. During the focus group interviews, five themes emerged related to how participants plan their core literacy instruction and differentiate to meet the emerging literacy needs of students.

Common thematic units aligned with CPLF. Teams ABS and CDS referenced Wednesday afternoons as a formal time to develop common units. Teachers A, B, C, and D attend the unit planning session. The SLP attends when she is available and checks in informally to ensure a link between the core instruction and her small group instruction. Teacher B stated, "…*it works really well when we have our speech people. They ask what our themes are, what you are doing, so their activities might be based on it*." Within these common thematic units, Teams ABS and CDS cited the use of children's literature as a springboard for additional literacy activities. Team ABS cited the Preschool Curriculum Resource Guide as helpful in planning literacy activities, and Team CDS referenced online websites as a resource for CPLF aligned activities.

Common literacy goals aligned with CPLF. Before beginning a new unit, Teachers A, B, C, and D meet to select a common theme. Teacher A describes the next step as, "…*we'll come up with what our theme is going to be for the month and then we think of different books that we want to make sure we read and then different activities unfold from that."* During the focus group interview with Team ABS, participants noted that the common planning time includes time when all four teachers agree on literacy skills, concepts, and targets for the month. Team ABS referred to the Preschool Curriculum Resource Guide as showing direct links to the expected literacy outcomes outlined in the CPLF and links to the DRDP assessment measures.

Flexibility. During the Team CDS focus group interview, both Teachers C and D shared that flexibility exists within the unit plan, allowing teachers to adjust activities and embed additional opportunities to develop literacy skills based on the students' interests and needs. Teacher C stated, "*I'll take the theme that we're doing that week, but I change it around accordingly for my kids,*" and Teacher A shared the following example:

> That's usually where we start [thematic unit]. Although sometimes it'll be when one of the kids will come up with an idea like they'll be talking about Starbucks or something funny and we'll say, "*We'll come up with a dress up center like that*," then they make signs which is pre-writing.

Teacher B described how she integrates the literacy needs of some students within her classroom so that all students benefit. Below is an excerpt from the Team ABS focus group interview.

> If I have kids that have an IEP and have goals then [SLP] will come and tell me, "*This is what we're working on."* I may set up a center on what that goal is for one specific child but really it doesn't hurt for any of the kids in the class to be doing the same thing if their goal is sequencing or if their goal is answering *who, what, where, when*. All the kids need to be able to do that. It's just like we get some extra support for not just the students with IEPs but for the typical kids as well.

Modifications. Team ABS shared examples of the Preschool Curriculum Resource Guide activities and adaptations offered for each activity. During the Team ABS focus group interview, Teacher A shared, "*I would say start with the theme and go from there, and then we look at ... If we notice that the kids are having trouble with rhyming for example then we'll make sure that we put in a rhyming activity in the afternoon. I'm pretty flexible*."

Team CDS referred to online preschool curriculum websites. Teacher D described how she takes the thematic literacy ideas and asks herself, "*Okay, how can I make these work for my kids, because my kids have different needs?*"

Expertise of staff. Participants related their own areas of expertise as contributing to the design of the instructional activities for students. Teachers B and C noted their early childhood background while Teacher D noted her expertise in special education (as well as the expertise of Teacher A and the SLP) as contributing to the understanding of the developmental sequence of language, fine motor, and other skills. Teacher A served as a contributing writer of the LCOE/SELPA Preschool Curriculum Resource guide. The SLP and Teachers A, B, C, and D noted the benefit of their program being housed on an elementary campus. Participants reported tapping into the expertise of kindergarten teachers to guide their planning of early literacy activities and learning targets based on kindergarten expectations. During the Team ABS focus group interview, the SLP shared, "*The kindergarten teachers really would love for the kids at preschool level to be introduced to the lower-case letters"* and Teacher A added*, "…instead of having the kids write all upper-case, if they're going to see their name in print, get used to seeing their name with the upper-case for the first letter in lower-case*."

Question 3 asked participants, *"Can you tell me how adult support might change in response to a student who is struggling in early literacy (for example, with vocabulary, understanding a story, etc.)?* The question was constructed to better understand the type of adult support provided for students when they struggle with early literacy skills.

During the focus group interviews, Teams ABS and CDS shared examples of early literacy needs recently exhibited by some students. As they shared examples, participants described how adult support changed to address a student's early literacy need. Table 16 presents

the examples shared by each team, detailing the recognition of a student's early literacy need and the response provided through adult support.

Table 16

Reported Adult Support Adapted to Support the Early Literacy Needs of Students

	Early Literacy Need	**Adult Support**
Team ABS	Comprehension and Literacy Interest- Student did not answer questions and did not appear to be attending to the story.	Classroom assistant observed and documented student responses and behavior. Teacher reviews notes with classroom assistant to determine next steps. For example, classroom assistant pulls a small group (including the child) during discovery time (free choice) and re-reads the story with the child and a couple of peers.
Team ABS	Vocabulary and Phonological Awareness- Student did not know the animal name or beginning letter sound of iguana.	Teacher's support during a group activity was in the form of strategies utilized. For example, the teacher posed a different question, guided brainstorming, enlisted peer models, led repeated reads of a story, used new vocabulary words throughout the day, and prompted student to use visual clues or encourages student to "*ask for a clue.*"
Team ABS and CDS	Language Use- Student struggled with word retrieval or understanding a new concept during whole or small group centers.	SLP support ranged from giving student beginning letter sound, providing synonyms for vocabulary words, and modeling the use in a sentence. SLP dropped in during non-scheduled time to reinforce the words or concepts. It was reported that this type of adult support is provided by the SLP or SLPA within the four classrooms.
Team CDS	Writing- Student struggled with using scissors, writing horizontal lines, drawing shapes, and writing letters.	Teacher embedded additional opportunities for the student to use pencils and scissors during *discovery time* and assigned a classroom assistant to the writing center to model how to hold scissors and writing instruments. Teacher also provided additional visual examples of letters and shapes in the writing center.

(Continued)

	Early Literacy Need	Adult Support
Team CDS	Comprehension- Student was unable to sequence a familiar story and exhibited behavior needs.	Teacher gathered manipulatives such as flannel pieces and magnetic figures from the story *The Very Hungry Caterpillar.* Teacher assigned a classroom assistant to work at the center with the student while the teacher opened the book and pointed out visual references. Since this student also exhibited behavior needs, the teacher provided a tangible reinforcer (i.e. a treat or treasure box item).

Question 4 asked participants, *"Think about a student who you recently provided extra support to in the area of early literacy. What instructional strategies were utilized to support the student?* The question was constructed to better understand the type of instructional strategies employed by participants to respond to a student who has struggled with an early literacy skill.

During the focus group interviews, Team ABS and CDS shared examples of early literacy needs exhibited by some students. As they shared examples of identified early literacy needs, participants noted instructional strategies, materials, and additional opportunities utilized in response to the student's early literacy needs. Table 17 presents the examples shared by each team, detailing the recognition of a student's early literacy need and the response provided through instructional strategies. A review of the interview transcript led to the emergence of three instructional strategy types. The codes used to categorize the strategies included: (a) multimodal strategies, (b) peer modeling, and (c) question types.

Table 17

Reported Use of Instructional Strategies to Support the Early Literacy Needs of Students

	Early Literacy Need	Instructional Strategy
Team ABS	Comprehension- One student could not demonstrate	<u>Multimodal materials and experiences:</u> Provide real objects, visuals including photos or

(Continued)

	Early Literacy Need	Instructional Strategy
	background knowledge or experience necessary to understand story. A second student had a visual impairment and could not fully access illustrations in book.	video and hands-on experiences (i.e. cooking). Example- *The Big Pumpkin* story. Some students did not understand that it could not be easily taken off a vine. A real pumpkin allowed students to get a sense of the size and weight of a pumpkin. Example- Zoo Animal book. Listening to animal sounds and watching video clips or real photos.
Team ABS	Sequencing- Three students were unable to recall the sequence of a story.	Multimodal materials and additional opportunities to practice sequencing: Example- *Polar Bear* book and the creation of large drawings for each part of the story. Students given additional opportunities to sequence story (moving large drawings in order) and working with a peer. Acting out story using costumes in dramatic play or puppets in the library corner. Repeated reads of a story.
Team ABS	Writing and Literacy Interest- Some students in Class A demonstrated difficulty applying what they learned about zoos into the dramatic play area.	Peer Modeling: Fluidity of student groupings and interactions between Class A and B. Example- dramatic play zoo area. Peer models to help create signage.
Team CDS	Language Use- One student with a language impairment and another student who was an English Language Learner (ELL) struggled with answering questions during share time and during routines throughout the day.	Question Types: Focus on what questions before adding who, where, and why. When asking a question, give student two options (provide vocabulary) and choice.
Team CDS	Making Inferences- Two students struggled to use clues to make an inference during a read aloud that had been read previously.	Peer Modeling: Use of a small group with adult support to facilitate a re-read of a book. Use picture clues to make inferences.
Team CDS	Concepts about Print- Some students were not making the	Multimodal- Pairing Visuals with Print: Example, green circle (green construction paper,

(Continued)

	Early Literacy Need	Instructional Strategy
	progress expected in reading environmental print in classroom.	circle shape with words *green circle* on it).

Artifact review. Interview question 2 asked, *"Please share any resources you brought that capture the way your team plans whole class and/or differentiated early literacy activities for students."* Participants shared instructional resources and student work samples that demonstrated how their respective teams plan early literacy activities. The submission of the five artifacts were collected during and directly after the interview. Four of the five artifacts were also submitted to address research questions one and two.

Weekly lesson plans. Teams ABS and CDS submitted copies of weekly lesson plans as well as a link to their unit plans on their respective class websites. The weekly lesson plans list activities aligned with CPLF to corroborate literacy planning for the whole class.

Weekly schedules. Team ABS submitted weekly schedules showing how adult support is distributed to support the learning of students. For example, the Team ABS schedule includes a notation that a classroom assistant name is assigned to facilitate language at table activities. Team CDS posted a schedule on the wall, but the researcher did not receive a copy to use as an artifact.

Preschool Curriculum Resource Guide. Team ABS submitted a copy of the LCOE and SELPA Preschool Curriculum Resource Guide used to support literacy planning during the Wednesday team meeting block. This resource includes references to the CPLF and DRDP. Additionally, this resource includes adaptations for each activity.

Zoo theme within dramatic play area. Photos that showcase the transformation of the dramatic play area into a zoo were taken from Class B. Additional photos of zoo related writing prompts and graphs were taken in Classes A, C, and D.

Polar Bear book sequencing story materials. The large drawings created for each part of the story were submitted to support how instructional strategies and materials are utilized to meet the early literacy needs of students.

Classroom observations. The researcher included four sections on the Observation Field Note Form (Appendix G) to indicate evidence of the following practices: (a) use of a variety of learning formats and grouping, (b) implementation of evidence-based core curriculum (i.e. alignment with the CPLF), (c) adult support that is adapted to students' early literacy needs, and (d) use of instructional strategies to meet the needs of the whole class, some students, and individuals (i.e. intentional teaching, intensive scaffolding). The purpose of including these sections in the Observation Field Note Form was to note how, if at all, are multi-tiered instructional practices utilized by staff teams to respond when a student is not making the expected progress in early literacy.

Learning formats. Two 30 minute observations took place in Classes A, B, C, and D. During the observations, whole group, small group, and embedded opportunities were present in each of the classrooms. Tables 18 - 20 include the learning format used to support literacy instruction during each observation.

Implementation of core curriculum aligned with CPLF. The researcher sought to identify connections between observed literacy activities and the research-based expected student outcomes outlined in the CPLF. A review of the interview transcript led to the expansion of the initial code *CC* for core curriculum to reflect the three strands within the CPLF Literacy Domain.

The strands used for coding included: a) *CC-LS* for the Listening and Speaking Strand, b) *CC-RD* for the Reading Strand, and c) *WR* for the Writing Strand. Table 18 presents the literacy activities observed within each observation, the alignment of the activities with the CPLF Literacy Strands, and the learning formats utilized during the observation.

Table 18

Observed Literacy Activities Aligned with CPLF Literacy Strands

Observation	Listening and Speaking Strand	Reading Strand	Writing Strand
Class A Whole Group Circle	Teacher asked students to recall what they are learning about and students respond, "*cats and dogs*." Teacher responds, "*I am thinking of a category…*" Students respond "*Pets!*" Teacher asks students to share examples of pets.	Students asked to create a pet list, and name the beginning letter and sound of each pet named. Students asked to brainstorm rhyming words (phonemic and phonological awareness). Students asked to name the title, illustrator, and author and to show which direction to read (concepts about print).	
Class A Small Group Center Rotations	Students supported in producing oral language, describing pictures, stretching length of sentences, expanding vocabulary (i.e. checked, scarf, pattern), and following 1-2 step directions.	Students supported in making connections to text/illustrations/colors. Students practice high frequency words, make predictions about story.	Students practice fine motor skills through directed draw.
Class B Whole Group Circle	Students share out responses as they are asked to make predictions based on text and illustrations (also Reading Strand).	Concepts about print: spine, title page, illustrator, and author. Book: *Smelly Socks.*	

(Continued)

Observation	Listening and Speaking Strand	Reading Strand	Writing Strand
Class B Small Group Center Rotations	Vocabulary defined and examples of perilous and astonished. Student share.	Guided book walk, students asked to identify real versus make believe and to provide text based answers, "*What in the picture makes you think that?*"	Directed draw.
Class C Whole Group Circle	Oral language, rhyming, and movement through song (alligator, spider, and Dracula songs). Over, around, and under. Recognizing own name- teacher takes one card at a time and shows it to the group. The student recognizes his/her own name and comes up and says "*My name is _____ and I'm 4 years old. I'm going to be the (job duty i.e. bell ringer)*" and places it on the job board.	Days of the week (today/tomorrow), months of the year- what comes next? Counting using multiple modalities (i.e. stand up and count). Weather with wheel (pictures and words) and recognizing own name.	
Class C Small Group Center Rotations	Vocabulary and real-life connections to book "Have you ever been worried about something?"	Text dependent questions. Teacher connects to the character being worried in the story (giraffe). Rhyming word puzzle pairs (animals).	Fine motor including use of scissors, cutting and gluing shapes- oval, square, circle, and rectangle. Dictation and drawing to match words. Writing prompt "*I feel worried when…*"
Class D Whole Group Circle	Oral language/counting during calendar and singing to days of the week song. Oral language after treasure hunt (partners	Students read along with teacher the days of the week (point, directionality, print	

(Continued)

Observation	Listening and Speaking Strand	Reading Strand	Writing Strand
	share each item and are prompted to expand their language). Teacher "____ *and* _____*, what did you find*?"	names of days). Print-name cards, good morning song, and job board. Students read treasure map (words with photos of real objects in the classroom).	
Class D Small Group Center Rotations	Oral language/sentence expansion, pronouns/descriptions, family members and flannel pieces. Attention to illustrations.	Concepts about print-upside down/right side up, identifying cover, title page, author, illustrator, and words on page. Inferential questions "*Why is the hat flying away*?" Text dependent "*What in the pictures make you think that?*"	

Adult support that is adapted to students' early literacy needs. The researcher sought to identify the types of adult support provided to students that promote early literacy skills. The initial review of the interview transcript, question three, that related to the types of adult support did not lead to the expansion of codes (see Table 16). However, after a review of the classroom observation data, three types of adult support emerged. The types included: (a) reinforcement, (b) proximity, and (c) prompting. Table 19 presents examples of adult support collected during the eight classroom observations.

Table 19

Observed Adult Support Adapted to Support the Early Literacy Needs of Students

(Continued)

Observation	Reinforcement	Proximity	Prompting
Class A Whole Group Circle	Jewels and verbal praise	Classroom assistants sit in close proximity to students during whole group circle.	Teacher asks student, "*What can you ask*?" Student says, *"I need a clue*." Teacher presents pet figures to prompt ideas.
Class A Small Group Center Rotations	Jewels and verbal praise	Centers each facilitated by staff member. One classroom assistant moves with a student as he goes from center to center.	Teacher models concept being taught and then prompts student, "*Now you try*." Teacher removes hand over hand prompting and prompts verbal prompt only (as student writes name).
Class B Whole Group Circle	Bucket filling-students each have a bucket and earns tokens throughout the day.	Classroom assistants sit away from whole group circle and increase proximity only if directed by the teacher.	Teacher says "*Maybe you need a grown up to help*" and classroom assistant gives verbal assistance only."
Class B Small Group Center Rotations	Verbal praise	Centers facilitated by teacher or classroom assistant.	Teacher prompts through questions posed, "*What can happen to___?*" and *"What do you think a cat wants to do with a mouse?"*
Class C Whole Group Circle	Verbal praise	Student comes up next to teacher to respond to questions about the calendar and name/job cards.	Teacher takes one name card out at a time and shows it to the group, prompting student to come up and say, "*My name is _____ and my job today is _____*."
Class C Small Group Center Rotations	Verbal praise	Each center activity is facilitated by a staff member.	Teacher prompts students with questions and visuals to promote language and expansion of ideas.
Class D Whole Group Circle	Verbal praise and individual tokens boards.	Staff members remain in close proximity as pairs of students engage in the treasure hunt.	Staff prompts to promote language use if student asks for assistance. During the treasure hunt, student says, "*Help please*." Classroom

(Continued)

Observation	Reinforcement	Proximity	Prompting
			assistant prompts, "*What do you need help with?*" Student says, "*Bag*." Classroom assistant models, "*Say, I need help with my bag."*
Class D Small Group Center Rotations	Treasure box and snacks used to reinforce for verbal responses and for task completion.	Staff members rotate rather than students moving to a new center/new adult. One staff member floats to support individuals in attending to task/praising this behavior.	When a student is not attending, teacher prompts student to monitor his attention to task by asking, "*How is your engine?*" and student responds, "*Warm.*" SLP prompts students with questions and visuals to promote language and expansion of ideas.

Use of instructional strategies to meet the needs of the whole class, some students, and individuals (i.e. intentional teaching, intensive scaffolding). The researcher sought to identify the types of instructional strategies used by staff to support the early literacy skills of students. The initial review of the participant's responses to interview question four led to the expansion of codes to reflect three strategy types: (a) multimodal, (b) peer modeling, and (c) question types (see Table 17). After a review of the classroom observation data, a fourth strategy type emerged, d) adult modeling. Table 20 presents examples of the instructional strategy types used by staff during the eight classroom observations.

Table 20

Observed Use of Instructional Strategies to Support the Early Literacy Needs of Students

Observation	Multimodal	Adult Modeling	Peer Modeling	Question Types
Class A	Teacher uses a pet	Teacher	Teacher asks	Teacher poses

(Continued)

Observation	Multimodal	Adult Modeling	Peer Modeling	Question Types
Whole Class Circle	song and pauses after each 2-3 animals and asks, "W*hat sound does /letter/ say?"* Teacher pairs this with sign language, writes on white board and literature.	models how to write pet names on small white board.	students to come up and model how to hold a book, where to start reading, and how to make a checkmark.	questions throughout the activity about beginning letter sounds and animal names. Differentiates question based on individual response.
Class A Small Group Center Rotations	Teacher model draws a cat. SLP uses fingers spelling, tapping out sounds while leading a game (Give a Dog a Bone and Pets spinner game) which incorporates verbal, kinesthetic, visual (pet picture cards), and auditory.	Teacher re-reads book and leads a directed draw of a cat.		SLP asks students to recall one thing from the whole group read aloud. SLP differentiates questions based on student response. *"Can you tell me what color…? Why do you think this dog's name is Sunshine?*
Class B Whole Class Circle	Students act out vocabulary words in story.	Teacher changes intonation while reading specific vocabulary words to emphasize meaning.		
Class B Small Group Center Rotations	Teacher reads book about buttons, pausing page by page, and	Classroom assistant leads a directed draw of a cat		During student share, classroom assistant asks, "*Let's think of three*

(Continued)

Observation	Multimodal	Adult Modeling	Peer Modeling	Question Types
	asks students to show their understanding of math through the use of a variety of buttons (shapes and colors).	and guides students step by step. "*First, let's draw the cat's head. What shape is the head*?"		*questions for (student name)*." Classroom assistant asks each student to ask a question related to what was shared and extends by asking some students to ask something that was not shared by the peer presenter.
Class C Whole Group Circle	Visuals, movement, and song paired with print.		Teacher follows up student sharing with specific questions about what the student shared to check if his peers retained the information i.e. "*What did (student name) say about….*?"	Teacher asks students questions as they share their responses to the writing prompts, i.e. "*How did that make you feel when your brother broke your dinosaur's tail*?"
Class C Small Group Center Rotations		Special education teacher models language for turn taking (fine motor center).	Peer Modeling (partners within small group for rhyming).	Teachers posed questions to small group and individuals based on student response (writing prompt center).
Class D Whole Group and Partners	Treasure hunt with partner (map with classroom items including photos and words) and use of music and		As students search, teacher asks individual students, *"Let's see if we can find…."*	Teacher asks student pairs as they search for treasures, "*What is on your map? Where can you look?" "Where do*

(Continued)

Observation	Multimodal	Adult Modeling	Peer Modeling	Question Types
	movement (alphabet, colors, days of the week).			*we usually keep that?*"
Class D Small Group Center Rotations	SLP presents two flannel pictures and asks students to discriminate by beginning sound and/or by function.			SLP poses questions related to flannel story, i.e. "*Father is going to work. Which one does he need*?" (SLP presents pictures of a cake and a computer). "*Why do you think he needs the computer for work*?"

Triangulation of data. Data collected from two focus group interviews, five artifacts, and eight classroom observations provided an understanding of the commonalities and differences in the multi-tiered instructional practices utilized by two multidisciplinary teams within the same preschool program to respond when a student is not making expected progress in early literacy. Four findings emerged through the triangulation of the data collected.

Early literacy instruction reflects the three domains of the CPLF. During the focus group interviews, both teams described the use of CPLF instructional resources to plan common units and to develop common literacy targets. Additionally, both teams confirmed the use of a weekly planning time to co-plan.

This finding was validated through the classroom observations. Eight of the eight classroom observations included activities aligned with the Listening and Speaking Strand and the Reading Strand. Three of the eight classroom observations included activities aligned with the Writing Strand. Three artifacts further substantiated this finding: (a) weekly lesson plans

reflected early literacy activities across strands, (b) the Preschool Curriculum Resource Guide included activities with references to CPLD and DRDP, and (c) the *Polar Bear* book sequencing materials align with the Reading Strand expected outcomes for students. While differences existed in the activities observed between classrooms, participants noted that within the common unit flexibility exists, so they can adjust to best meet the emerging needs of their students.

Literacy instruction occurs in a variety of learning formats to respond to student early literacy needs. During the focus group interviews, participants in both teams provided examples of literacy instruction occurs in a variety of learning formats to respond to student early literacy needs. For example, participants noted the use of structured whole and small group formats and unstructured times such as discovery (art, dramatic play, and outside) to support literacy instruction. This finding was corroborated through the eight classroom observations. Whole group and small group formats were observed in all participating classrooms. Two artifacts that further corroborate this finding include the weekly lesson plans that reflect the literacy activities throughout the school day and the *Polar Bear* book sequencing materials designed to be used outside of the structured group times.

A difference that emerged is related to the way groups are designed. Team ABS described flexible grouping and the fluidity of the groups between the two classrooms. During the observations in Classroom A and Classroom B, the researcher noted that the shared door between classrooms remained open. During the Team CDS interview, Teacher C reported that she uses mixed groupings as a way to utilize peer modeling within the group. Teacher D shared that she prefers to use ability grouping so that she can target the individualized needs of the students in her classroom. The researcher noted that the shared door between Class C and Class D remained closed during the observations.

Adult support provided to students is intentional and allows for differentiated support in the area of early literacy. During the focus group interviews, Teams ABS and CDS shared examples of how adult support provided to students is intentional and allows for differentiated support in the area of early literacy. Adult support increases in response to students' early literacy needs, and the manner in which adult support is given is intentional. For example, Teacher A described how she enlists peer models, facilitates brainstorming, and poses questions to prompt thinking. Teacher B reported that she assigns a classroom assistant to observe and document a student's response to an activity. Teacher B follows this with a plan to embed additional opportunities for staff to work with the student and a few peers throughout the school day. Teacher D described how she breaks down a skill into discrete steps, such as putting together a name puzzle, to support a student.

Classroom observations corroborated this finding. In eight out of eight observations, adults supported students through reinforcement, increased proximity, and prompting. During the seven out of the eight observations, staff members posed questions to prompt students to elaborate on a response, to model a phrase or question, and to check for understanding. This finding was further substantiated by the weekly schedule artifact which included notations related to adult support including a staff member assigned to facilitate language at table activities.

The integration of multimodal experiences is used to expand early literacy opportunities for students. During the focus group interviews, both teams provided examples of the integration of multimodal experiences to expand early literacy opportunities for students. For example, Team ABS shared how they use real objects, videos, and photos to help fill in a lack of background knowledge. Team CDS described the pairing of visuals with print. The classroom

observations corroborated this finding. For example, all four classrooms used song and movement to support the phonemic awareness and vocabulary development. While in rooms A and D, the SLP integrated games, flannel stories, and finger spelling within her center activities. This finding was further supported by the Preschool Curriculum Resource Guide and the weekly lesson plans submitted to highlight the range of early literacy activity types. In addition, the *Polar Bear* book artifact reflects how staff extend a student's ability to sequence the events of a story beyond listening to the story. This artifact reflects a kinesthetic and visual approach that adds to the auditory read aloud of the story. Finally, the zoo theme photos with student generated signage within the dramatic play area support this finding.

Summary of Key Findings

In summary, data collected to address the three research questions in this study included two focus group interviews, eight classroom observations (to address research questions 1 and 3), and a review of eleven artifacts. The triangulation of data led to findings in response to the three research questions.

Research Question One. Three findings emerged related to assessment practices used to recognize when a student is not making the expected progress in early literacy. First, student portfolios are used throughout the year to monitor student progress in early literacy. Portfolios described through the focus group interviews and submitted through the artifact review contained monthly directed draws, student dictations and illustrations created in response to a story, and student application of sequencing of a story through fine motor cutting and pasting.

Second, snapshots of student progress in early literacy are collected and used to inform planning. This finding was noted in the focus group interviews as participants shared how they utilized anecdotal notes, iPad applications, and data collection sheets to both capture student

progress and to consult with a colleague about next instructional steps. The tools described by staff were submitted as artifacts and further substantiated this finding.

Third, naturalistic observation of students during classroom activities is used to guide selection of instructional strategies. This practice was evidenced through the focus group interviews as participants described using in the moment teaching opportunities to assess student progress. During classroom observations, the researcher noted how participants used student responses during whole group circle and small group center activities to respond to student needs through the use of teacher questions, peer modeling, reinforcement, and visuals.

Research Question Two. Two findings emerged related to collaborative problem solving practices utilized by staff to plan next steps when a student is not making expected progress in early literacy. First, formal and informal structures are used to support co-planning, co-teaching, and consultation. Participants identified formal and informal opportunities used to problem solve around the early literacy needs of students. For example, students are dismissed early once per week allowing participants to have two hours of time to engage in ongoing communication and co-planning. Additionally, staff members have opportunities to co-teach and consult during the school day.

Second, collaborative problem solving relationships exist among multidisciplinary staff members. Participants described informal ways they problem solve with colleagues to determine an instructional response for a student who is struggling with a particular early literacy skill, such as sequencing or language use. These two findings emerged from the focus group interviews and artifact review of weekly schedules and lesson plans.

Research Question Three. Four findings emerged related to the use of multi-tiered instructional practices to respond when a student is not making expected progress in early

literacy. First, early literacy instruction reflects the three domains of the California Preschool Learning Foundations (CPLF) across all four classrooms. This was evidenced through the participants' responses to interview questions and the presence of literacy activities that reflect the Listening and Speaking, Reading, and Writing Strands in the CPLF. The artifact review of lesson plans and curricular resources supported this finding. Second, literacy instruction occurs in a variety of formats to respond to student early literacy needs. Whole group, small group, and embedded opportunities were noted in the interviews and classroom observations.

Third, adult support provided to students is intentional and allows for differentiated support in the area of early literacy. During the focus group interview, participants described the level and type of adult support students receive based on their emerging literacy needs from teachers, classroom assistants, and the speech and language pathologist. It was noted during the classroom observations that all center rotations are facilitated by one of the abovementioned staff members. During the classroom observations, the type of adult support varied from reinforcement, proximity, and prompting. A review of the weekly schedule further corroborated this practice, as staff members names are listed as supporting specific literacy needs, including the facilitation of language at an activity table. Finally, the researcher found that the integration of multimodal experiences was used to expand early literacy opportunities for students. Participants reported how they design multimodal literacy opportunities for structured and non-structured times of the day. For example, students can practice early literacy skills through dramatic play and art. Participants reported that providing real objects and photos helps students build the necessary background knowledge to access concepts. Multimodal instructional strategies and materials were also noted during the classroom observations, including the use of music to build phonemic awareness, visuals paired with print during a treasure hunt, and large

illustrations to sequence a story. This finding was further supported through the artifact review of lesson plans and instructional materials.

Chapter 5

Introduction

Previous studies indicate that students who struggle as readers in elementary school have not mastered early literacy skills, including phonemic awareness and vocabulary; and yet young children have the capacity to build early literacy skills in preschool (McGee & Ukrainetz, 2009; Wasik, 2001). The alignment of early literacy instructional and assessment practices is fundamental in preventing future reading difficulties in elementary school and beyond.

An RTI framework offers K-12 educators a framework for systematizing instruction, assessment, and support. The emergence of preschool RTI models indicates an effort to better align instructional and assessment practices from preschool to kindergarten. M. R. Coleman et al. (2006) proposed a model called Recognition and Response (R & R) which can be applied independent of a prepackaged curriculum. However, the application of the R & R model is emerging, and additional research is needed to guide early childhood educators in selecting assessment tools, collaborative problem solving structures, and multi-tiered instructional practices to respond to early literacy gaps.

Statement of Purpose

The purpose of this case study was to investigate and describe Recognition & Response (R & R) practices, a model of early literacy Response to Intervention, utilized by multidisciplinary staff teams in a purposively selected, inclusion-based preschool program in Southern California. Investigated R & R practices included: (a) recognition of student needs through assessment, (b) collaborative problem-solving as a process to plan and evaluate next steps for students, and (c) response through a multi-tiered instructional approach.

The researcher examined the following three research questions in one purposively selected Southern California preschool program that is inclusion-based, has multidisciplinary staff teams of early childhood education teachers, early childhood special education teachers, and speech and language pathologists, and has been identified as utilizing the three practices of recognition of students' early literacy needs through assessment, collaborative problem solving, and multi-tiered instructional strategies:

1. What informal and formal progress monitoring assessment tools and practices, if any, are utilized by staff teams for the purpose of recognizing when a student is not making the expected progress in early literacy?
2. What collaborative problem solving practices, if any, are utilized by staff teams to plan next steps when a student is not making the expected progress in early literacy?
3. What multi-tiered instructional practices, if any, are utilized by staff teams to respond when a student is not making the expected progress in early literacy?

Research Design

A qualitative case study design was utilized for this study. Through purposive sampling, a single district preschool program was selected. This district program was selected based on expert recommendations from other district program directors and an early childhood education program department chair from a local community college. The program is comprised of ten preschool classrooms located on two elementary school campuses. In consultation with the preschool program director, four preschool classrooms that make-up the four-year old part of the program, and are located at the same elementary school site, were selected for this study. The director recommended these four classrooms due to the participant inclusion criteria and longevity of staff within the preschool program.

Three data collection instruments were designed to address the research questions. The instruments included a twelve-question focus group interview protocol, an artifact review form, and a classroom observation field note form. During the first phase of data collection, focus group interviews were held with each of the multidisciplinary staff teams. Team members were asked to bring artifacts that represent the use of the three practices of progress monitoring practices, collaborative problem solving, and multi-tiered instructional practices.

Next, the researcher arranged for the transcription of the interviews and provided a copy of the team's transcript to the participants interviewed, inviting individuals to clarify or elaborate on anything missed. The participants were reminded that they could contact the researcher and provide additional artifacts.

In the final phase of data collection, the researcher conducted eight classroom observations; two thirty minute observations in each of the four classrooms. The first classroom observation was scheduled during whole group instruction. The second observation was scheduled during small group centers. An original observation field note form was used for each observation.

The following sections of this chapter begin with a discussion of the key findings presented in Chapter Four, which were identified through the triangulation of data from focus group interviews, classroom observations, and artifact review. This is followed by the conclusions of the study and recommendations for policy and practice. Finally, recommendations for further research are offered.

Discussion of Key Findings

Research Question One. Three findings emerged related to assessment practices used to recognize when a student is not making the expected progress in early literacy. First, student

portfolios are used throughout the year to monitor student progress in early literacy. Second, snapshots of student progress in early literacy are collected and used to inform planning. Third, authentic assessment is used during classroom activities to guide selection of strategies.

Student portfolios are used throughout the year to monitor student progress in early literacy. Through both focus group interviews and the artifact review, the study found that all four classroom teachers utilized student portfolios as an informal assessment tool used to monitor the progress of the whole class as well as individual students. Portfolios contained examples of monthly directed draws, fine motor cutting and pasting activities, and student dictations and illustrations created in response to a story. The use of student work as authentic informal assessment is recognized as a tool for informally monitoring student progress. Ball and Trammell (2011) suggested that with the dearth of formal progress monitoring tools available at the preschool level, informal assessments can help teachers identify the lowest performing 25% of the class and then provide these students with intervention. The contents of the student portfolios represented common types of student work over time, allowing staff to monitor the progress in specific early literacy skill areas.

During the focus group interviews, teachers reported that this was the first year that they administered the Desired Results Developmental Profile (DRDP) to all children in the program. What remains to be seen is how this formal assessment tool will be used across the four classrooms to monitor students' early literacy skills throughout the year.

Snapshots of student progress in early literacy are collected and used to inform planning. The gathering and use of authentic snapshots of students' early literacy skills to inform planning was found to be a common assessment practice. This finding was noted in the focus group interviews, artifact review, and classroom observations. When asked in which

settings early literacy assessments take place, six coded responses emerged from the Team ABS interview and four coded responses from the Team CDS interview indicating that assessment takes place in the classroom. Additionally, both teams indicated using the small group activities as opportunities to assess students' early literacy skills, including one coded response from Team ABS and three from Team CDS.

Previous studies suggest that progress monitoring provides ongoing snapshots of the individual student's growth within a specific skill area, guiding teachers to recognize whether or not a child is on track for attaining the long-term literacy goals (Stecker et al., 2008). During the focus group interview, teachers described how they used snapshots including anecdotal notes, an iPad application, and data collection sheets to consult with colleagues about next steps for students.

Naturalistic observation of students during classroom is used to activities to guide selection of instructional strategies. Through both focus group interviews and classroom observations, the researcher found that teachers and speech and language pathologists used a range of strategies to respond to student needs. During the interview, participants shared examples of on the spot adjustments in question types, material choice, and the use of peer modeling in response to a student's need. In seven out of the eight classroom observations, it was also noted how participants posed questions as a way to check for understanding, to prompt for a response or elaboration, and to model language use. In eight out of eight observations, participants used additional visual materials in response to student need. The use of authentic assessment embedded within the classroom is supported by previous studies. Lonigan, Allan, and Lerner (2011) noted that informal assessment can also be used to scaffold an activity for a

student as the teacher uses the student response to increase or decrease the difficulty level of the task.

The use of language modeling and prompting as one of instructional strategies used in response to student needs could be contributed to the inclusive nature of the classroom, as the SLP and SLPA are regularly in the classroom supporting students with speech and language goals. During the Team ABS focus group interview, Teacher B described how she integrates the student's IEP goals within the classroom because all of her students can benefit. While the researcher found the use of three common informal assessment practices across the four classrooms, evidence of the use of common formal progress monitoring tools was not found. All four teachers reported that this was the first year of administering the Desired Results Developmental Profile (DRDP) as a formal assessment. However, evidence of using the results to inform instruction was mentioned by only one team.

Research Question Two. Two findings emerged related to collaborative problem solving practices utilized by staff to plan next steps when a student is not making expected progress in early literacy. First, formal and informal structures are used to support co-planning, co-teaching and consultation. Second, collaborative problem solving relationships exist among multidisciplinary team members. These two findings emerged from the focus group interviews and artifact review of weekly schedules and lesson plans.

Formal and informal structures are used to support co-planning, co-teaching, and consultation. Through both focus group interviews and the artifact review, the researcher found that formal and informal times in the day were built into support ongoing communication between staff members. For example, two formal times built into the schedule include 30 minutes of time scheduled daily and a weekly two-hour block to support ongoing communication

between staff members. Participants reported using this time to co-plan and review snapshot assessment data. Researchers found that when specialists and teachers develop shared goals, maintain regular opportunities to dialogue, share ideas, observe, and utilize each other's expertise, they strengthen the likelihood that students will generalize skills learned from the service provider sessions into the classroom (Bauer et al., 2010; V. Buysse & Wesley, 2004). All participants shared examples of using informal structures during the day to communicate around student needs with a staff member on the multidisciplinary team. The informal communication was demonstrated during classroom observations as teachers provided classroom assistants with scaffolding ideas and between the speech and language pathologist during center rotations. Additional examples were described in the focus group interviews. Case-Smith and Holland (2009) added that when service providers are given flexibility in scheduling, they can adapt their service delivery to best meet the needs of students within the classroom environment and gain a better understanding of teacher's concerns about a student's progress.

Participants described utilizing time in the classroom as an opportunity to problem solve, try a new strategy, and ask for a team member to observe. Previous studies found that when specialists model how to embed specialized instruction within daily routines, general educators can better support the development of students with and without special needs in inclusion-based preschools (Dinnebeil et al., 2009; Miller & Stayton, 1998). The structure of time was found to be safeguarded and used to informally problem solve around the early literacy needs of students. The researcher did not find evidence of formal protocols to guide the team's dialogue.

Collaborative problem solving relationships exist among multidisciplinary team members. Through both focus group interviews and the artifact review, the researcher found that each participant engages in problem solving around students' early literacy needs. While all

participants shared examples of problem solving with a colleague, they differed in the time utilized for the problem solving as well as with whom they problem solve. Three of the four classroom teachers described the collaboration with the speech and language pathologist to be essential to their planning of early literacy instruction. Previous studies also support the SLPS's role in collaborative problem solving. Sanger et al. (2012) stated that a speech and language pathologist's expertise " …extends beyond language and communication disorders to include literacy, curriculum, and learning in school …the expertise of the speech and language pathologist in serving children with language and literacy problems suggests that clinicians should be primary stakeholders in RTI" (p. 3). Previous studies also found that the role of the service provider is to understand the preschool teacher's goals and core curriculum while simultaneously enabling teachers to differentiate their instructional approach so that it matches the unique abilities and needs of the student child (Case-Smith & Holland, 2009; Ritzman et al., 2006).

What is known about collaboration is that there are essential ingredients that contribute to an effective collaborative relationship. Collaboration relies on a positive and productive relationship which can be built through informal and formal conversations (Ritzman et al., 2006; Wesley & Buysse, 2006). While Team ABS shared examples of problem solving involving all three members of their team, including the classroom assistants, Team CDS shared examples of problem solving primarily with service providers. A possible reason for the disparity in collaboration between teams is that building a trusting, collaborative relationship occurs over time. Teachers A and B have taught together for six years while Teachers C and D have worked together for three years; one year as teaching colleagues and two years whereby Teacher C served as a classroom assistant in Teacher D's classroom. The change in their collegial

relationship may be a reason for the difference in the level of collaboration in Team ABS compared to Team CDS. While the researcher found evidence of informal collaborative problem solving, evidence of a formalized cyclical problem solving process was not found in this study.

Research Question Three. Four findings emerged related to the use of multi-tiered instructional practices to respond when a student is not making expected progress in early literacy. First, early literacy instruction reflects the three domains of the California Preschool Learning Foundations (CPLF). Second, literacy instruction occurs in a variety of learning formats to respond to student early literacy needs. Third, adult support provided to students is intentional and allows for differentiated support in the area of early literacy. Finally, the integration of multimodal experiences to expand early literacy opportunities for students was the fourth finding.

Early literacy instruction reflects the three domains of the California Preschool Learning Foundations (CPLF). Through the focus group interviews, classroom observations, and artifact review, the study found that literacy activities reflect the expected learning outcomes outlined in the CPLF Reading Strand, Listening and Speaking Strand, and the Writing Strand. Classroom observations included responding to questions after a shared reading, listening for letter sounds while listening to a song, and directed draws.

After reviewing the literature on early literacy skills, agreement exists around the key learning domains for preschoolers that are predictive of later reading success. All fifty states have developed, or are in the process of developing and publishing, preschool learning outcomes using current research on early literacy (California Department of Education, 2008). The CPLF Listening and Speaking Strand is supported by previous research which found that a child's grammar and oral language development impact listening and reading comprehension as they

engage in dialogue around a text and answer questions posed by the teacher (Beauchat et al., 2009; M. C. Bradley et al., 2011; Chandler et al., 2008; van Kleeck, Vander Woude, & Hammett, 2006). Furthermore, the foundations in the CPLF Reading Strand reflect previous studies that found phonemic awareness, which is a student's ability to manipulate smaller units of sound, to be one of the strongest predictors of later reading success (Lonigan & Whitehurst, 1998; Wasik, 2001). Finally, the foundations in the CPLF Writing Strand reflect previous studies which indicate that as students develop an understanding of the relationship between sounds and letters, writing moves from emergent writing to conventional spelling (Chandler et al., 2008; Whitehurst & Lonigan, 1998). A multi-tiered *response through instruction* approach refers to core instruction as well as instruction tailored to meet the needs of small groups and individual students.

During the focus group interview, Teams ABS and CDS noted the advantages of being on an elementary school campus. Perhaps one of the reasons for the alignment of literacy instruction across the four classrooms is related to the communication that occurs between the preschool staff and kindergarten staff. A second reason for this alignment could be attributed to the built in time for unit planning where literacy targets are agreed-upon.

Literacy instruction occurs in a variety of learning formats to respond to student early literacy needs. Through the focus group interviews, classroom observations, and artifacts, the study found that the four preschool classrooms utilize a variety of learning formats to support early literacy skills. For example, the use of whole group circle and small group center rotations emerged from the both focus group interviews and classroom observations. The use of embedded opportunities through the art center, dramatic play, and outside time to promote early literacy skills emerged from the focus group interviews and artifact review.

The finding is supported through previous studies and principles of early childhood education programs. Researchers found that embedding instruction throughout the day increases the likelihood of the generalization of skills across settings (Grisham-Brown et al., 2000; Rakap & Parlak-Rakap, 2011). Additionally, researchers suggest that opportunities for intentional teaching of early literacy skills be planned and presented in a fun and developmentally appropriate manner through play activities such as dramatic play or building blocks (Callaghan & Madelaine, 2012; Paciga et al., 2011). Finally, researchers have advocated for naturalistic approaches that are embedded in instruction because they are minimally intrusive and brief (Grisham-Brown, Schuster, Hemmeter, & Collins, 2000; Horn & Banerjee, 2009). Perhaps the varied formats and embedded early literacy opportunities can be attributed to the adult support provided by teachers, the speech and language pathologist, and classroom assistants throughout the day.

Adult support provided to students is intentional and allows for differentiated support in the area of early literacy. Through the focus group interviews, classroom observations, and artifact review, the study found that the adult support assigned throughout the day was intentional. During the focus group, participants described the level and type of adult support students receive based on their emerging literacy needs from teachers, classroom assistants, and the speech and language pathologist. During the classroom observations, the type of adult support varied from reinforcement, proximity, and prompting during whole group circle and small group center rotations.

The literature review suggested that the intentionality of adult support can improve students' early literacy progress, particularly at the Tier 2 and Tier 3 level. Christ and Wang (2011) found that increased adult support within a small group activity, such as a book share, can

be Tier 2 strategy. A teacher may also pause during a whole group shared reading activity when using a target vocabulary word and explain the meaning in context.

Intentionality of adult support was further supported in the review of the literature as a way to support the most intensive early literacy needs at the Tier 3 level. Scaffolding enables teachers to provide children with the necessary amount of feedback and prompts, and it is an especially useful strategy to employ with preschoolers considered social disadvantaged and/or lacking in early literacy skills (McGee & Ukrainetz, 2009; Pentimonti & Justice, 2010). Examples of scaffolds include co-participating, eliciting, and reducing choices. During the focus group interviews, participants described ways they prompt and scaffold activities for students. This type of support was also observed during classroom observations.

The integration of multimodal experiences is used to expand early literacy opportunities for students. Instructional strategies and materials were found to reflect the multiple modalities of learners. The triangulation of data collected from focus group interviews, classroom observations, and the artifact review support this finding. For example, during the classroom observations the use of music to build phonemic awareness, the use of visuals paired with print during a treasure hunt, and large illustrations to sequence a story were observed.

The literature review revealed that early literacy gaps can be prevented when learning experiences are integrated within the classroom context, connected to students' lives, and tailored to meet students' developmental needs. Designing these experiences using a theme-based approach and planning learning opportunities where preschoolers learn through different modalities can address knowledge gaps (Christ & Wang, 2011; Horn & Banerjee, 2009; Spencer et al., 2012). The theme-based approach used in this preschool program was evidenced through the focus group interviews, classroom observations, and artifacts.

Conclusions

The Recognition and Response (R & R) conceptual model was used as a lens for this study. R & R was first introduced in 2006, and an opportunity existed to study how early childhood educators recognize and respond to students' early literacy needs. The examination of the four preschool classrooms within a single district program has provided insight that can guide early childhood educators in selecting assessment tools, collaborative problem solving structures, and multi-tiered instructional practices to respond to early literacy gaps. An analysis of the data collected through focus group interviews, classroom observations, artifact reviews, and the synthesis of these findings of this study have led to four conclusions.

The first conclusion is that informal assessment is critical for providing intentional early literacy experiences to students. A synthesis of the three findings that emerged from *research question one* led to the conclusion that informal assessment is critical for providing intentional early literacy experiences to students. Participants utilize common, informal progress monitoring tools and practices to monitor the early literacy skills of students. The four preschool classrooms within the target program utilize student work portfolios as a common informal assessment tool. Teams ABS and CDS noted the student portfolio work as a way to recognize students who are not making progress in early literacy. Additionally, the four teachers and speech pathologist use two common informal assessment practices; naturalistic observation of students and snapshots of student progress to inform planning. Ball and Trammell (2011) suggested that with the dearth of formal progress monitoring tools available at the preschool level, informal assessments can help teachers identify the lowest performing 25% of the class and then provide these students with intervention. During the Team ABS focus group interview, participants shared how they used informal assessment to identify students not making the expected progress in rhyming skills:

> Teacher A: I really noticed… Did you [Teacher B] notice that I was dismissing kids by whose name rhymes with and so-and-so didn't get their name to rhyme with that. We need to plug in more of that.
>
> Teacher B: It's great because [Teacher A] gets to take a look at my kids that might need a little more of something I am not doing. "Hey did you ... Is he able to do this?" Or I can ask and say, "Can you watch this for me because I'm doing this and this, and it's just not working," and then she can give me a different idea. Or if we're not sure of one of our typical kids is not so typical that's when I can say, "What suggestions do you have?" You need the whole RTI approach. Okay we're thinking something is going on but we're not really sure so let's try this, let's try that. If it's not working out we can go to [Teacher A] and say, "What else can we do?" I can go to [SLP].

During the Team CDS interview, Teacher C shared an example of using questions as a way of identifying and responding to the comprehension skills of the whole group and individuals:

> I might ask them a question from the page before, or I might ask them if they didn't get the right answer or the answer I was looking for. Then maybe we will go back and look at the page before…But most of the time, I'm able to assess the whole circle at some point. And ask each one an individual question while we're reading the story, or while we're having share, or whatever it is that we're working on.

Participants reported that this was the first year of administering the DRDP as a formal assessment. However, evidence of using the results to inform instruction was mentioned by one team.

The second conclusion is that informal problem solving between members of a multidisciplinary team is essential in planning an instructional response to support student early literacy needs. A synthesis of the two findings that emerged from *research question two* led to the conclusion that informal problem solving between members of a multidisciplinary team is essential in planning an instructional response to support student early literacy needs. Participants problem solve with at least one member of the multidisciplinary team to support their students' early literacy needs. Participants reported using both formal and informal structures to engage in problem solving. These formal structures included before or after school and a weekly two-hour block built into the schedule. Informal structures included opportunities to problem solve while co-teaching. Collaborative problem solving relationships exist across multidisciplinary staff, particularly within Team ABS, who have worked together for six years.

Previous studies have revealed that consultation and collaboration with specialists allow for opportunities to exchange knowledge from general educator to specialist and vice-versa within the teaching context (Dinnebeil et al., 2009; Sadler, 2005). Wesley and Buysse (2004) examined the comfort level of preschool teachers in delivering specialized instruction to students. When preschool teachers had access to experts and resources, their comfort level increased. During the focus group interviews, each participant provided an example of how their instruction changed as a result of the collaborative problem solving. The structure of time was found to be safeguarded and used to informally problem solve around student early literacy needs. The researcher did not find evidence of formal protocols to guide the team's dialogue. While the researcher found evidence of informal collaborative problem solving, evidence of a formalized cyclical problem solving process or use of protocols was not found in this study.

The third conclusion is that a core literacy program that reflects agreed-upon literacy targets through theme-based units and a range of learning formats across classrooms is key to recognizing student early literacy needs. A synthesis of two of the findings from *research question three* led to the conclusion that a core literacy program that reflects agreed-upon literacy targets through theme-based units and a range of learning formats across classrooms is key to recognizing student early literacy needs. The Tier 1 core literacy program in the four classrooms is research-based and reflects the expected early literacy student outcomes in the California Preschool Learning Foundations (CPLF). The teachers in this program agree upon common literacy targets when designing a theme-based unit and individual lesson activities. The theme-based approach affords students multiple opportunities to build literacy interest while gaining vocabulary and background knowledge of the theme/study topic. Furthermore, the participants integrate literacy experiences across learning formats, which include structured whole group circle, small group center rotations, and embedded opportunities that include dramatic play, art, and outside time.

The fourth conclusion is that the embedded use of multi-tiered instruction is a means of providing all students with access to core literacy curriculum. A synthesis of two of the findings from *research question three* led to the fourth conclusion that the embedded use of multi-tiered instruction is a means of providing students with access to core literacy curriculum. Student access to the core curriculum is embedded and ensured in two ways. First, teachers use a multimodal approach when designing literacy activities during structured groups and embed additional opportunities throughout the daily activities and centers, including arts, blocks, dramatic play, and outside time. Second, adult support is intentional during structured group times and embedded opportunities. The intentionality of the adult support was documented

through focus group interviews, classroom observations, and the artifact review. Three types of intentional adult support that emerged included reinforcement, proximity, and prompting. Additionally, three types of instructional strategies utilized by staff emerged. These included the intentional use of adult modeling, peer modeling, and questioning.

The two conclusions related to multi-tiered instruction are supported by previous research related to best practices in early intervention. Odom and Wolery (2003) offered eight tenets to guide early intervention at the preschool level. For example, one tenet, *children learn through acting on and observing their environment* is aligned with the practice of embedding learning opportunities within daily routines and activities. A second tenet, *adults mediate children's experiences to promote learning*, and a third tenet, *children's participation in more developmentally advanced settings, at times, with assistance, is necessary for successful and independent participation in those settings* is aligned with the intentional use of adult support.

Implications for Policy and/or Practice

The findings and conclusions of this study have policy and practical implications for state and district leaders, preschool program directors, and staff teams that may lead to significant benefits for students.

Funding model. A policy implication at the federal, state, and district level is related to the current funding model for public preschool programs. A review of the literature identified programmatic policies and funding, as administrative obstacles for fulfillment of roles and responsibilities of the collaborative problem solving team (V. Buysse & Wesley, 2004; Marston et al., 2003; Sanger et al., 2012). Currently, district preschool programs that rely on state and federal funding do not have the autonomy to build programs that meet the needs of their students through an R & R model or that reflect local priorities. Regulations such as the exclusion of

students whose families do not meet specific income requirements, mandated curriculum, inflexible program minutes, and facility restrictions can serve as roadblocks to designing programs that can fully apply practices described in the R & R model.

The program in this study utilized a combination of California State Preschool funds, family tuition fees, and district general fund dollars. This funding model allowed for all preschool classrooms in this program to be inclusive of all students, staffed with multidisciplinary teams, and located on elementary school campuses. This funding model also affords the district with decision-making autonomy over curriculum, professional learning priorities, and flexibility in scheduling.

Leadership and vision for early childhood programs. The examination of this single district preschool program sparked much reflection around the development of leadership and vision. This program started in 1998 with a vision to meet the needs of all students with special needs and has since been recognized as a program of "best practice" to meet the needs of students on the autism disorder spectrum. During one of the researcher's initial conversations with the program director, the director shared how the vision aimed to focus on supporting students with special needs, particularly with autism. However, the district is interested in building upon the preschool program's strengths by moving towards *Response to Instruction and Intervention (RTI^2)* by systematizing their early intervention efforts to meet the needs of all students in the program. The director also noted that the preschool classes have secured space on the elementary school site to facilitate smooth transitions and communication between staff. The program director shared that in addition to the weekly two-hour block, staff members attend a common professional learning opportunity three times a year. These examples speak to the district's leadership and vision for the program.

During the focus group interviews, participants described the program's interest in RTI^2 as a way of identifying a student's needs and connected the use of the DRDP across all four classrooms as a move in that direction. The current staffing ratio in the classroom, flexibility of schedules, and investment in the professional learning of staff speaks to the leadership and vision of this district. Furthermore, the longevity of staff at this preschool, along with their openness to participate in this study, speaks to their commitment and investment in the program.

Professional learning priorities. An implication for practice is the investment in the professional learning of early childhood education teams. A review of the literature revealed that the lack of professional development opportunities on topics such as instructional strategies and collaborative processes, particularly for preschool teachers, was noted as an obstacle to effective collaboration (Dinnebeil et al., 2009; Trainor, 2008). The findings of this study indicated assessment and collaborative problem solving occurred informally. In order to formalize a collaborative problem solving cycle, staff members will need the tools to feel successful. These tools include common universal screening tools, progress monitoring assessment tools, and protocols to guide the collaborative problem solving team in engaging in data-driven decision making.

A second professional learning priority is *intentional teaching*. The outcomes of this study suggest that the early literacy needs of the whole group, some students, and individual students can be met through the intentional selection of literacy targets, lesson activities, instructional strategies, and adult support. The multidisciplinary team approach lends itself to the sharing and development of intentional teaching opportunities. Spencer et al. (2012) noted that intentional teaching of early literacy skills will require the expertise of general educators, special educators, and speech pathologists in the planning and modeling of the strategies.

Structures to promote flexibility. An implication for practice is the allocation of time for teachers and support staff to engage in critical conversations. The literature review revealed that insufficient time for service providers to support the implementation of strategies within the classroom was a challenge for fulfillment of roles and responsibilities of multidisciplinary team members. It was also recommended that more time with the speech and language pathologist (SLP) be allocated to programs and that the placement of a single SLP at the school site would foster collaboration (Bauer et al., 2010; Baxter et al., 2009). One of the outcomes of this study was the use of built-in structures that participants utilized to informally and formally communicate around literacy instruction for the whole class, some students, and individuals. Participants in this study reported meeting weekly to agree upon common early literacy targets, plan common units, and problem solve. Teachers also shared how they used in class co-teaching time to communicate with the speech and language pathologist. The participants further added that the SLP would drop-in during non-scheduled times to support students. Flexibility in the SLP's schedule would require a smaller caseload.

Recommendations for Future Research

Replication of study. If this study were to be replicated, it is recommended that four components be added to the data collection. The first recommendation for replicating this study is to include a post classroom observation debrief. Adding this component would allow the researcher to gain more insight into informal, authentic assessment, and how it will be used to plan next lessons. The second recommendation is to include an observation of a collaborative planning or problem solving time. This would lead to a more detailed description about the way team members approach problem solving, particularly around the early literacy needs to discuss the needs of the whole class, some students, and individual students. The third recommendation

is to build in an observation during non-structured time with a focus on how adult support, in a non-structured format, is similar to or different from a structured whole or small group time. The fourth recommendation is to hold a focus group interview with the classroom assistants. Their perspective could provide valuable insight into the roles and responsibilities of the classroom team.

Future studies. R & R is emerging as an RTI framework for preschool, and there is much to explore. There are three recommendations for future studies that may benefit the early childhood profession. First, once cohort DRDP data is available, the program selected for this study could be studied longitudinally using a mixed methods design to determine the relationship, if any, between student progress on the Language and Literacy Development Domain (LLD) measures and instructional practices. Second, the longevity of staff who serve on multidisciplinary teams could be explored further. Shedding light on the factors that keep early childhood educators in the profession can inform district and program leaders so that they may invest in the highest leverage ways of building capacity. Finally, a third recommended area of study is to explore the use of prompting in early childhood classrooms. The use of prompting was noted as a type of support given to students in this program. However, two of the participants noted that questions have been raised about the frequency of prompting and how, if at all, prompts support or hinder student independent use of learned skills.

Summary

This qualitative case study examined the use of three practices within the Recognition and Response (R & R) preschool RTI model. The three practices include the use of assessment, collaborative problem solving, and multi-tiered instructional strategies to recognize and respond to students' early literacy needs. Through purposive sampling, a single district preschool

program in Southern California was selected. Within this preschool program, four preschool classrooms that serve four-year old students with and without special needs were examined using the three research questions of the study. The four preschool classes were inclusion-based and staffed with multidisciplinary teams. The participants that made up these multidisciplinary teams included an early childhood education teacher, an early childhood special education teacher, and a speech and language pathologist. Participants have served in this same program from three to thirteen years.

Data collected from this study included two focus group interviews, eight class classroom observations, and a review of eleven artifacts submitted by participants. Through an analysis of the data collected, nine findings emerged. These nine findings were synthesized to four overall conclusions of the study. First, *informal assessment is critical for providing intentional early literacy experiences to students.* Participants utilize informal progress monitoring tools and practices to monitor the early literacy skills of the whole class and individual students. The four teacher participants use portfolios as a common informal assessment tool. The four teachers and the speech and language pathologist use snapshots of student progress to inform planning and naturalistic observation of students to select instructional strategies in response to student needs. The second conclusion is *informal problem solving between members of a multidisciplinary team is essential in planning an instructional response to support student early literacy needs*. Formal and informal structures are used to support co-planning, co-teaching, and consultation. Participants problem solve with at least one member of the multidisciplinary team to support students' early literacy needs. Participants described how their instruction changed as a result of collaborative problem solving. The third conclusion of this study is *a core literacy program that reflects agreed-upon literacy targets through theme-based units and a range of learning formats*

across classrooms is key to recognizing student early literacy needs. The Tier 1 core literacy program in the four classrooms is research-based and reflects the expected student outcomes in the California Preschool Learning Foundations (CPLF) and is embedded in a variety of learning formats. Fourth, *the embedded use of multi-tiered instruction is a means of providing students with access to core literacy curriculum*. Student access to the core curriculum is ensured through a multimodal approach when designing literacy activities and through the intentionality of adult support during structured group times and embedded opportunities.

Four implications for policy and practice were presented. An implication for policy implication at the federal, state, and district level is related to the current funding model for public preschool programs. The program in this study utilized a blended funding model that allowed for preschool classrooms to be inclusive of all students, staffed with multidisciplinary teams, and located on elementary school campuses. This funding model also afforded the district with decision-making autonomy over curriculum, professional learning priorities, and flexibility in scheduling.

Three implications for practice were presented. The first implication for practice included the development of leadership and vision for early childhood programs. The program in this study, established in 1998, continues to flourish. The leadership and clarity of vision ensures the allocation of resources from the district level. A second implication for practice is investment in the professional learning of early childhood education teams in areas that include collaborative problem solving and intentional teaching. A third implication for practice is the allocation of time for teachers and support staff to engage in critical conversations.

Recommendations for replication of the study and for further research were offered. If this study were to be replicated, it is recommended that four components be added to the data collection. The first recommendation for replicating this study is to include a post classroom observation debrief. The second recommendation is to include an observation of a collaborative planning or problem solving time. The third recommendation is to build in an observation during non-structured time with a focus on how adult support, in a non-structured format, is similar to or different from a structured whole or small group time. The fourth recommendation is to hold a focus group interview with the classroom assistants.

Three recommendations for future studies that may benefit the early childhood profession were suggested. First, once cohort DRDP data is available, the program selected for this study could be studied longitudinally using a mixed methods design to determine the relationship, if any, between student progress on the Language and Literacy Development Domain (LLD) measures and instructional practices. Second, the longevity of staff who serve on multidisciplinary teams could be explored further. Finally, a third recommended area of study is to explore how, if at all, prompts support or hinder student independent use of learned skills in early childhood classrooms.

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APPENDIX A

Informed Consent for Classroom Research- Teachers and Speech and Language Pathologists

Recognition and Response: Early Literacy in an Inclusion-Based Preschool Program

Dear Teacher or Speech and Language Pathologist,

My name is Irene Gonzalez-Castillo and I am currently a student at Pepperdine University in the Educational Leadership, Administration and Policy (ELAP) program. You are invited to participate in a qualitative case study conducted as part of the requirements for a Doctorate in Educational Leadership, Administration and Policy in the Graduate School of Education and Psychology at Pepperdine University. For this project I will gather data from inclusion-based preschool classrooms in order to examine how staff teams recognize and respond to students' early literacy needs. The research will be supervised by Dr. Linda Purrington, Dissertation Committee Chair.

The purpose of this study is to investigate and describe Recognition & Response (R & R) practices utilized by staff teams in inclusion-based preschool programs. R & R practices to be investigated include: a) recognition of student needs through assessment, b) collaborative problem-solving as a process to plan and evaluate next steps for students, and c) response through an instructional tiered approach as they apply to early literacy in preschool.

For this project, you will be asked to participate in a focus group interview where you will be asked a series of questions and asked to share artifacts. You will be given a copy of the interview questions and a list of potential artifacts to bring with two-weeks in advance notice. The entire interview should take between 60-75 minutes. The focus group interview will take place at an agreed-upon location and will be recorded for accuracy. At any point, you may ask me to turn off the tape or refuse to answer a question. After the recording has been transcribed, the transcription will be shared with you to ensure that I captured the information accurately. You will then have the opportunity to clarify or elaborate and provide additional artifacts. To ensure confidentiality, the audio recording will be erased once the interview has been transcribed and your identity will remain confidential.

You will also be asked to participate in two 30 minute classroom observations with a focus on learning formats, instructional strategies, and adult support. I will take field notes based on these classroom observations. Through this data I hope to learn how inclusion-based preschool staffs recognize student early literacy needs through assessment and make instructional decisions for students through collaboration. To ensure confidentiality, pseudonyms will be used during the data collection and written report. Records will be destroyed after three years upon completion of the study.

Participation is voluntary and there are neither penalties nor loss of benefits should you choose not to participate. Remuneration for your participation will be a $25 gift card for your time. You are free to withdraw your consent to participate at any time. If you have any questions or concerns about your participation in this study, feel free to contact me at [redacted]@pepperdine.edu. For questions about your rights, please call or write [redacted]@pepperdine.edu at [redacted] or Dr. Thema Bryant-Davis, Chairperson of the Pepperdine University Graduate and Professional Schools IRB, at [redacted]@pepperdine.edu or [redacted] for additional questions about your rights as a participant. Thank you for your consideration.

Sincerely,
Irene Gonzalez-Castillo, Doctoral Candidate

I _____, agree to participate in the research study conducted by Irene Gonzalez-Castillo under the direction of Dr. Linda Purrington.

Signature of participant: _____ Date: _____

APPENDIX B

Informed Consent for Classroom Research- Classroom Assistants

Recognition and Response: Early Literacy in an Inclusion-Based Preschool Program

Dear Classroom Assistant,

My name is Irene Gonzalez-Castillo and I am currently a student at Pepperdine University in the Educational Leadership, Administration and Policy (ELAP) program. You are invited to participate in a qualitative case study conducted as part of the requirements for a Doctorate in Educational Leadership, Administration and Policy in the Graduate School of Education and Psychology at Pepperdine University. For this project I will gather data from inclusion-based preschool classrooms in order to examine how staff teams recognize and respond to students' early literacy needs. The research will be supervised by Dr. Linda Purrington, Dissertation Committee Chair.

The purpose of this study is to investigate and describe Recognition & Response (R & R) practices utilized by multidisciplinary staff teams at three purposely selected inclusion-based preschool programs in Southern California. R & R practices to be investigated include: a) recognition of student needs through assessment, b) collaborative problem-solving as a process to plan and evaluate next steps for students, and c) response through an instructional tiered approach as they apply to early literacy in preschool.

For this project, I will conduct two 30 minute observation in the classroom. The focus of the classroom observations will be the instructional strategies used by the teachers and speech and language pathologists not include the classroom assistants nor the children. During this observation, I will take notes using a field note form. All information obtained will be treated confidentially and records will be destroyed after three years upon completion of the study.

Participation is voluntary and there is no compensation provided in exchange for your participation. As an instructional assistant, your only participation will be in the classroom when I am observing for approximately two 30 minute sessions. However, you are free to withdraw your participation at any time should you decide to do so. There are no penalties nor loss of benefits should you decide not to participate. If you have any questions or concerns about your participation in this study, feel free to contact me at [redacted]@pepperdine.edu. For questions about your rights, please call or write [redacted]@pepperdine.edu at [redacted] or [redacted], Chairperson of the Pepperdine University Graduate and Professional Schools IRB, at [redacted]@pepperdine.edu or [redacted] for additional questions about your rights as a participant.

Thank you,

Irene Gonzalez-Castillo, Doctoral Candidate

I _____, agree to participate in the research study conducted by Irene Gonzalez-Castillo under the direction of Dr. Linda Purrington.

Signature of participant: __ _____ Date: _____

APPENDIX C

Informed Parent Consent for Classroom Research: Children

Recognition and Response: Early Literacy in an Inclusion-Based Preschool Program

Dear Families,

My name is Irene Gonzalez-Castillo and I am doctoral student at Pepperdine University. I am writing to let you know that your child's staff team has been invited to participate in a study. For this study, I will gather information from preschool classrooms to learn more about how staff teams support students' early literacy needs. The research will be supervised by Dr. Linda Purrington, Dissertation Committee Chair.

As part of this study, I will visit the classroom twice, each time for a 30 minute period. The focus of the observation will be the teachers and speech and language pathologists, not the children. I will observe a typical lesson and the children's participation will be the same as it is on any given day. I would appreciate your permission in allowing your child to remain involved in the instructional activities in the classroom as I conduct the observation. No teacher's names or student names will be identified in the classroom observation data collected.

Participation is voluntary and there is no compensation provided in exchange for your child's participation. If you choose for your child not to participate in observed lessons, your child will be provided a non-observed activity. You are free to withdraw your child's participation at any time should you decide to do so. If you have any questions or concerns about your participation in this study, feel free to contact me at [redacted]@pepperdine.edu. For questions about your rights, you may also call or write [redacted]@pepperdine.edu at [redacted] or [redacted], Chairperson of the Pepperdine University Graduate and Professional Schools IRB, at [redacted]@pepperdine.edu or [redacted]. Thank you for your help!

Please indicate below whether or not you give your permission for your child to remain in the activities while I am observing.

- ○ Yes, I give my child permission to remain in the classroom during the two 30 minute observations.
- ○ No, I would prefer my child participate in a non-observed activity during the two 30 minute observations.

Teacher's Name: _____

Child's Name: _____

Parent's/Guardian's Signature: _____Date:_____

Sincerely,

Irene Gonzalez-Castillo, Doctoral Candidate

APPENDIX D

Focus Group Interview Protocol

STEP 1: Welcome and Overview of Focus Group Purpose and Protocol (2-3 minutes)
"Hi Everyone. First of all, thank you for being here to participate in this focus group interview. My name is Irene Gonzalez-Castillo and I am a doctoral student at Pepperdine University. I am interested in learning more about how collaborative multidisciplinary teams recognize and respond to the early literacy needs of preschoolers. I selected you because you have experience in a collaborative, inclusion-based program as a special education preschool teacher/ general education preschool teacher/speech pathologist."

"The interview today should take between 60-75 minutes. I am going to facilitate the focus group interview and I have a second person in the room who will help manage the audio recording and take additional handwritten notes (introduce recorder). After the transcripts are created from the recording, three additional steps will take place."

"First, I will give individuals who participate in the interview a copy of the transcript to ensure accuracy and representativeness."

"Second, I will invite individuals who participated to submit additional artifacts that can help provide additional insight into the questions posed. The individual or I may want to schedule a follow-up conversation over the phone or via email to clarify or elaborate on any of the responses shared at the interview."

"Third, I will erase the audio recording. The typed transcripts will be kept on my computer in a password protected file for five years. Individuals can decide at any time to discontinue their participation. Please feel free to ask any questions you may have. Shall we get started?"

STEP 2: Whip Around Introductions (2-3 minutes)
"Please tell me about your background, experience, credentials."

STEP 3: Twelve Questions Posed to the Focus Group (4-5 minutes per question)

1) What learning formats, routines and groupings do you use to promote early literacy skills? PROMPT (if needed) Can you describe an example of how you embed early literacy throughout your day?
2) Describe how your team plans early literacy activities (that are aligned with the California Preschool Learning Foundations) for the whole class, for some students and for individuals. Please share any resources or artifacts you brought that capture the way your team plans whole class and/or differentiated early literacy activities for students.
3) Can you tell me how adult support might change in response to a student who is struggling in early literacy (for example, with vocabulary, understanding a story etc.)?
4) Think about a student who you recently provided extra support to in the area of early literacy. What instructional strategies were utilized to support the student?

5) In what ways does your team informally and formally communicate around student's early literacy needs?
6) A- What type of informal and formal assessments do you use to learn about your students' early literacy skills?
   B- Please share any artifacts you brought that highlight how your team monitors student progress in early literacy.
7) In what ways do the informal and formal assessments align with the California Preschool Learning Foundations?
8) In what settings do the progress monitoring of students' early literacy skills occur? How do you monitor early literacy skills? (i.e. do opportunities to assess exist during small group time, free-choice, center time?)
9) Can you describe the responsibilities of the team in collecting student assessment information and providing instructional support for any given student? PROMPT (if needed) Can you walk me through the ways you would each share responsibility related to a student who is gaining expected early literacy skills?
10) How, if at all, does the assessment data gathered inform your instructional planning for the whole group? For some students? For individuals?
11) Please share any artifacts you brought that capture the way your team collaborates and makes decisions to support students' early literacy needs. PROMPT (if needed) Can you walk me through the type of data or information you use to plan next steps for your class, some students, and individuals?
12) What structures do you have in place to support collaboration? PROMPT (if needed) Can you walk me through a typical collaborative meeting time?

STEP 4: Closing Question (3-5 minutes)

"Is there anything you would like share about early literacy in your classrooms that I did not ask?"

STEP 5: Thank participants and recap next steps (1-2 minutes)

- After the focus group interview, the audio recording will be transcribed.
- I will share transcripts to ensure accuracy and representativeness.
- If needed, focus group members will be contacted via email or phone to elaborate or clarify.
- At the end of the interviews, if individuals have any additional materials or artifacts, I can retrieve them at a later date.

APPENDIX E

Alignment between Research Questions, Literature Themes and Instruments

Research Question	**Themes**	**Focus Group Interview Questions**	**Artifact Review (examples)**	**Classroom Observation (examples)**
What informal and formal progress monitoring assessment tools and practices, if any, are utilized by multidisciplinary staff teams for the purposes of recognizing when a student is not making the expected progress in early literacy?	**Tools:** ✓ Use of informal and formal assessments ✓ Aligned with the research-based core curriculum and early literacy skills (in California, the Preschool Learning Foundations) **Practices:** ✓ Snapshots of progress over time ✓ Monitors individual and whole group progress ✓ Informs instructional planning ✓ Authentic/naturalistic assessment (Ball & Trammell, 2011; L. S. Fuchs & Fuchs, 2007; Lieberman-Betz et al.,	**Q6A** What type of informal and formal assessments do you use to learn about your students' early literacy skills? **Q7** In what ways do the informal and formal assessments align with the California Preschool Learning Foundations? **Q6B** Please share any artifacts you brought that highlight how your team monitors student progress in early literacy. **Q10** How, if at all, does the assessment data gathered inform your instructional planning for the whole group? For some students? For individuals? **Q8** In what settings do the progress monitoring of students' early literacy skills occur? (i.e. do opportunities to assess exist during small	Informal (i.e. portfolios, student work, observation and/or anecdotal notes) Formal (i.e. early literacy probes)	Informal assessment in an authentic or naturalistic setting.

Research Question	Themes	Focus Group Interview Questions	Artifact Review (examples)	Classroom Observation (examples)
	2013; McConnell et al., 2002)	group time, free-choice, center time?)		
What collaborative problem solving practices, if any, are utilized by multidisciplinary staff teams to plan next steps when a student is not making the expected progress in early literacy?	✓ Ongoing communication ✓ Roles and responsibilities of team members ✓ Data-driven decision making ✓ Structure for collaboration (i.e. protocols, time to meet) (Bauer et al., 2010; V. Buysse & Wesley, 2004; Dinnebeil et al., 2009; McNamara et al., 2008; Miller & Stayton, 1998).	**Q5** In what ways does your team informally and formally communicate around student's early literacy needs? **Q9** Can you describe the responsibilities of the team in collecting student assessment information and providing instructional support for any given student? PROMPT (if needed) Can you walk me through the ways you would each share responsibility related to a student who is gaining expected early literacy skills? **Q11** Please share any artifacts you brought that capture the way your team collaborates and makes decisions to support students' early literacy needs. PROMPT (if needed) Can you walk me through the type of data or information you use to plan next steps for your class, some students and individuals?	Team meeting notes Protocols Meeting Schedules Service delivery and/or class schedules Lesson Plans	N/A

Research Question	Themes	Focus Group Interview Questions	Artifact Review (examples)	Classroom Observation (examples)
		Q12 What structures do you have in place to support collaboration? (PROMPT (if needed) Can you walk me through a typical collaborative meeting time?		
What multi-tiered instructional practices, if any, are utilized by multidisciplinary staff teams to respond when a student is not making the expected progress in early literacy?	**Practices:** ✓ Implementation of **evidence-based core curriculum** aligned with early literacy skills (California Preschool Learning Foundations) ✓ Use of a variety of **learning formats/groupings** (i.e. whole group, small group, centers, embedded) ✓ **Adult support** that is **adapted** to students' early literacy needs ✓ **Use of instructional strategies** to meet the needs of the whole class, some students, and individuals (i.e. intentional	**Q2** Describe how your team plans early literacy activities (that are aligned with the California Preschool Learning Foundations) for the whole class, for some students and for individuals. Please share any resources or artifacts you brought that capture the way your team plans whole class and/or differentiated early literacy activities for students. **Q1** What learning formats, routines and groupings do you use to promote early literacy skills? PROMPT (if needed) Can you describe an example of how you embed early literacy throughout your day? **Q3** Can you tell me how adult support might change in	Lesson plans Early literacy curriculum and resources Team meeting notes	Intentional teaching of early literacy skills Whole group/small group Centers Routines Embedded opportunities Adult support and scaffolding of early literacy skills Instructional strategies such as shared reading, adult and /or peer modeling, scaffolding and prompting

Research Question	Themes	Focus Group Interview Questions	Artifact Review (examples)	Classroom Observation (examples)
	teaching, intensive scaffolding) (B. A. Bradley & Reinking, 2011; Chandler et al., 2008; McGee & Ukrainetz, 2009; Pentimonti & Justice, 2010; Spencer et al., 2012)	response to a student who is struggling in early literacy (for example, with vocabulary, understanding a story etc.)? **Q4** Think about a student who you recently provided extra support to in the area of early literacy. What instructional strategies were utilized to support the student?		

APPENDIX F

Artifact Review Form

Date:	**Time:**	
Classroom: **A B C D**		
Research Question	**Type of Artifact**	**Practices**
What informal and formal progress monitoring assessment tools and practices, if any, are utilized by multidisciplinary staff teams for the purposes of recognizing when a student is not making the expected progress in early literacy?	o Portfolio o Student work o Observation o Anecdotal notes o Early literacy probes o Other informal o Other formal	o Use of informal assessment o Use of formal assessment o Aligned with core curriculum/early literacy skills o Snapshots of progress monitoring over time o Monitors individual and whole group o Informs instructional planning o Authentic/naturalistic assessment o Other
What collaborative problem solving practices, if any, are utilized by multidisciplinary staff teams to plan next steps when a student is not making the expected progress in early literacy?	o Team meeting notes o Protocols o Meeting Schedules o Service delivery and/or class schedules o Lesson Plans o Other	o Ongoing communication o Roles and responsibilities of team members o Data-driven decision making o Structure for collaboration (i.e. protocols, time to meet)
What multi-tiered instructional practices, if any, are utilized by multidisciplinary staff teams to respond when a student is not making the expected progress in early literacy?	o Lesson plans o Early literacy curriculum and resources o Team meeting notes o Other	o Implementation of evidence-based core curriculum aligned with early literacy skills o Use of a variety of learning formats/groupings (i.e. whole group, small group, centers, embedded) o Adult support that is adapted to students' early literacy needs o Use of instructional strategies to meet the needs of the whole class, some students, and individuals (i.e. intentional teaching, intensive scaffolding)

APPENDIX G

Observation Field Note Form

Date:	**Time:**	
Classroom: **A B C D**		
Research Question	**Practices**	**Evidence**
What multi-tiered instructional practices, if any, are utilized by multidisciplinary staff teams to respond when a student is not making the expected progress in early literacy?	Implementation of evidence-based core curriculum aligned with early literacy skills	
	Use of a variety of learning formats/groupings (i.e. whole group, small group, centers, embedded)	
	Adult support that is adapted to students' early literacy needs	
	Use of instructional strategies to meet the needs of the whole class, some students, and individuals (i.e. intentional teaching, intensive scaffolding)	
What informal and formal progress monitoring assessment tools and practices, if any, are utilized by multidisciplinary staff teams for the purposes of recognizing when a student is not making the expected progress in early literacy?	Use of informal and formal assessments	
	Authentic/naturalistic assessment	

APPENDIX H

Social and Behavioral Research Certificate- Researcher

CITI Collaborative Institutional Training Initiative

Graduate & Professional School Social & Behavioral Research - Basic/Refresher Curriculum Completion Report
Printed on 12/14/2012

Learner: Irene Gonzalez-Castillo (username: idgonzal)
Institution: Pepperdine University
Contact Information Department: ELAP
Email: [redacted]@pepperdine.edu

Social & Behavioral Research - Basic/Refresher: Choose this group to satisfy CITI training requirements for Investigators and staff involved primarily in Social/Behavioral Research with human subjects.

Stage 1. Basic Course Passed on 12/14/12 (Ref # 9260811)

Required Modules	Date Completed	Score
Belmont Report and CITI Course Introduction	12/11/12	3/3 (100%)
Students in Research	12/11/12	7/10 (70%)
History and Ethical Principles - SBR	12/11/12	3/5 (60%)
Defining Research with Human Subjects - SBR	12/11/12	4/5 (80%)
The Regulations and The Social and Behavioral Sciences - SBR	12/11/12	4/5 (80%)
Assessing Risk in Social and Behavioral Sciences - SBR	12/11/12	5/5 (100%)
Informed Consent - SBR	12/11/12	5/5 (100%)
Privacy and Confidentiality - SBR	12/11/12	3/5 (60%)
Research with Prisoners - SBR	12/14/12	4/4 (100%)
Research with Children - SBR	12/14/12	4/4 (100%)
Research in Public Elementary and Secondary Schools - SBR	12/14/12	4/4 (100%)
International Research - SBR	12/14/12	3/3 (100%)
Internet Research - SBR	12/14/12	5/5 (100%)
Research and HIPAA Privacy Protections	12/14/12	4/5 (80%)
Vulnerable Subjects - Research Involving Workers/Employees	12/14/12	4/4 (100%)
Conflicts of Interest in Research Involving Human Subjects	12/14/12	3/5 (60%)

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI participating institution. Falsified information and unauthorized use of the CITI course site is unethical, and may be considered scientific misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Course Coordinator

Return

APPENDIX I

Social and Behavioral Research Certificate- Interview Recorder

Appendix D: CITI Certificate

CITI Collaborative Institutional Training Initiative

Graduate & Professional School Social & Behavioral Research - Basic/Refresher Curriculum Completion Report
Printed on 12/15/2012
Learner: [redacted]
Institution: Pepperdine University
Contact Information Department: ELAP
Email: [redacted]

Social & Behavioral Research - Basic/Refresher: Choose this group to satisfy CITI training requirements for Investigators and staff involved primarily in Social/Behavioral Research with human subjects.

Stage 1. Basic Course Passed on 12/14/12 (Ref # 8821691)

Required Modules	Date Completed	Score
Belmont Report and CITI Course Introduction	12/11/12	3/3 (100%)
Students in Research	12/11/12	7/10 (70%)
History and Ethical Principles - SBR	12/11/12	2/5 (40%)
Defining Research with Human Subjects – SBR	12/11/12	4/5 (80%)
The Regulations and The Social and Behavioral Sciences – SBR	12/11/12	4/5 (80%)
Assessing Risk in Social and Behavioral Sciences – SBR	12/11/12	5/5 (100%)
Informed Consent – SBR	12/11/12	5/5 (100%)
Privacy and Confidentiality - SBR	12/11/12	4/5 (80%)
Research with Prisoners - SBR	12/14/12	4/4 (100%)
Research with Children - SBR	12/14/12	3/4 (75%)
Research in Public Elementary and Secondary Schools – SBR	12/14/12	4/4 (100%)
International Research - SBR	12/14/12	3/3 (100%)
Internet Research – SBR	12/14/12	5/5 (100%)
Research and HIPAA Privacy Protections	12/14/12	3/5 (60%)
Vulnerable Subjects - Research Involving Workers/Employees	12/14/12	4/4 (100%)

Conflicts of Interest in Research Involving Human Subjects	12/14/12	3/5 (60%)

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI participating institution. Falsified information and unauthorized use of the CITI course site is unethical, and may be considered scientific misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Course Coordinator

APPENDIX J

Social and Behavioral Research Certificate- Second Coder

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI)
HUMAN RESEARCH CURRICULUM COMPLETION REPORT
Printed on 04/20/2014

LEARNER	[redacted] (ID: [redacted])
	[redacted]
	United States
DEPARTMENT	PSYCHOLOGY
PHONE	[redacted]
EMAIL	[redacted]
INSTITUTION	University of California, Los Angeles
EXPIRATION DATE	04/13/2017

HUMAN RESEARCH - SOCIAL & BEHAVIORAL RESEARCHERS & STAFF

COURSE/STAGE:	Basic Course/1
PASSED ON:	04/14/2014
REFERENCE ID:	12793678

REQUIRED MODULES	DATE COMPLETED
History and Ethical Principles - SBE	04/13/14
Defining Research with Human Subjects - SBE	04/13/14
The Regulations - SBE	04/13/14
Assessing Risk - SBE	04/13/14
Informed Consent - SBE	04/13/14
Privacy and Confidentiality - SBE	04/14/14
Research With Protected Populations - Vulnerable Subjects: An Overview	04/14/14
University of California, Los Angeles (UCLA)	04/14/14

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI Program participating institution or be a paid Independent Learner. Falsified information and unauthorized use of the CITI Progam course site is unethical, and may be considered research misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Program Course Coordinator

APPENDIX K

Permission to Conduct Study

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

May 1, 2014

Irene Gonzalez-Castillo
[redacted]

Protocol #: E0314D03
Project Title: Recognition and Response: Early Literacy in an Inclusion-Based Preschool Program

Dear Ms. Gonzalez-Castillo:

Thank you for submitting your application, *Recognition and Response: Early Literacy in an Inclusion-Based Preschool Program,* for exempt review to Pepperdine University's Graduate and Professional Schools Institutional Review Board (GPS IRB). The IRB appreciates the work you and your faculty advisor, Dr. Purrington, have done on the proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations (45 CFR 46 - http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html) that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(2) states:

> (b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:
>
> **Category (2) of 45 CFR 46.101**, research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: a) Information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact Kevin Collins, Manager of the

Institutional Review Board (IRB) at gpsirb@peppderdine.edu. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Thema Bryant-Davis, Ph.D.
Chair, Graduate and Professional Schools IRB

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives
Mr. Brett Leach, Compliance Attorney
Dr. Linda Purrington, Faculty Advisor