

2013

A survey of literacy instruction in public preschool programs in Iowa

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A SURVEY OF LITERACY INSTRUCTION
IN PUBLIC PRESCHOOL PROGRAMS IN IOWA

An Abstract of a Thesis
Submitted
in Partial Fulfillment
of the Requirements for the Degree
Specialist in Education

Anne Marie Berthelsen
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May 2013

ABSTRACT

This paper focuses on the importance of emergent literacy instruction with preschool populations. Emergent literacy refers to the early developmental stages of reading in preschool children and focuses on strengthening pre-reading skills. This paper describes best practice for survey development as well as recommended changes to the methodology of a previous study. The paper also describes changes made to improve the previous emergent literacy survey and concludes with a discussion of how the results of the survey could be used to improve emergent literacy instruction for preschool children.

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This Study by: Anne Berthelsen

Entitled: A Survey of Literacy Instruction in Public Preschool Programs in Iowa

has been approved as meeting the thesis requirement for the

Degree of Specialist in Education

3-26-13

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TABLE OF CONTENTS

	PAGE
LIST OF TABLES	vi
CHAPTER 1. INTRODUCTION	I
Purpose of Study	5
Research Questions	5
CHAPTER 2. LITERATURE REVIEW	7
Description of Emergent Literacy	8
Emergent Literacy Skill Areas	10
Alphabet Knowledge	10
Phonological Awareness	11
Rapid Automatic Naming (RAN)	12
Writing	12
Phonological Memory	12
Additional Early Literacy Skills	13
National Institute for Literacy Categories of Interventions	14
Code Focused Strategies	15
Language Enhancement Interventions	16
Reading Techniques in Preschool Settings	17
Reading Techniques in Home and School Settings	22
Conclusion	27

CHAPTER 3. SURVEY DEVELOPMENT AND RESEARCH METHODS	28
Selection of Participants	32
Survey Administration	33
Pilot Study.....	35
CHAPTER 4. APPLICATION OF BEST PRACTICE DESIGN TO REVISED STUDY	38
Clearly Defining Research Objectives.....	38
Revised study	39
Information Needed to Answer Research Questions	40
Revised study	43
Question and Response Format	49
Revised study	50
Focus Group Discussions.....	52
Revised study	52
Pilot Study.....	53
Selection of Participants	53
Survey Administration	54
Revised study	55
Analysis.....	57
CHAPTER 5. DISCUSSION	60
REFERENCES	63
APPENDIX A: RESULTS AND DISCUSSION FROM ORIGINAL STUDY	66
APPENDIX B: PRESCHOOL LITERACY SURVEY.....	81

APPENDIX C: REVISED PRESCHOOL LITERACY SURVEY	83
APPENDIX D: EMAIL TO SUPERINTENDENT.....	96
APPENDIX E: EMAIL TO PRESCHOOL TEACHER	97

LIST OF TABLES

TABLE	PAGE
1 Phonological Awareness Activities Added to Survey	45
2 Concepts About Print Activities Added to Survey	46
3 Comprehension/Vocabulary Activities Added to Survey	47
4 Alphabet Knowledge and Letter Sounds Activities Added to Survey	48
5 Emergent Writing Activities Added to Survey	49
A1 Area Education Agencies (AEAs) with the Number of Participating Districts and Teachers	67
A2 Frequency of Use of Book Knowledge Activities	69
A3 Frequency of the Use of Print Awareness Activities	70
A4 Frequency of the Use of Phonological Awareness Activities	71
A5 Frequency of Use of Alphabet Knowledge Activities	72
A6 Frequency of Use of Writing Skills Activities	73

CHAPTER 1

INTRODUCTION

Learning to read is one of the most important accomplishments of a person's life and one's ability to read is often necessary for success both in school and throughout one's lifetime (Reschly, 2010). Because of the importance of reading, many national organizations have been created to assist parents and educators as they teach children to read. Two of these organizations, the International Reading Association (IRA) and the National Association for the Education of Young Children (NAEYC) jointly wrote a position statement describing developmentally appropriate practices for preschool-aged children. These national organizations have recognized that the preschool period is a critical time to learn the skills that later develop into reading. Emergent literacy is defined as "a term that denotes the idea that the acquisition of literacy is best conceptualized as a developmental continuum with its origins early in the life of a child, rather than an all-or-none phenomenon that begins when children start school" (Bowman, Donovan, & Burns, 2001, p. 186).

The most important time for children to develop reading skills is from birth to age eight (NAEYC, 1998). It is during this critical period that educators begin to identify children who may have a higher risk for experiencing reading difficulties. Early identification of reading difficulties is important both for schools and children. One goal of educational professionals is to reduce the number of children who are significantly below grade-level peers in reading skills. It has been suggested that early intervention for reading difficulties could be a cost-effective way to reduce the number of children

referred for special education services in schools (Justice, 2006). In addition, children may have more positive school experiences if they are able to be successful academically in school.

A natural place for emergent literacy instruction to occur is in preschool learning centers. A number of different preschool programs are available for parents to choose from, including Head Start and the preschool programs funded by local school districts. Private preschool programs are also an option. Researchers have examined the teaching strategies that can be most effective in the preschool populations.

Preschool programs can assist students in laying the literacy groundwork for the skills the child will need in elementary school. During preschool, children gain literacy, social/emotional, and academic skills (Mashburn, 2008). For some students, the educational services and support they receive in preschool programs can prevent later academic difficulties and special education identification. Students who begin kindergarten without sufficient literacy background knowledge are more likely to be identified for special education services (Whitehurst & Lonigan, 2001).

Children who are immersed in reading activities at an early age continue to have the potential for reading success in the classroom throughout their educational experiences (Wasik, Bond, & Hindman, 2006). The current belief among educators is that it is never too soon to begin literacy instruction, and reading development is especially important during the preschool years. Teachers and other professionals who work in schools are focused on identifying children who show signs of having a learning disability so that the children can receive the additional instruction needed for later

academic success (Skibbe et al., 2008). Through professional development opportunities and further education, teachers learn best practice and research-based instructional methods that best teach emergent literacy skills to preschool-aged children.

The quality of preschool reading programs varies widely and as a result, children enter kindergarten with an extensive array of pre-reading skills. While some students enter kindergarten after excellent preschool experiences, other students have been enrolled in lower quality preschools. Some children, usually from low economic areas or high minority areas, have not been able to attend preschool. Children who have not had an opportunity to attend preschool may be behind their peers – academically, behaviorally, and socially (Iowa Department of Education, 2009). In an effort to give children an equal opportunity to attend preschool, states are funding public preschool programs. Preschool programs not only teach pre-literacy and early math skills, but also can help children develop social and emotional skills (Iowa Department of Education, 2009; Iowa Department of Human Services, 2006). In an effort to increase the number of Iowa children attending quality preschools, former governor Chet Culver signed House File 877 in May 2007 to establish the Statewide Voluntary Preschool Program for 4-Year-Old Children. The curriculum for this program includes 10 areas, one of which is early literacy.

The National Institute for Literacy published a report in 2008 that described the skills that would predict children's later literacy achievement. According to the *Developing Early Literacy* report, the top six areas that had the greatest predictive relationships with later reading ability were alphabet knowledge, phonological

awareness, rapid automatic naming (RAN) of letters or digits, RAN of objects or colors, writing, and phonological memory (National Institute for Literacy, 2008, p. vii).

Additional skills that had a lesser impact on literacy achievement later on were concepts about print, print knowledge, reading readiness, oral language, and visual processing.

Collectively, when these 11 areas are integrated into preschool programming, the students will be learning skills that will prepare them for literacy success for the rest of their educational careers (National Institute for Literacy, 2008).

As states design curriculum for preschool programs, educational professionals must consider the skills that will promote students' reading success in the future. Because of the importance of preschool, it is important for State of Iowa officials to ensure that quality preschool programming is offered. If students do not attend preschool, they may come to kindergarten unprepared and lacking needed foundational skills. Preschool programs can offer children the opportunity to have exposure to print as well as trips to the library, the zoo, and other developmentally appropriate activities.

Examining current preschool instructional practices will assist state officials in improving the quality of preschool programming. After gathering information, the state can plan professional development for preschool teachers in the instructional practices that are not commonly used but important for emergent literacy development. This will give teachers the opportunity to learn and practice research-based strategies appropriate for the preschool age. Along with professional development opportunities, state officials could develop websites as well as pamphlets and booklets that describe and give examples of emergent literacy instructional practices. As a result, the state of Iowa can

offer preschool children excellent early childhood education that lays the foundation for literacy instruction in elementary school. When children enter kindergarten, they will have the readiness skills to be successful learners at the next level.

Purpose of Study

This paper is a follow up to a previous study conducted by the author. The initial study sought to discover which emergent literacy activities were used the most often in preschool programs in Iowa. However, the survey data did not answer this research question (see Appendix A for Results and Discussion sections from the original study). This paper will provide a revised research method to better answer the original research questions. The new method will include a revised survey developed using best practices of survey development. The revised survey will integrate emergent literacy recommendations from the Hawken, Johnston, and McDonnell (2005) study and the recommendations of the National Institute for Literacy (2008) publication.

Research Questions

The researcher's original goal was to answer the following question, "From the given list of emergent literacy activities, which research-based activities do preschool teachers report using most often during emergent literacy instruction?" The research questions for the current proposal have been revised to include more specificity. The first revised research question is: What literacy strategies and activities are preschool teachers in the 4-year-old preschool program in Iowa using and do these literacy strategies match best practice? The second revised research question is: Do preschool teachers in the 4-

year-old voluntary preschool program in Iowa use read aloud (dialogic) reading strategies in a way that is consistent with best practice?

This paper will provide the revised research proposal as well as an overview of literature related to best practices of survey development. Chapter 2 will provide a definition of emergent literacy, along with a description of the components that make up emergent literacy instruction. Next, early reading interventions are considered, with the focus on children in preschool. Interventions that can be implemented in both the home and school will be discussed. Following the review of literature, Chapter 3 will describe best practice methods in survey research. Chapter 4 will propose an appropriate follow up study based on the research questions and the best practice guidelines. Chapter 5 will describe the improvements made to the initial survey and will discuss the information that would be learned from the revised survey.

CHAPTER 2

LITERATURE REVIEW

School administrators across the United States are concerned about student achievement as well as improving scores on national tests. Early education is now seen as vital to help ensure that children are given the opportunity to learn literacy and math concepts before the kindergarten age, especially for children who are at greater risk for falling behind peers and expected level of achievement (Schickedanz, 2003). In May 2007, former Iowa governor Chet Culver signed House File 877, which authorized state and federal money to fund state preschool programs for 4-year-old children. Iowa's Statewide Voluntary Preschool Program for 4-Year-Old Children offers all children preschool programming and a chance to begin kindergarten with the literacy skills to be successful learners (Iowa Department of Education, 2009). In spring of 2009, Governor Culver approved the funding for an additional 53 preschool programs beginning in the 2009-2010 school year. With the 113 school districts already receiving funding for preschool programs for 4-year-olds, this enabled nearly 14,000 children to have access to quality preschool programs (Iowa Department of Education, 2009).

As more children are able to attend state-funded preschool programs, policymakers and educational leaders across the state need to consider what emergent literacy activities comprise quality preschool education. The purpose of this paper is to provide an overview of best practice in survey development and to demonstrate these practices through the revision of the initial survey. The revised survey will integrate emergent literacy recommendations from both the Hawken et al. (2005) study and the

recommendations of the National Institute for Literacy (2008) publication. This chapter provides a description of the important skills that are part of emergent literacy development. The chapter also contains a review of current literature on emergent literacy reading interventions including code focused interventions, shared reading interventions and language enhancement interventions. The chapter concludes with descriptions of preschool programs and school and home partnership programs.

Description of Emergent Literacy

Children begin the process of learning how to read long before they begin kindergarten and formalized reading instruction. Marie Clay first used the term emergent literacy in 1966, referring to children's early reading skills before traditional reading instruction occurs (Canadian Language and Literacy Research Network, 2007). The emergent literacy phase describes the child becoming aware of print, becoming aware of letters, sounds, and words, and beginning to write (Canadian Language and Literacy Research Network, 2007). The emergent literacy learning that occurs during the preschool years of development lays the foundation along a continuum of reading skills (Whitehurst & Lonigan, 2001). Early reading skills learned during the emergent literacy period strongly influence subsequent reading skills and academic performance.

Whitehurst and Lonigan (1998) examined children's emergent literacy development. In their description of emergent literacy, seven components were described, including: language, conventions of print, knowledge of letters, linguistic awareness, phoneme-grapheme correspondence, emergent reading, and emergent writing. Hawken et al. (2005) studied the types of emergent literacy activities being used in Head

Start programs. The emergent literacy activities were divided into five categories: book knowledge and appreciation, print awareness, phonological awareness, alphabet knowledge, and early writing. These categories were found in the Head Start Early Outcomes Framework (Hawken et al., 2005).

However, since the Whitehurst and Lonigan (1998) and Hawken et al. (2005) studies were completed, experts have continued to scrutinize, group, and rename the components of emergent literacy. The National Early Literacy Panel (NELP) was formed from the country's leading literacy researchers and experts. In 2008, a report published by the National Institute for Literacy summarized the early literacy skills that most determined later reading success. The six skills that were reported to have medium to large predictive relationships with later reading skills are: alphabet knowledge, phonological awareness, rapid automatic naming of letters and digits, rapid automatic naming of objects and colors, writing, and phonological memory (National Institute for Literacy, 2008). The National Institute for Literacy (2008) report identified five additional skills that have moderate correlations with later reading skills: concepts about print, print knowledge, reading readiness, oral language, and visual processing (National Institute for Literacy, 2008).

The Hawken et al. (2005) study and the National Institute for Literacy (2008) publication included similar components of emergent literacy. Both suggested that alphabet knowledge, phonological awareness, and writing were important skills to learn during the preschool stage. Hawken et al. (2005) also listed print awareness and concepts about print/book knowledge, which were mentioned in the National Institute for Literacy

(2008) publication as additional skills that are important components of emergent literacy instruction. However, according to the National Institute for Literacy (2008) publication, print awareness and concepts about print/book knowledge do not have as strong a relationship with later reading success as the first category of skills. The National Institute for Literacy (2008) publication listed additional skills not included in the Hawken et al. (2005) study such as rapid automatic naming of letters, digits, objects and colors as well as reading readiness, oral language, and visual processing. These skills are constructs that are the combination of several reading components. In the following sections, alphabet knowledge, phonological awareness, rapid automatic naming (RAN), writing, and phonological memory, will be discussed. The discussion will include a description of each skill, as well as examples of activities associated with each skill area.

Emergent Literacy Skill Areas

Alphabet Knowledge

Alphabet knowledge “describes children’s knowledge of individual letter names, including both upper and lowercase forms” (Cabell, McGinty, & Justice, 2008, p. 329). Children begin to understand that the written symbols they see written on a page represent a given sound in a word. Children also learn that the name of the letter is different than the sound the letter makes. Examples of activities that develop alphabet knowledge include reading alphabet books, playing with alphabet puzzles and magnetic letters, practicing letter sounds as books are read aloud, playing games that teach letter/word recognition, and making letter collages (Hawken et al., 2005).

Phonological Awareness

Phonological awareness is defined as “the ability to analyze the sound structure of spoken language” (Schuele, Skibbe, & Rao, 2007, p. 275). During this process, preschool children pay attention to the sounds that make up words. As part of phonological awareness, phonemic awareness refers to individual sounds (Schuele et al., 2007, p. 276). The phonological awareness skills learned early on will shape later decoding experiences with written words. There are several activities that parents and teachers can use to help preschool children learn more about the sounds in words such as learning and reciting nursery rhymes, playing rhythm games practicing sounds in words, identifying initial sounds in words, and blending sounds to make words (Hawken et al., 2005).

Phonological awareness skills can be described according to a continuum of less to more complex skills and children learn these skills in the same order (Schuele et al., 2007). First, children have an awareness of syllable segments, then rhyme, initial sounds, and final sounds. As they continue to develop pre-reading skills, they begin to have an ability to blend sounds, then segment words into phonemes. The final skill along the continuum is the ability to delete or substitute sounds (Schuele et al., 2007).

Phonological awareness skills are learned in overlapping stages and one skill does not have to be mastered before a new one is started. Development of these skills can be affected by the amount and type of literacy experiences, both at home and at preschool. The child’s level of interest in sounds may also be a factor in the development of these skills (Schuele et al., 2007).

Rapid Automatic Naming (RAN)

Rapid automatic naming (RAN) tasks involve the speed of naming or identifying print. The National Institute for Literacy (2008) report indicated two types of RAN: letters or digits and objects or colors. Children taking RAN assessments are asked to name, as quickly as possible, up to 50 letters, numbers, colors, or objects on a page. Research studies have investigated a correlation between RAN ability and reading skills and have found that rapid automatic naming (RAN) tasks are consistently related to reading (Manis, Seidenberg, & Doi, 1999). “Rapid naming involves a variety of processes that overlap with reading, including but not limited to attention, visual recognition, access to phonological codes, and articulation” (Manis et al., 1999, p. 130). RAN is a construct that is part of learning to read, but research studies have not been conducted to determine which activities can be used to develop this skill.

Writing

Writing demonstrates that the child understands that letters printed together have meaning. Writing skills are demonstrated when children use scribbles in an attempt to write and also when children attempt to write their names. Some of the writing activities that can be used in the preschool classroom include tracing letters, writing in journals, using a variety of tools as they write, and practicing write their name (Hawken et al., 2005).

Phonological Memory

In the National Institute for Literacy (2008) report, phonological memory was defined as “the ability to remember spoken information for a short period of time” (p.

vii). Phonological memory refers to how information, in this case auditory and phonological information, is coded and stored in a child's working memory. During the reading process, people need to decode written symbols into verbal information as well as translate text into meaningful sentences (Bishop & League, 2006). Therefore, phonological memory will also be used in the future as students develop reading comprehension skills. RAN is the process by which the information stored in phonological memory is retrieved (Bishop & League, 2006). Phonological memory is using RAN activities such as remembering increasing lists of numbers or longer sentences and/or by asking children to read non-words. Children with strong phonological memory skills are able to devote more cognitive ability to comprehending what is being read and less cognitive ability on decoding.

Additional Early Literacy Skills

In addition to the six variables described in the proceeding sections, the National Institute for Literacy (2008) publication also identified five additional variables that have a moderate effect on reading skills during elementary school. These five variables are: concept about print, print knowledge, reading readiness, oral language, and visual processing. Concept of print is a term that is used to describe a child's understanding of how books can be read. This includes knowledge that books open from left to right and the text goes from left to right on the page. Concept of print also includes the knowledge that letters are segments of words that adults read on each page. The concept of print component links well with other parts of emergent literacy, including phonemic awareness and alphabet knowledge (National Institute for Literacy, 2008).

Print knowledge and reading readiness are concepts that are made up of several components of early literacy variables. Print knowledge combines alphabet knowledge, concepts about print, and early decoding. Reading readiness is a combination of alphabet knowledge, concepts of print, vocabulary, and memory. Other variables that contribute to emergent literacy include oral language and visual processing. Oral language is the “ability to produce and comprehend spoken language” (National Institute for Literacy, 2008, p. viii) and includes vocabulary and grammar. Visual processing is the process of interpreting written symbols on a page. Research has shown that these concepts are important in the development of reading, but additional research should be conducted to further investigate their role in literacy development (National Institute for Literacy, 2008).

National Institute for Literacy Categories of Interventions

Researchers have determined the preliminary skills that are integral for learning how to read and have found children benefit from preschool instruction (National Institute for Literacy, 2008). The next step is to design instruction and activities that will teach the skills to preschool-aged children. Emergent literacy instruction is comprised of a variety of activities, because each activity will reinforce a different type of pre-reading skill. Instruction may include direct teaching as well as opportunities for self-instruction and investigation. Learning can occur in many different types of settings, including both home and school environments (National Institute for Literacy, 2008). Next, an explanation of code focused and language enhancement interventions are described, including activities that can be used to develop skills in these areas.

Code Focused Strategies

Code focused interventions are designed to teach preschool children phonemic awareness skills. According to current research, interventions that build phonemic awareness skills include rhyming and alliteration, as well as segmenting and blending phonemes. Children need active and meaningful participation in interventions that instruct them in the sounds that letters and letter blends make (Pullen & Justice, 2003). Children's development of phoneme awareness goes from the largest unit to the smallest unit, so teachers should first use activities at the word level, then syllable, and finally at the phoneme level (Pullen & Justice, 2003).

Pullen and Justice (2003) provide a number of activities that can be used to develop phonemic awareness skills. For example, rhyming skills can be developed using large group activities and through direct instruction. The teacher can read a story aloud that has rhyming patterns and discuss the rhymes as the book is read. In addition, as a small group or large group activity, the teacher can gather objects or small plastic toys, place them in a bag, have child pick a toy, and think of a couple words that rhyme with this word. For example, if the child picked a car, the child would think of two to three words that rhyme with car. The teacher may also need to teach rhyming skills directly, and discuss what sounding the same means. For example, children may initially believe that sounding the same refers to ending in the same letter sound (both ending with an n).

Pullen and Justice (2003) also describe alliteration activities that can be used in preschool classrooms. Alliteration is when two words have the same beginning, middle, or ending phoneme. An example of an activity that can be used to develop alliteration

skills is reciting tongue twisters that have many words starting with the same sound.

Another activity is to give the children a word and ask them to think of other words that start with the same phoneme. The teacher can also give students plastic toys or show pictures on cards and have them sort the items or pictures by their beginning phoneme.

Some examples of activities for learning to blend and segment phonemes involve tangible items. For example, Pullen and Justice (2003) suggest giving preschool children something they can tap with, including blocks or rhythm sticks. The teacher can start with asking the children to tap using their block or stick for the number of words in a sentence that the teacher reads aloud. Once this skill is mastered, teachers can give the preschool children a multi-syllable word and ask them to tap for the number of syllables in the word. In a similar activity, preschoolers can be given a string with beads. The children can move the beads, one at a time, to count the number of words in a sentence or the number of syllables in a word.

Language-Enhancement Interventions

Interventions targeting building vocabulary are called language enhancement interventions. One way that children can expand vocabulary is through interactive book reading. During interactive book reading, children become active participants as the story is being read aloud. Adults ask children questions as they read the story, eliciting a natural conversation about what is happening in the book and building prediction skills as to what might happen next (Wasik & Bond, 2001). These conversations are critical to the child developing emergent literacy skills.

Dialogic reading is a similar book reading strategy that can be used to develop reading skills in children. Developed during the late 1980s and early 1990s, dialogic reading is intended to advance language development in preschoolers through practice and feedback (Arnold, Lonigan, Whitehurst, & Epstein, 1994). There are seven principles for adults to practice when reading picture books with preschoolers. As the story is being read, the adult asks “what” questions, follows answers with questions, repeats what the child says, helps the child as needed, praises and encourages the child, shadows the child’s interests, and has fun (Arnold et al., 1994).

Reading Techniques in Preschool Settings

The purpose of a study by Wasik et al. (2006) was to instruct preschool teachers about additional activities to develop language and vocabulary at the preschool level. Two Head Start centers, which were located in high poverty neighborhoods, were included in the study. One Head Start center, with 10 teachers, served as the experimental site and the other Head Start Center, with six teachers served as the control site. The study included 207 children with a mean age of 3 years 10 months.

In professional development sessions held each month for 2 hours, teachers in the experimental group were taught methods to increase preschoolers’ vocabulary development during story time. The three parts of the book reading strategy, asking questions, building vocabulary, and making connections, were taught to the participating teachers (Wasik et al., 2006). A method, made up of several components, that the teachers learned was to practice active listening, to respond to the children in a meaningful way, and to teach the children how to practice active listening. As teachers

read stories to children, they were taught how to ask open-ended questions about thematic points in the book and key vocabulary terms. Teachers were able to practice these skills and receive feedback on their abilities to implement these techniques. Teachers were instructed to expand the skills they learned to other subjects taught during the course of the day (Wasik et al., 2006).

The results of this study suggested that the teachers who engaged in the active listening and other intervention methods were able to increase the vocabularies of their students. One conclusion from this study was that teachers can learn how to implement literacy strategies that will most effectively teach vocabulary and other literacy skills to preschool-aged children (Wasik et al., 2006). A second conclusion from the study was that early education at the preschool age can help students from low-income neighborhoods “catch up” in vocabulary development with middle class and upper class peers (Wasik et al., 2006). Third, children will develop language and literacy skills when they have additional opportunities to share their thoughts and questions (Wasik et al., 2006). The research suggested that future reading development may be positively supplemented by early education programs (Wasik et al., 2006).

Wasik and Bond (2001) investigated the effectiveness of interactive book reading in the preschool classroom. The goals of the study were to increase the children’s vocabulary and to provide teachers with effective strategies to optimize story time in their classrooms. The study was conducted at a low-income Title I early learning center and lasted from the middle of October through the end of May. A total of four teachers participated in the study: two teachers were randomly assigned to the experimental group

and the other two teachers were randomly assigned to the control group. All of the teachers involved in the study had both morning and afternoon classes. The study included 121 four-year-old children: the two teachers assigned to the experimental group had a combined total of 61 children enrolled in their classes and the two teachers assigned to the control group had a combined total of 60 children enrolled in their classes.

For the intervention, teachers were trained in interactive book reading techniques and book reading extension activities. Teachers were also given all of the books and materials needed for the activities. One of the researchers spent the first 4 weeks of the study training the teachers in the experimental group interactive book reading strategies. These teachers were also taught methods to effectively question children and encourage the preschoolers to talk and answer questions as they read a story. Each week the teachers focused on a different topic area, for which they had received a theme box with two trade books, concrete objects to reinforce the vocabulary words from the books, and instructions and materials for related activities following story time. The teachers in the control groups did not receive training in interactive book reading strategies and questioning techniques, but otherwise the control and experimental groups had no major differences (Wasik & Bond, 2001).

At the conclusion of the study, the researchers found that the children in the experimental groups had learned more book-related vocabulary words than the children in the control groups. The children in the control group only had access to the books, whereas the children in the experimental groups were given many experiences with the vocabulary (Wasik & Bond, 2001). The researchers also found that the children who

were in the experimental group routinely asked the teacher more questions as a story was being read to them and were more likely to ask when a vocabulary word was unknown to them. The results of the study also indicated that the reading intervention could be effectively implemented in a classroom setting (Wasik & Bond, 2001).

A study conducted by Reese and Cox (1999) compared the effectiveness between different ways that adults can read with preschool children. The three types of reading styles examined were describer style, comprehender style, and performance-oriented style. The describer style is most similar to dialogic reading, and involves the adult describing pictures during the reading. When adults use the comprehender style, they focus on the story meaning. The performance-oriented style has an adult ask questions when the adult is finished reading the story. The purpose of the study was to examine how different types of book reading styles affects children's emergent literacy skills (Reese & Cox, 1999).

Researchers randomly assigned 48 preschoolers with a mean age of 4 years 5 months to one of three reading styles: describer style, comprehender style, and performance-oriented style. The reader visited each preschooler two or three times a week and read two to three books each session. The study maintained consistency and validity by preparing five questions and five comments for the readers to use for each book. Coded stickers in the books indicated when the reader should ask each question or make each statement. The adults reading the stories were given explicit directions as they read the story, including the comments they were to make and the exact times that the comments were to be made (Reese & Cox, 1999).

At the conclusion of the intervention, the preschoolers were post-tested using different forms of the pre-test assessments. The assessments measured receptive vocabulary, print skills, and story comprehension. The children in the describer condition had the greatest gains in vocabulary when compared to children in the performance-oriented condition (Reese & Cox, 1999). The results of this study further indicated that dialogic reading was a useful strategy to use with the preschool population. Using the pre-test vocabulary assessments to approximate children's reading skills, the findings also suggested that the dialogic style was most effective with children with lower level reading skills. Other styles, such as the performance-oriented style, were effective with children with more advanced reading skills (Reese & Cox, 1999).

The findings suggest that teachers can have a direct role in helping students expand language and vocabulary skills. The interventions consisted of the teacher engaging students during the story time experiences. In the studies, teachers practiced active listening and encouraged student participation as the story was read by asking open-ended questions. Adults had productive conversations with children about the book. The results of these studies demonstrate the importance of storybook reading to preschool populations. It is not merely reading to a student that is beneficial, but having the child be actively involved in the story helps build vocabulary skills. These studies demonstrate that children's language skills can be developed when parents encourage children to talk about the book as it is read to them and that parents play an important role of providing feedback to their children's comments and questions (Arnold et al., 1994).

Reading Techniques in Home and School Settings

Reading techniques can be used at home, in addition to during the school day. Parents can also play a key role in helping their children develop literacy skills. One study that evaluated the usefulness of dialogic reading with families was conducted by Fielding-Barnsley and Purdie (2003). Families in the experimental group were given eight picture books that have research support for effectively developing the reading skills in young children. The books chosen to be used in the study contained all of the recommended elements of a well-chosen book for the preschool age group, including phonological awareness, alphabet knowledge, alliteration, and rich vocabulary (Fielding-Barnsley & Purdie, 2003). The parents received instruction in dialogic reading strategies through a video tape with modeling as well as a pamphlet. The parents were instructed to read each book at least five times during the 8 week study. The families in the control group received the intervention following the study. The study showed that dialogic reading had a positive impact on the reading abilities of children and that the effects were long-lasting because children had maintained the reading advantage throughout the school year. The results of this study suggest that reading interventions such as dialogic reading can have advantages for preschool-aged children who may be at risk for later reading difficulties (Fielding-Barnsley & Purdie, 2003).

Studies have also investigated the effectiveness of dialogic reading strategies when implemented in both the school and home setting at the same time. Whitehurst et al. (1994) conducted a study that compared the literacy skills of children who were randomly assigned to one of three groups: dialogic reading at both school and home,

dialogic reading at school only, and a control group who played instead of receiving the dialogic reading condition. The 3-year old-children who participated in this study were from low-income backgrounds and lived in an urban area in New York state. Of the 75 children, approximately half of the children were African American, 25% were Caucasian, and 25% were from Hispanic backgrounds (Whitehurst et al., 1994).

The children receiving dialogic reading strategies at school were placed into groups of no more than five children. The teacher was instructed to read to the children using dialogic strategies for approximately 10 minutes per day per reading group. Training in dialogic reading strategies was delivered to teachers via an instructional video developed by the researchers. Whitehurst et al. (1994) devised a list of books that would be beneficial for the children based on the book's potential to teach new vocabulary words and the quality of illustrations. During the 6 week intervention, the teachers chose six to eight books from this list to use for the dialogic reading sessions. In many of the classrooms, the intervention was conducted with the assistance of a paraeducator, who supervised the children when they were not involved in the target dialogic reading group. The children placed in the control group were receiving no experience in dialogic reading strategies and were given 10 minutes each day to play with peers in small groups.

Children that received dialogic reading instruction at both home and school received the same instruction as children in the condition that received dialogic instruction only at school. However, these children also experienced the dialogic reading strategy at home with a parent implementing the reading strategy. Parents involved in the dialogic reading condition received the same training video as the teachers. They were

given three books to use when engaged in dialogic reading with their child and were able to keep these books after the conclusion of the intervention. These were the same books that were being used by the schools. As part of the dialogic reading criteria, parents were instructed to read to their child on a daily basis (Whitehurst et al., 1994).

The study's results suggested that dialogic reading interventions did increase vocabulary knowledge in low-income preschoolers. The children who received dialogic reading in both school and home environments showed the most improvement. The researchers cautioned that it was difficult to determine if the result was due to the combined efforts of teachers and parents, or related to parent intervention alone. The study did not have a group that received only dialogic reading strategies in the home environment.

Hargrave and Sénéchal (2000) investigated the effectiveness of dialogic reading in day care centers and in home environments. The purpose of this study was to determine if preschool children with poor vocabulary skills increased their vocabulary as a result of having stories read to them (Hargrave & Sénéchal, 2000). The children in the study were aged 3 to 5, with a mean age of 4 years 1 month. An important component of this study was that children in the dialogic reading group were compared with similar students whose teacher or parent read to them without using dialogic reading techniques. Previous studies had not directly compared the effects of regular reading with dialogic reading.

The two day care centers included in the study served children from low-income families. Participants were selected for the treatment or non-treatment group based on

the daycare they attended. The dialogic reading treatment condition occurred at one day-care center, while the other day care served as the control group. Before implementation of the intervention, the teachers who would be using the dialogic reading strategy were given training in dialogic reading techniques and were given time to practice and role-play these strategies.

During the 4-week intervention, both groups of children were read the same books. The books were chosen based on several criteria including: the inclusion of colorful illustrations and new vocabulary words, not excessive in length, and appropriateness to the age group of the children involved. The teachers in both groups were instructed to read each book a total of two times and to read at least 10 minutes each day. Teachers were able to read other books in addition to the one involved in the study.

An at-home component was also included in the study. Twenty-eight of the 36 parents agreed to participate in the at-home intervention. The parents who participated in the home component of the study read to their preschooler at least 10 minutes per day, five times per week. The children in the dialogic reading group at the day-care center received dialogic reading strategies at home. The parents of these students were given training in the dialogic reading methods. The control group and dialogic reading group had access to the same books. The books included in the home intervention were different from the books being read to the child at school. On Mondays, children could choose a book that would be sent home for the parent to read. The books were returned on the following Monday, when another book could be chosen (Hargrave & Sénéchal, 2000).

Before the intervention began, the children's expressive vocabulary was pre-tested using the Expressive One Word Picture Vocabulary Test-Revised (EOWPVT-R; Gardner, 1990). A different form of this assessment was administered at the conclusion of the intervention. The EOWPVT-R pretest scores revealed that the children were significantly below average in expressive vocabulary skills. At the conclusion of the intervention, both groups of children showed improvement in expressive vocabulary skills. However, the children in the dialogic reading intervention group showed more improvement than the control group and on average, showed a four month growth in four weeks (Hargrave & Sénéchal, 2000).

The three preceding studies examined the effects of dialogic reading interventions in both home and school environments. The dialogic reading techniques are easy for parents to put into practice and can successfully be used both in the school and home settings with preschool children. As the Fielding-Barnsley and Purdie (2003) study demonstrated, the effect of the dialogic reading strategy has long-lasting positive effects for preschool-age children. The results of the Whitehurst et al. (1994) study demonstrated that students who received the dialogic reading intervention in both home and school environments showed the most growth in vocabulary. Similarly, the Hargrave and Sénéchal study (2000) showed more expressive vocabulary growth in the treatment group that received dialogic reading strategies in both the school and home environments. These results demonstrate that both the school and home provide important learning experiences as a child learns to read.

Conclusion

Because children are at varying levels of emergent literacy understanding when they are at the preschool age, states offer preschool programs to provide instruction to fill in the missing areas in emergent literacy skill development and ensure that children are ready to enter kindergarten. Iowa offers a voluntary preschool program for 4-year-old children to ensure that all children have access to quality preschool programming. However, to ensure that preschool meets children's needs, it is important to review the programming. Teachers should be using research-based emergent literacy activities. Evaluation of preschool programming will ensure that we are offering children the best education possible to prepare them for the future.

CHAPTER 3

SURVEY DEVELOPMENT AND RESEARCH METHODS

Research is conducted for a variety of reasons. The purpose of descriptive research is to gather information about an occurrence or event. Surveys are one method to gather information about people and their experiences and viewpoints. Surveys encompass a series of questions and allow respondents to share what they know as well as their viewpoints. A great deal of research has been conducted to determine the most reliable and valid methods to use when gathering survey information. Fowler (2009) reviews the results of research in this area and suggests best practice for survey research. The purpose of the current paper is to revise the researcher's initial survey using best practices of survey development. The purpose of the original study was to investigate the frequency of use of these activities in the 4-year-old voluntary preschool programs in Iowa. The revised survey will integrate emergent literacy recommendations from both the Hawken et al. (2005) study and the recommendations of the National Institute for Literacy (2008) publication.

As part of his discussion of best practice for survey research, Fowler (1995) described five challenges when developing a survey. The first challenge is to clearly define research objectives and decide what type of questions and answers are needed. The research objectives will shape how the questions are written and what type of data is gathered. The researcher must keep in mind the type of data and level of measurement that is needed to answer the research questions.

There are four levels of measurement that can be collected: nominal, ordinal, interval, and ratio. If the researcher chooses to ask questions that gather nominal data, the responses will yield descriptive data. For example, the question, “Are you male or female” gathers nominal information. Ordinal data occurs when participants are asked to rate something according to a scale, such as poor, fair, good, excellent. This scale of measurement does not have specific quantifiable differences between categories. Ratio data, however, does have specific quantifiable differences between the values. Ratio data is expressed when each category of information is descriptive for the participant and also has equal intervals between the categories. Examples of ratio data are distance or weight. Interval data does have specific units between each class, but is not often found in survey research. One example of interval data is Fahrenheit temperature. Fowler (2009) reports that the two most commonly used levels of measurement in a survey are nominal and ratio.

The decision of what type of data is needed to answer the research question is an important part of survey development because research questions and the type of data needed to answer the research questions are closely linked and must be considered early on in the survey development process. In addition, an analysis plan, which outlines how the data will be used, ensures that there is a clear focus for the survey and that the resulting data can be analyzed to answer the research questions. When writing the questions that will be answered as a result of distributing the survey, the researcher must consider what type of questions will be used and what level of measurement will be

possible with each type of question. A research question that asks for quantitative analysis cannot be answered with questions that gather nominal data (Fowler, 2009).

A second challenge is creating questions that will be interpreted the same way by all participants. Error is added to the survey if questions could be understood in more than one way. Guidelines for writing survey questions include using simple and clear wording and avoiding double negatives. Participants must understand the terminology used in the question. It can be useful to provide definitions to words or phrases that might be unclear to respondents (Fowler, 2009). When asking the participant to answer how many times an activity or event may have happened, it may be necessary to specify a time period to make the question easier to answer. Specifying a time period also ensures that all participants understand the question in the same way and give the same information as part of their answer (Fowler, 1995).

Third, participants should be asked questions they can answer. Researchers are advised to ask only one question at a time (Fowler, 1995). Therefore, short, one part questions will be easier for participants to answer. If the questionnaire includes multiple choice answers, the researcher should include all possible answers or include an “other” response option. Open answer questions, where the respondent does not have answer options to choose from, are not favored by the participants in a study because they are more difficult to complete. In addition, because there can be a number of different answers, the responses can be difficult to sort and code accurately (Slavin, 2007). Closed answer questions, where acceptable answers are provided for respondents, are recommended for self-administered surveys because they are the easiest for respondents

to complete. However, open answer questions can be used at the end of surveys so respondents can summarize additional information they want to share.

A fourth challenge is writing the question so that the participant can easily pick out his/her answer based on what he/she knows. Survey questions should be written so that the participant can easily follow the survey instructions, read the question, and give his or her answer (Fowler, 1995). The researcher may choose to give a definition of terms, which should be listed before the question. Giving definitions ensures that the participant understands the question and what they are asked (Fowler, 1995).

After the researcher has a rough draft of survey questions, it can be helpful to gain insight and feedback from others, such as professionals in the field or a sample group similar to the participants in the target group. Conducting focus group discussions, the process of gathering ideas from experts, can be a valuable resource before survey questions are written. One key intention of focus group discussions is to learn if the research questions and goals of the study are in accordance with what is relevant to the participant's daily routine and reality. Focus group discussions ensure that the research team understands the current practices in the field and the information that will most likely be useful to participants as a result of the study (Fowler, 1995). The focus group can also help determine if the wording of the questions is clear and able to be answered accurately by the participants. Through discussions, the focus group panel can also help the researcher decide the form of the questions, such as closed answer versus open answer format.

Selection of Participants

After a draft of the survey has been developed with the assistance of focus group discussions, the next important factor to consider is the people who will participate. The participants should represent the population of interest. By distributing a survey to a sample group of people, the researcher attempts to describe the target population. The closer the sample represents the population of interest, the more generalizable the results of the survey will be. Sampling error refers to the amount of difference between the people participating in the survey and the population of interest. Sampling error is unavoidable, but should be minimized as much as possible (Fowler, 2009).

Sampling is the process of selecting participants who will complete the survey. There are different types of sampling methods, such as simple random sampling, cluster sample, and stratified random sampling. When using simple random sampling, all individuals in the population are listed and assigned a number. Then using a computer or a list of random numbers, the researcher selects the participant based on the numbers that are randomly chosen. Simple random sampling is time consuming because a list of all possible participants needs to be made and each individual needs to be assigned a number. Instead, a more convenient sampling procedure is to choose participants through cluster samples. Using this sampling method, groups or classes of individuals are chosen. For example, if a researcher wanted to survey fifth grade students, an entire class of fifth graders may be chosen, instead of selecting fifth grade students from a number of schools across a larger geographic area. However, a disadvantage of cluster sampling is that the group of participants included may not reflect the characteristics of the larger population.

By using a stratified random sample procedure, the researcher's goal is to make sure the sample is similar to the population. Characteristics that may be considered are race, sex, age, education, socioeconomic status, and geographic location (Slavin, 2007). Stratified random sampling is not a useful technique when the participants studied cannot be divided into different groups.

Survey Administration

After the sampling procedure has been chosen, the method of survey administration should be decided. Surveys can be given by interviewers, in person or over the phone, or they can be distributed by mail or electronic methods. When giving a survey in person, it is recommended that interviewers follow a script and read each question and all of the options to each participant. Scripts are important because surveys must be given in a standardized way so that each respondent hears the same information, understands each question the same way, receives the same response options, and has the same opportunity to respond. Interviewers are more likely to give the survey in a standardized manner when they receive well-defined directions. Providing training to the interviewers in advance can improve the likelihood that the survey will be given in the standardized way (Fowler, 1995).

Surveys can also be distributed without the use of interviewers. An interviewer is not needed for self-administered surveys as communication to the participant is only through the written instructions, questions, and responses. Self-administered surveys can be given in paper-pencil format or electronically on the computer. Forms may be

emailed to participants or participants may be given a link to the survey website (Fowler, 2009).

Along with the decision of how to administer the surveys, the researcher should consider how survey administration may affect response rates. Fowler (1995) cited that there is no guideline for an acceptable response rate. Larger, national surveys such as those conducted by the United States Census Bureau often have a response rate of 90%. However, internet and mail surveys have response rates of between 5-20% (Fowler, 2009). Overall, surveys administered over the phone often have higher response rates because interviewers call the phone numbers several times, often at different times of day, to reach the participant. Mail and internet surveys have lower response rates because they are not given with an interviewer, and the response rate is affected by the interest level and motivation of the participant. Sometimes the response rate of mail and internet surveys can create bias, because the participants with the most interest and knowledge in the subject are the most likely to complete and return the survey. Fowler (1995) explains that a higher response rate will give more accurate results, even if fewer participants were included in the study. Therefore, it is better to use a small sample and receive a higher response rate than to use a larger sample and have a smaller response rate.

In summary, the process of designing a survey begins with a research question and considering the type of information that is needed to answer the research question. The researcher decides the population of participants who can best answer the survey questions and develops a measurement tool to gather this information. Questions are

written based on the information needed and the population of participants who will be answering the question. The survey tool will be designed according to the best method of gathering the information to answer the research question. Response rates will also be a factor in determining the best way to distribute the survey and gather the results.

Pilot Study

When the researcher believes that the survey is close to completion, he/she may choose to administer a draft survey. This process is known as piloting or pretesting survey questions. It is useful to conduct a pilot study after focus group discussions. The purpose of the focus group discussions is to brainstorm the topics that should be included in the survey questions, as well as the participants who should complete a survey and the method of data collection. The pilot study is one of the final steps to complete as a run-through of the survey and to fix unclear or confusing questions.

When conducting a pilot study, the researcher will often use a small convenience sample of participants. The number of participants in the pilot study usually ranges from 15 to 35. The common procedure for pre-testing a survey is to give the survey as it was designed and then ask the participant questions about the survey at the end of the written survey questions. During the pilot study, the procedures of taking the survey and collecting the data will be the same as for the actual survey. The difference is that during the pilot study, participants are chosen because of convenience and availability and not due to appropriate sampling procedures (Fowler, 1995). Some advantages of distributing a pilot survey include finding misspellings and awkwardly worded questions and finding how long the survey takes to administer. The participants in the sample group can be

asked to give feedback on questions that they found confusing or had difficulty answering. If the questions are not given with an interviewer, debriefing questions can be included at the end and the participant completes the questions on his/her own (Fowler, 1995).

Fowler (1995) discusses some limitations of distributing a pilot survey. First, if multiple interviewers are used to administer the survey, the tolerance for errors may differ. Some interviewers may record even miniscule errors while other interviewers will record only a few major problems. Second, interviewers may be able to fix problems so that respondents are able to answer a question without realizing it. Some interviewers are more skilled than others at reading questions and eliciting responses.

In addition, because of the small sample size of the pilot study, the researcher has to decide if the problem is with the question or if the sample participants were unique to the question. Also, if 20% of respondents were not able to answer a question, this percentage would be interpreted differently if there were 10 respondents to 100 respondents. Other limitations include the willingness of the sample respondents to share concerns openly and the ability to encourage respondents to discuss the survey questions (Fowler, 1995).

After the pilot study, the researcher reviews the survey results. Based on the feedback from the sample participants, the wording of questions may be clarified or some questions may be removed from the survey. Questions may also be added if additional information is needed. Some questions may be changed from closed to open answer

form. The researcher should look at the results of the survey and ensure that the study's questions will be answered using the current survey form (Fowler, 1995).

CHAPTER 4

APPLICATION OF BEST PRACTICE DESIGN TO REVISED STUDY

This researcher's initial study sought to investigate which emergent literacy activities were used most often in preschool programs in Iowa. The literature review contained extensive information on dialogic reading techniques that can be used in both the home and school settings, but this focus was not reflected in the survey questions. The survey included research-based emergent literacy activities and a scale that asked how often the teacher used each emergent literacy activity. However, when the researcher analyzed the data, it was discovered that the research questions were not answered. The previous versions of Chapter 4 and 5 are found in Appendix E.

One purpose of the revised proposal is to improve the researcher's initial survey using best practices of survey development. Before revising the survey, the research questions were clarified. This chapter will provide an overview of the initial study and a revised research proposal based on the best practice information included in Chapter 3 of this paper.

Clearly Defining Research Objectives

According to Fowler (2009), the first challenge when writing questions for a survey is clearly defining research objectives and deciding what type of questions and answers are needed. During the initial study, the research sought to investigate which emergent literacy activities were used most often in 4-year-old preschool programs in Iowa. Another research objective was to compare the results of the 4-year-old preschool teachers in Iowa to the Head Start Teachers surveyed in the Hawken et al. (2005) study.

Revised Study

Fowler recommends writing a summary paragraph about what the survey will accomplish and a statement of purpose for the study. The summary paragraph of the purpose of the revised proposal was developed based on the review of the literature and feedback from faculty. The following is the approval Problem of Interest Statement.

National organizations such as the International Reading Association (IRA) and the National Association for the Education of Young Children (NAEYC) have recognized that the preschool period is a critical time to learn the skills that later develop into reading. The most important time for children to develop reading skills is from birth to age eight (NAEYC, 1998). For some students, the educational services and support they receive in preschool programs can prevent later academic difficulties and special education identification. Early identification of reading difficulties is important both for schools and children. It has been suggested that early identification for reading difficulties could be a cost-effective way to reduce the number of children referred for special education services in schools (Justice, 2006). Students who begin kindergarten without sufficient literacy background knowledge are more likely to be identified for special education services (Whitehurst & Lonigan, 2001). In addition, children may have more positive school experiences if they are able to be successful academically in school. Researchers have examined the teaching strategies that can be most effective in the preschool populations. Because state-funded preschools are more common and school district budgets continue to be a concern, it is important for the efficacy of preschool programming to be examined.

As the researcher prepared to develop a new research proposal and survey, the summary of the purpose of the study guided the process. During this process, the researcher reviewed the research as well as the initial study results. The first revised research question is: What literacy strategies and activities are preschool teachers in the 4-year-old voluntary preschool program in Iowa using and do these literacy strategies match best practice? The second revised research question is: Do preschool teachers in

the 4-year-old voluntary preschool program in Iowa use read aloud (dialogic) reading strategies in a way that is consistent with best practice?

Information Needed to Answer Research Questions

The four types of data that can be collected are: nominal, ordinal, interval, and ratio. According to Fowler (2009), the two most commonly used levels of measurement in a survey are nominal and ratio. Nominal data is gathered when the questions ask for descriptive information. When participants are asked to rate an experience on a scale that does not use specific differences between categories, ordinal data is being gathered. In comparison, ratio data is more advanced in that there are quantifiable and equal differences between each value in the scale. Similarly, interval data also contains specific units between each value, but this is not often used in surveys.

Research questions and the type of data needed to answer the research questions should be considered in the early stages of the survey development process. An important part of survey development is deciding what type of data is needed to answer the research question. The researcher should also write an analysis plan, which outlines how the data will be used and how the resulting data will be analyzed to answer the research questions. This process ensures that the researcher will have data that is in the correct format to address and answer the research questions.

When designing a survey, it is common to examine survey questions used in similar studies and use the same questions as they apply. Using the same survey questions in follow-up studies will gather comparable data and will generalize findings in the field (Fowler, 2009). For the initial study, some of the survey questions from the

Hawken et al. (2005) study were included. Because the researcher did not use all of the questions when the survey was replicated, it was difficult to compare the results of the two studies. During the revision process, the researcher learned about the best practice techniques to use when creating, distributing, and analyzing a survey.

Hawken et al. (2005) developed a survey to distribute to Head Start teachers across the United States. The researchers sought to learn about the types of emergent literacy activities being used in Head Start classrooms and the frequency that these activities were being used. The activities were divided into five groups: book knowledge and appreciation, print awareness and concepts, phonological awareness, alphabet knowledge, and early writing. The 10-page survey was sent to 500 Head Start teachers across the United States. The teachers were selected to participate according to a stratified, randomly chosen sample of preschool teachers in the Head Start program.

For the initial study, the most commonly chosen activity from each of the five emergent literacy groups from the Hawken et al. (2005) study was chosen to include in the researcher's survey. In addition, the researcher selected one to two other activities from each of the five groups. The selected activities may have been other highly chosen responses from the Head Start survey or activities described in research articles as effective with the preschool population (e.g., teacher points to print while reading stories aloud to children, children practice identifying syllable units, and children playing with magnetic letters). The researcher chose to include the activities that were most frequently endorsed by Head Start teachers because these items would most likely encompass the

strategies that preschool teachers in Iowa would use in their classrooms. A copy of the original survey can be found in Appendix B.

The original survey gathered nominal and ordinal data. Nominal data is used to sort people or events into unordered categories (Fowler, 2009). Ordinal data asks participants to rate conditions, events, or attitudes based on a single dimension (Fowler, 2009). An example of an ordinal scale is asking a participant to rate their feelings toward a condition or idea, using descriptions such as: strongly disagree, disagree, agree, and strongly agree. The Hawken et al. (2005) study used the response options: never, 1-2 times per month, 1-2 times per week, and daily. The researcher used the same response options with the 4-year-old preschool teachers in Iowa so that a comparison between the two studies would be possible.

Using questions that collected nominal and ordinal data, the researcher gathered descriptive data and information about which activities had the highest descriptive response rates, but statistical information could not be gathered. For example, the researcher cannot add, subtract, multiply, or divide the numbers, but calculating mode is possible. This is important because it limits the types of questions that can be answered. The only types of research questions that could be answered would refer to the number of teachers who answered with each response option.

The measurement scale used on the survey did not provide the necessary information to answer the question of which emergent literacy activities were used the most often in 4-year-old preschool settings. The data provided information about the number of teachers that indicated they used specific strategies daily, 1 to 2 times per

week, 1 to 2 times per month or never. However, the results did not provide the information to determine which were used most often because the teachers did not rank the activities from which ones were used most often to least often. From the activities that the teachers answered that they used daily, it would not be possible to rank these top activities in order of most to least used. In addition, the list of activities given may not have encompassed the activities that the teachers use on a daily basis. To answer the research questions, the survey should have included a more exhaustive list of all activities that can be used with the preschool population, as well as a more sensitive rating scale.

Revised Study

The revised study integrates recommended emergent literacy activities from the National Institute for Literacy (2008) publication, National Association for the Education of Young Children (NAEYC), and leading researchers in the field of emergent literacy. The report from the National Institute for Literacy (2008) is the most recent findings of current best practice for emergent literacy instruction and is guiding instructional decisions nationwide. The National Association for the Education of Young Children (NAEYC) is an organization that promotes and accredits high quality early education programs for children from birth to age eight. It was also helpful to further review published materials by leading literacy experts, such as Dr. Ehri for additional recommended activities for the preschool population.

The revised survey questions are based on the main ideas, important concepts, and findings of the dialogic reading studies included in the literature review. The addition of questions on dialogic reading strategies is important because much of the literature

review includes a discussion of the importance and usefulness with the preschool population. Slavin (2007) stated that the literature review includes information on the topics included in the study.

The revised survey includes a comprehensive list of activities that represent all components of emergent literacy and questions that pertain to dialogic reading techniques. It also gives participants more activities to choose from so the researcher can gain a clearer picture of the activities commonly used in the preschool programs across the state. Activities for each category of emergent literacy were divided into teacher-directed activities and child-directed activities. In addition, the activities were written so that all of the wording was in the same parallel form. The wording for the activities was edited to make the survey easier to read for participants. Table 1 through Table 5 list the category and corresponding emergent literacy activities that are added to the survey. The revised survey can be found in Appendix C.

Table 1

Phonological Awareness Activities Added to Survey

Teacher-Directed Activity	Child-Directed Activity
The teacher reads poetry to children, focusing on rhyming words.	Children play rhythm games practicing sounds in words (e.g.: movement with songs, finger plays, and marches).
The teacher uses alliteration games to practice sounds in words. Alliteration is when words start with the same sounds (e.g.: “big bears bounce on beds.”)	Children clap out syllables in words. Children use visuals such as blocks or plastic chips to represent the sounds in words.
The teacher instructs children in small groups, according to the phonological stage they have entered.	Children engage in physical activities, such as hopping, to practice counting the number of phonemes in a word.
The teacher instructs children in large (whole class) groups, regardless of phonological stage.	Children use printed letters to identify and match sounds in words.
The teacher instructs children one or two phoneme awareness skills at a time.	Children practice saying just one part of a given word (e.g.: say first sound of the word “red.”)
The teacher instructs children a combination of three or more phoneme awareness skills at a time.	Children are asked to verbally substitute one phoneme for another (e.g.: for book, instead of /b/ say /l/.)
	Children practice blending sounds together to form words (e.g.: put these sounds together /b/, /a/, /t/.)

Table 2

Concepts About Print Activities Added to Survey

Teacher-Directed Activity	Child-Directed Activity
As a book is read, the teacher instructs where the title of the book is found.	
As a book is read, the teacher models for children that the words on the page tell the story.	
As a book is read, the teacher shows children where to find the beginning and end of the story.	
As a book is read, the teacher shows children that text in books is read from top to bottom.	
As a book is read, the teacher shows children that text in books is read from left to right.	
As a book is read, the teacher models for children how to correctly turn the pages of a book (from left to right).	
As a book is read, the teacher asks students to point to identify letters on the page.	
As a book is read, the teacher asks students to point to identify words on the page.	
As a book is read, the teacher shows children the difference between capital and lowercase letters.	
As a book is read, the teacher shows children different punctuation marks as they appear in the story.	

Table 3

Comprehension/Vocabulary Activities Added to Survey

Teacher-Directed Activity	Child-Directed Activity
The teacher models how to retell the story after a story has been read.	Children predict stories.
The teacher does retelling activities with the children after a story has been read.	Children connect prior experiences to the text.
The teacher encourages children to participate in retelling activities after a story has been read.	Children identify connections across texts (e.g.: books by the same author, books with similar topics).
The teacher has a word wall in the classroom, with vocabulary words the students have been learning.	
The teacher makes conversation and poses thoughtful questions for teachers to answer.	
The teacher models for children how to use story context clues to figure out the meaning of the word.	
The teacher directly instructs new words by giving a definition, examples, or the words, and asks questions that will cause the children to use the word.	

Table 4

Alphabet Knowledge and Letter Sounds Activities Added to Survey

Teacher-Directed Activity	Child-Directed Activity
The teacher hangs letters of the alphabet in the classroom at eye level.	Children learn the letters in their first name.
The teacher has children identify letter sounds during read-aloud time.	Children play games that teach letter/word recognition.
The teacher reads alphabet books aloud to children.	Children read alphabet books to themselves or with a small group or other children.
The teacher introduces new letters as part of a lesson.	Children use letter stamps or sponges.
The teacher uses a word wall with the children's name in the class.	Children make letter collages.
	Children sort pictures by beginning sounds.
	Children sort pictures by ending sounds.
	Children make words using magnetic letters.
	Children make new words from a given word family (e.g.: cat, sat, mat).

Table 5

Emergent Writing Activities Added to Survey

Teacher-Directed Activity	Child-Directed Activity
Teachers write children's stories as the child tells them the story.	Children practice writing their names.
Teacher re-reads the child created text with the child after the dictation.	Children practice tracing letters and words.
The teacher engages children in shared interactive writing opportunities.	Children engage invented spelling.
	Children use templates to help form letters.
	Children write in journals.
	Children write for meaningful purposes.
	Children make their own books.
	Children share their writing with other students.

Question and Response Format

A second challenge to writing a survey, according to Fowler (2009), is creating questions that will be interpreted the same way by all participants. Questions should be written using simple and clear wording, avoiding double negatives or questions that could be understood in more than one way. The researcher may also choose to include a definition for terminology or phrases that may be unclear for participants. In the initial study, the researcher used the same wording for questions from the Hawken et al. (2005) study. It was assumed, that because the Hawken et al. (2005) study was published in a peer-reviewed journal that her wording was able to be understood by teachers. Fowler (2009) describes five challenges that researchers may encounter when drafting surveys.

In addition to the challenges already discussed, two others when constructing surveys are asking participants questions they can answer and writing the questions so that the participants can easily pick out their answers based on what they know. The initial survey asked preschool teachers in Iowa to rate their use of emergent literacy activities. Each activity was listed individually. Hawken et al. (2005) chose to use a closed answer question format to gather information so that the survey results would be easier to evaluate. The participants' answers are easier to compare because they are all answering based on the same scale. In addition, the participants are not required to remember exactly how many times each activity is used, which would make the questions more difficult to answer.

The researcher chose to also use closed answer question format so that the results could be compared to the Hawken et al. (2005) study. The closed answer question format is adequate because it is the most user-friendly format for participants. Asking an open-question format about the frequency that emergent literacy activities are used would be time-intensive for participants. As mentioned earlier, an open-ended question would require participants to recall exactly how many times each activity was used over a given time period. In addition, the replies would not be in the same format or answered based on the same scale, therefore making coding the results difficult and less accurate.

Revised Study

The research questions for the revised study more closely reflect the information that is described in the literature review. The revised research questions are able to be answered using the question format in the survey. Fowler (2009) gives guidance in the

process of designing the questions and response formats in a survey. When designing an extensive survey, closed-answer questions make the survey less cumbersome.

Because the revised survey is lengthy, the questions are in closed-answer format, except for a few questions where an “other, please specify” response is included. On the first page of the survey, when participants are asked to answer demographic information, response options have been edited to be easy to understand and include all possible responses. Unclear questions or responses have been removed from the survey. For example, in the initial survey, when asked how many years the school has had the 4-year-old voluntary preschool program, the response options were written “1-2,” “2-5,” and “5 or more” and likely resulted in the survey participants not knowing which response to select if their answer was 2 or 5. The new survey includes response options of “1-2,” “3-5,” and “6 or more,” which results in survey participants to better know which response fits their answer. The rest of the survey uses a closed answer question format, with Likert-scale responses of never, rarely, sometimes, usually, and always. The closed-answer questions on the revised survey meet Fowler’s (2005) guidelines, as the questions ask one question at a time and include all possible response options.

After the introductory questions that ask basic questions such as the participating teacher’s general location in Iowa, number of years of experience, and educational background, the next part of the revised survey asks questions about teacher read aloud techniques (dialogic reading). The top of the page has a definition of teacher read alouds. Next are nine questions about the preschool teacher’s familiarity and frequency of use of read alouds as well as the frequency of use of specific read aloud strategies.

Focus Group Discussions

The second step in survey development is to use focus group discussions as the survey is developed. An important purpose of the focus group is to receive considerable feedback on the rough draft of the proposed survey. A focus group was not used in the refinement of the initial survey. As a result, issues with the initial survey were not discovered until the survey had been administered and the researcher was in the process of reviewing and analyzing the data.

Revised Study

For this follow up study, it would be advisable to seek the input of professionals who work with the preschool population on a regular basis. These professionals have extensive knowledge of important terminology, research-based activities that should be frequently used with the preschool population, and familiarity with the standards, benchmarks, and curriculum that are used with this population of students. The members of the focus group could also give feedback on whether the questions included on the survey are understandable and able to be answered by the targeted participants.

Professors in the areas of early childhood and literacy at the local university, representatives from the state education department, and early childhood representatives employed by the state area education agencies would be invited to review the emergent literacy activities included in the survey, add emergent literacy activities, and give suggestions to question format and organization. The focus group members could give input on the question format they believe would yield the correct data to answer the research question. These professionals could share questions they would like to have

included on the survey. Their input would strengthen the clarity and general understanding of the questions on the survey. Next, following the focus group discussions, the survey questions can be edited according to the feedback received.

Pilot Study

According to Fowler (2009), the final step before the survey is distributed is to use field testing or distribute a pilot study. Field testing is a trial run of the study procedures and the survey questions. One of the benefits of conducting a pilot study is identifying and correcting unclear or awkward wording used in survey questions. A pilot study was not used in the initial study; however, a pilot study will be used before the revised survey is distributed. This will ensure that the wording on the survey is understood by potential participants. The revised survey would be distributed to a sample group of 20-25 preschool teachers in Iowa. The sample group of preschool teachers would be asked for feedback regarding the readability of survey questions and the appropriateness of content. Do the questions include a majority of the emergent literacy activities used in their classrooms on a regular basis? The sample of teachers would also give feedback as to the length of time it took to take the survey and if the responses on the survey were sufficient to answer the questions.

Selection of Participants

Another important consideration during survey development is who will answer the questions on the survey. The participants should represent the population of interest. By distributing a survey to a sample group of people, the researcher attempts to describe the target population. The closer the sample represents the population of interest, the

more generalizable the results of the survey will be. Sampling is the process of selecting participants who will complete the survey. There are different types of sampling methods, such as simple random sampling, cluster sample, and stratified random sampling. Each of these types of sampling has advantages and disadvantages, which the researcher should consider when choosing a sampling method.

The sample in the revised study will be comprised of all of the preschool teachers in Iowa who are part of the voluntary preschool program for 4-year old students. The researcher chose to include all of the preschool teachers in the sample because while it will include a large number of teachers, it is not so large to be unmanageable. Using all of the population of interest as a sample increases the likelihood that the results will be representative of the population.

Survey Administration

According to Fowler (1995), it is better to use a small sample and receive a higher response rate than to use a larger sample and have a smaller response rate. Researchers typically have higher response rates when surveys are given in person or over the phone because there is an interviewer as well as several attempts to contact participants. Lower response rates are more common with mail and internet surveys because they are more impersonal, it is easier for a potential participant not to take part, and there are fewer reminders to take the survey. A higher response rate is desirable because it will give the most accurate results.

In the original study, the researcher emailed superintendents of school districts with the state-wide 4-year-old preschool program and asked for their permission to email

preschool teachers in their district with the survey (See Appendix D for email from original study). If the superintendents gave permission by responding to the email, the researcher sent the preschool teachers an email describing the study and a link to the electronic survey (See Appendix E). Preschool teachers were asked to complete the survey and assured that the information they gave would be confidential. Responses were gathered, compiled, and analyzed by the researcher.

The participants in this study were preschool teachers in the school districts who receive funding for the 4-year-old voluntary preschool program. A total of 37 out of a possible 112 superintendents (33%) indicated interest in participating; and 37 teachers out of a possible 89 teachers in these districts (42%) completed the survey. A non-response from the superintendent was interpreted as not wanting to participate in the study. Follow-up emails were not sent to the superintendents or teachers to inquire of their interest in participating in the study or to remind them to complete the attached survey.

Revised Study

While the response rate may be considered adequate for an electronic survey, more assertive methods would likely result in a higher response rate. During the circulation of the revised survey, the researcher would send additional emails inquiring about participation in the survey. The researcher may also find it beneficial to call superintendents personally to ask if the teachers may participate in the study. In addition, an incentive may also be a useful technique to raise the response rates. For example,

teachers may be placed in a drawing for a gift certificate to a store or restaurant after completing the survey.

In the initial study, an electronic survey was emailed to preschool teachers after the district superintendent gave permission for the teachers to participate. Similar to the earlier study, during the revised study, the researcher will send an email to each superintendent in Iowa whose school has a 4-year-old voluntary preschool program. The email will contain a description of the study, the purpose and research questions, and a copy of the survey. By returning an electronic permission form or email, the superintendent will give confirmation that his or her preschool teachers can participate in the study. The researcher will then send an email to preschool teachers with a description of the study and an electronic link to the survey. It is possible that the same teachers who participated in the initial study would again participate in the follow up study. It is also possible that additional teachers will participate, as superintendents and teachers have changed in the time that has elapsed from the initial study to the follow up study. Also, superintendents and teachers who ignored the earlier invitation to participate may respond to this request.

During the revised survey, the researcher would contact the district superintendents more than once if a response was not given to the initial invitation to participate. The researcher may ask the superintendent to respond to the email by either answering “agree to participate” or “choose not to participate” in the study. The researcher may also choose to follow up emails with a phone call to the superintendent to receive their response to the invitation to participate in the survey. Similarly, the teachers

will also be sent a reminder email to participate in the study by completing a survey. The researcher may also choose to add an incentive of a random drawing for a gift certificate to one or more of the teachers who complete a survey. These methods would increase the response rate of participants in the revised study. For the revised study, the researcher's goal is to have a response rate of 75%. This response rate would provide a more accurate depiction of the emergent literacy activities that are being used in 4-year-old preschool classrooms.

Analysis

After the surveys have been distributed and returned, the researcher will tabulate the results of the survey. The process of calculating the results of the survey comprises the analysis plan. For the initial survey, the researcher chose to compile the results by hand, and tally the total number of responses for each question. The analysis plan for the revised study would use technology to tabulate the results. The researcher could use a program such as Google Forms, which tabulates the number of responses for each item. The survey responses yield nominal and ordinal data, so this method would be appropriate. Advanced statistical analysis, which would be accomplished with the assistance of a computer program, is not necessary because the data collected is descriptive data. Using the computer program would be beneficial because it ensures that all responses are accounted for when the results are reported. Open-ended questions would be analyzed by recording all of the responses and making notes if the same responses are given by more than one participant. The researcher would summarize all of the responses in a table, with the most common responses at the top of the list. The table

would note the number of participants in parentheses who gave each open-ended response.

The first revised research question asks what literacy strategies and activities preschool teachers in Iowa use and if these strategies match best practice. All of the strategies and activities included in the survey match best practice, so the researcher will be determining which of the literacy activities participants indicate they are using on a regular basis. For each activity, the researcher will count how many participants selected each frequency and a total will be tabulated. The activities will then be ranked by percentage, highest to lowest, of which are used “always.” The researcher will then compile the list of activities, from highest to lowest, of activities that are “usually” used.

The second research question asks if preschool teachers use dialogic reading strategies according to best practice. The researcher will follow a similar procedure to analyze data as described above. The researcher will calculate the percentage of participants that selected each frequency for each question. The dialogic reading strategy described in the question that is endorsed by 50% or more of participants as being used on an always or usually basis will be considered to be used on a regular basis.

After the results of the survey have been tabulated, the researcher will examine the data to determine which activities preschool teachers are using on a regular basis. The researcher will look for trends and patterns to see if activities from one literacy component are used more than other literacy components. For example, are preschool teachers in Iowa using nearly all of the best practice activities from phonological awareness but that few activities are used from emergent writing? The data will give

understanding to which emergent literacy concepts are a primary part of preschool instruction and which activities should be integrated more frequently into a daily routine. It will also be interesting to see if the data suggests if the emergent literacy activities used vary by the class size or teacher to student ratio. The data may help superintendents to advocate for more funding so more adults can staff preschool classrooms.

Because the researcher has followed Fowler's (1995) best practice techniques for survey development, the research questions will be answered by the revised survey. The survey questions have been written with the research questions in mind. There is an alignment between the literature review and the survey questions. Each question included in the survey relates to one of the research questions.

The results of the survey would be shared with school administrators, the state department of education, and training programs at the college level. If preschool teachers report that they do not have knowledge in research-based emergent literacy strategies, changes could be made at the local and state level, as well as in training programs. For example, these groups may decide to offer additional professional development opportunities or colleges may choose to add course offerings to their pre-professional programs. If a common concern is time and material availability, administrators at the local and state level may look at additional funding for materials or adding time to the preschool program. The overall result of this survey would be to increase the use of research-based emergent literacy practices in preschool programs.

CHAPTER 5

DISCUSSION

The purpose of the current study was to revise the researcher's initial survey using best practices of survey development. In addition to survey revisions, the research questions were also changed to match the information discussed in the literature review. The first research question was: What literacy strategies and activities are preschool teachers in the 4-year-old voluntary preschool program in Iowa using and do these literacy strategies match best practice? The second revised research question was: Do preschool teachers in the 4-year-old voluntary preschool program in Iowa use read aloud (dialogic) reading strategies in a way that is consistent with best practice?

During the revision process, the survey was extensively modified. Instead of relying on the activities included in the Hawken et al. (2005) study, the researcher added activities recommended by several organizations that focus on emergent literacy, such as the International Reading Association (IRA) and the National Association for the Education of Young Children (NAEYC). The National Institute for Literacy 2008 report, entitled *Developing Early Literacy*, was also a useful resource for emergent literacy activities. Activities were added in each of the following areas: phonological awareness, concepts about print, comprehension/vocabulary, alphabet knowledge and letter sounds, and emergent writing. These five areas were described in the literature as being important to the field of emergent literacy. The activities added to the survey are listed in Chapter 4, Tables 1-5. The revised survey can also be found in Appendix C.

In the earliest draft of the survey, the activities were listed together in a table, and were not listed in a particular order. The revised survey included activities that were sorted by the emergent literacy category, with a subheading. In addition, the activities were also grouped by activities that were teacher-directed and child-directed.

One of the primary concerns with the earliest draft of the survey was the inconsistency between the research questions and the survey questions and responses. Once the revised research questions were developed, the survey was revised to include the appropriate new content. An evaluation plan was developed to ensure that the new questions would provide the information necessary to answer the new questions.

The research has demonstrated that dialogic and interactive reading techniques are useful for both teachers and parents to use to help preschool-aged children develop emergent literacy skills. Because of the importance of dialogic and interactive reading strategies, a research question about these strategies was developed. The survey now includes a section pertaining to dialogic and interactive reading strategies.

In addition to revisions to the survey, the method of the study was revised as well. The changes were based on the recommendations of Fowler (2009). A focus group will be added, made up of professionals and experts in the field of emergent literacy and preschool programming. A focus group will be beneficial because the members can give feedback on the activities included in the survey.

Another change to the method of the study is that the researcher will be more proactive in including all possible participants in the study. In the original study, the superintendents and preschool teachers were only contacted once about participating in

the study. In the revised study, the researcher will send additional emails inquiring about participation in the survey. The researcher may also find it beneficial to call the superintendents regarding participation in the study. Preschool teachers will be sent an email to remind them to complete the survey if they have not already done so. The researcher will also use an incentive, such as entering participating preschool teacher's names into a drawing for a gift certificate to a popular store or restaurant. These strategies should increase response rates. A higher response rate increases the representativeness of the population examined.

The survey results would give preschool teachers, school administrators, and state officials a detailed portrayal of the emergent literacy activities that teachers are using in the 4-year-old preschool classroom. Preschool teachers, school administrators, and state officials would also know which research-based emergent literacy activities were not being used as frequently. All of the emergent literacy activities listed on the survey are research-based and should be used on a regular basis. Currently the state of Iowa is using the GOLD curriculum that aligns with state standards to evaluate children's progress. It would be beneficial to compare the results of the survey to the GOLD assessment. Administrators at the school district and state level could make changes, such as offering more training and professional development in these areas. Possibly more funding could be found if additional materials are needed or class sizes need to be reduced.

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APPENDIX A

RESULTS AND DISCUSSION FROM ORIGINAL STUDY

The primary purpose of the initial study was to describe the state of Iowa's voluntary four-year-old preschool programs and the teachers who provide instruction in these programs. A secondary purpose was to describe the types of literacy instruction being implemented. The researcher sought to answer two questions as a result of conducting this study. First, what do voluntary four-year-old preschool programs look like across the state of Iowa? Demographic information gathered included the length of the preschool day, number of children in the preschool classroom, and educational and teaching experience of the teacher. The second research question was: what activities do preschool teachers report using most often during emergent literacy instruction? The sample included in this study was preschool teachers in the school districts who receive funding for the four-year-old voluntary preschool program. A total of 37 out of a possible 112 school districts (33%) indicated interest in participating; and 37 teachers out of a possible 89 teachers in these districts (42%) completed the survey.

School Demographic Information

Schools from all 10 Iowa Area Education Agencies (AEAs) participated in the research study. The AEAs whose school districts had the highest number of respondents was Loess Hills Area Education Agency 13 ($n = 9$) and Northwest Area Education Agency ($n = 7$). Together, these two AEAs comprise the western border of the state. The AEAs that had the lowest number of respondents was Area Education Agency 267 ($n = 1$) and Green Valley Area Education Agency ($n = 1$). Loess Hills AEA and Northwest

AEA have large urban areas in addition to rural settings, while AEA 267 and Green Valley AEA have larger rural areas and fewer urban areas. The number of respondents for each AEA may perhaps be related to the size of the school districts that consented to participate in the study. School districts in larger urban areas, with higher number of minority and economically disadvantaged students, have more teachers and therefore higher number of potential respondents for the study.

Table A1

Area Education Agencies (AEAs) with the Number of Participating Districts and Teachers

	Participating districts (n)	Participating teachers (n)
Keystone AEA	4	3
AEA 267	2	1
Prairie Lakes AEA	2	3
Mississippi Bend AEA	3	5
Grant Wood AEA	3	3
Heartland AEA	6	3
Northwest AEA	2	7
Loess Hills AEA	2	9
Green Valley AEA	2	1
Great Prairie AEA	3	2

In addition to identifying the geographic location of their school district, teachers were asked how long their school district has offered a preschool program. Nearly 49% of respondents said more than 5 years. Approximately 32% of teachers responded that their school district had offered preschool for the past 1 to 2 years. The remaining teachers, 19%, answered that their school district has offered preschool programs for 3 to 5 years.

The survey asked teachers to identify the length of their preschool program for 4-year-old students. The responses were nearly evenly divided, with approximately 38% of teachers reporting that preschoolers attended programming for half days, and 38% of teachers reported that students attended preschool the entire day. The other response option, that students attended for both half and full days, was reported by the remaining 24% of teachers.

The final school demographic characteristic was the number of children in each classroom. Fifty-one percent of teachers reported that 11-15 children are enrolled in each preschool classroom. An additional 46% of teachers answered that 16-20 children are present in the four year old classes. No teachers reported having fewer than 10 children, and 3% of teachers reported having more than 20 children in their classroom.

Emergent Literacy Instruction

The second part of the survey asked teachers to identify the amount of time spent each day on common emergent literacy activities. The most common response, 1 to 2 hours, was reported by 43% of preschool teachers. Thirty percent of preschool teachers answered that they provide between 3 and 4 hours of literacy instruction each day. The

response of less than 1 hour per day was selected by 19% of preschool teachers in the study, and the remaining 8% of teachers answered that they provided more than 4 hours of literacy instruction each day. The final part of the survey listed 14 early literacy activities and asked teachers to identify how often each of these was used in their classrooms.

Table A2

Frequency of Use of Book Knowledge Activities

	Daily	1-2 times weekly	1-2 times monthly	Never
The teacher has children practice holding books and turning pages correctly	23 (64%)	8 (22%)	2 (6%)	3 (8%)
The teacher has children retell stories	13 (36%)	13 (36%)	10 (28%)	0 (0%)
The teacher rereads stories to children	18 (50%)	15 (42%)	3 (8%)	0 (0%)

The first three activities listed on the survey were evidence-based strategies used to develop children's book knowledge. Table 2 summarizes the number of teachers who indicated the frequency of using each of these activities. The most common book knowledge activity used by preschool teachers in the study was letting children practice holding books and turning pages correctly.

Table A3

Frequency of Use of Print Awareness Activities

	Daily	1-2 times weekly	1-2 times monthly	Never
The teacher points to print while reading aloud	29 (81%)	7 (19%)	0 (0%)	0 (0%)
The teacher uses a written schedule	32 (94%)	1 (3%)	0 (0%)	1 (3%)
Children use literacy-related props during dramatic play	19 (53%)	9 (25%)	7 (19%)	1 (3%)

Evidence-based activities to build children's print awareness were the next three items listed on the survey and teacher's responses are listed in Table 3. All preschool teachers reported pointing to the words on the page as they read books aloud at least 1 to 2 times weekly, and 81% of teachers reported using this activity on a daily basis. The activity that was the most widely used was using a written schedule. Using a written schedule on a daily basis was reported to be used by 94% of the responding teachers. Only one teacher reported never to use this activity. The third activity, using literacy-related props during dramatic play, was used at least monthly by all but one teacher. The teachers' response to using literacy-related props during dramatic play received the widest range of responses for the print awareness activities.

Table A4

Frequency of Use of Phonological Awareness Activities

	Daily	1-2 times weekly	1-2 times monthly	Never
Children practice identifying initial sounds in words	26 (72%)	6 (16%)	2 (6%)	2 (6%)
The teacher reads nursery rhymes to class	7 (19%)	20 (56%)	9 (25%)	0 (0%)
Children practice identifying syllable units and blending sounds in words	6 (17%)	12 (33%)	8 (22%)	10 (28%)

Table 4 summarizes the frequency of reported use of research-based activities for phonological awareness. Almost 75% of the teachers indicated that they had preschoolers practice identifying initial sounds in words on a daily basis while 6% of teachers never used this activity. The second activity, reading nursery rhymes to the class, was used at least monthly by all of the teacher respondents. However, this activity was used most frequently on a weekly basis, rather than on a daily basis. The activity used the least, as evidenced by the number of teachers who reported using this on a daily basis as well as those that indicated they never used this activity, was having children practice identifying syllable units and blending sounds in words.

Table A5

Frequency of Use of Alphabet Knowledge Activities

	Daily	1-2 times weekly	1-2 times monthly	Never
Children are able to play with alphabet puzzles and magnetic letters	34 (94%)	1 (3%)	1 (3%)	0 (0%)
Children are able to play games to teach letter-word recognition	20 (56%)	9 (25%)	6 (16%)	1 (3%)
The teacher has children practice sounds during read-alouds	15 (42%)	13 (36%)	4 (11%)	4 (11%)

Table 5 lists the responses from preschool teachers on research-based alphabet knowledge activities. The most commonly reported used activity was having children play with alphabet puzzles and magnetic letters. Nearly all of the teachers use this activity on a daily basis and all of the teachers reported using this activity at least monthly. Playing games to teach letter-word recognition was the second most commonly used activity, endorsed by 56% of the teachers. One teacher reported never using this activity. The third activity, having children practice sounds during read-alouds, was used the least often, with four teachers reported never using this activity, and 42% using this activity on a daily basis.

Table A6

Frequency of Use of Writing Skills Activities

	Daily	1-2 times weekly	1-2 times monthly	Never
Children are able to use a variety of writing tools	36 (100%)	0 (0%)	0 (0%)	0 (0%)
Children practice writing names	33 (94%)	2 (6%)	0 (0%)	0 (0%)

Of the research-based activities used to develop each emergent literacy area, the responses were the least divided in the area of writing skills activities. Preschool teachers' responses for the area of writing skills activities are found in Table 6. All of the preschool teacher respondents answered that they have children use a variety of tools on a weekly basis and nearly all of the teachers (94%) answered that they have children practice writing their names on a daily basis. Two remaining teachers answered that they have students practice writing their names one to two times a week, rather than daily.

DISCUSSION FROM INITIAL STUDY

The purpose of the initial study was to investigate emergent literacy instruction in Iowa's voluntary preschool programs for 4-year-old children. The state of Iowa started funding voluntary preschool programs for 4-year-olds in 2007 and a total of 112 school districts were approved for these programs during the 2007-2008 and 2008-2009 school years. As the state of Iowa increasingly offers 4-year-old voluntary preschool programs, it is important to evaluate the types of literacy activities commonly used by preschool teachers. This study collected information on the demographic background of teachers and programs across the state of Iowa. A secondary purpose was to learn more about the types of emergent literacy instruction being provided by these programs.

According to the results of the survey, the length of the preschool day is evenly divided between half and full day enrollment. Twenty-four percent of the teachers reported that students attend their programs for both half and full days. This finding could reflect that the preschool programs seek to be flexible and work to best meet the individual needs of the child. It is also possible that parents are opting for the full day option when available to help with daycare needs.

The teachers who responded to the survey indicated that the most common class size was 11-15 children. This was reported by 51% of the preschool teachers surveyed. The next most reported class size, with 46% of teachers, was 16-20 children. Only one teacher answered that the class size was more than 20 and no teachers surveyed had a class size smaller than 10. This suggests that school districts in Iowa are working to keep class sizes small to best meet the academic, social, and physical needs of the student. A

class size of 10 or fewer might suggest that the school does not have the population to support a preschool population. A class size of greater than 20 would likely indicate to the school that their preschool program is in high demand and more teachers are necessary.

A majority of the teachers, 76%, have attained a bachelor's degree. An additional 19% have their master's degree and the remaining 5% of respondents to the survey are currently in graduate school. A large majority of the teachers have their early childhood credentials, with 34 out of 37 teachers responding that they have earned this credential. Approximately 22% of the respondents in the study were new teachers, with 1 to 2 years of experience. Nearly the same number of respondents (24%) had 2 to 5 years of experience and 6 to 10 years of experience (22%). However, after the 10 year mark, the number of teachers with several years of experience dropped significantly. Five teachers (14%) had 11 to 15 years of experience, and seven teachers (19%) had more than 15 years of experience. This may be because preschool education is relatively new to public education programming. With a higher demand, schools are hiring more preschool teachers and the demand may be apparent starting with new programs at the undergraduate level.

The second research question pertained to emergent literacy instruction and activities being used in the voluntary 4-year-old preschool programs. Emergent literacy activities were divided into one of five categories and teachers indicated how often each activity was used. The five categories were: book knowledge, print awareness, phonological awareness, alphabet knowledge, and emergent writing.

When reporting the use of book knowledge activities, at least one-third of teachers answered that they used each of the three activities at least once per day. These activities have widespread use because they encompass very early emergent literacy skills and are therefore endorsed by preschool teachers (Hawken et al., 2005, p. 239). The most commonly used book knowledge activity was having children practice holding books and turning pages correctly. The activity that is the least commonly used on a daily basis is having children retell stories. The third activity, the teacher rereads stories to children, was reported to be used at least monthly by all teachers in the study. Of the book knowledge activities, having children practice holding books was the only activity to never be used by a few teachers who participated in the study.

Activities that had children practice print awareness skills included the teacher pointing to print while reading aloud, using a written schedule, and including literacy-related props during dramatic play. Pointing to print was the only activity to be used at least 1 to 2 times monthly. Teachers indicated that they use this activity daily or at least a few times each week. The most commonly used print awareness activity was using a written schedule. However, one teacher did not respond whether he/she used this activity on a regular basis. The use of literacy-related props was reported to be used daily by approximately half of the respondents, and 97% of the teachers in the study use literacy-related props at least on a monthly basis. In a similar study, Hawken et al. (2005) found that “the teachers . . . reported using strategies that have been empirically validated, such as using shared book reading, pointing to print while reading aloud, and having children retell stories” (p. 239).

The third category of emergent literacy activities is phonological awareness. The three activities that were on the survey in this category were: children practice identifying initial sounds in words, the teacher reads nursery rhymes to class, and children practice identifying syllable units and blending sounds. The activity that was used the most on a daily basis was having children practice identifying initial sounds in words. The activity that was used the least was having children practice identifying syllable units and blending sounds. Just over twenty-five percent of teachers never use this activity. The results of the Hawken et al. study (2005) were similar; teachers were more likely to use activities that taught rhyming and alliteration, rather than segmenting and blending (p. 239). The Hawken et al. study (2005) suggested that preschool teachers may feel it is more age-appropriate to teach rhyming and that skills in segmenting and blending are more advanced skills.

Alphabet knowledge can be divided into two parts: identification and naming. A child has mastered identification when he/she is able to point to a letter when given a letter name. Naming, a more difficult task, requires the child to give the name of the letter that is pointed to (Christie, 2008, p. 35). Alphabet knowledge activities listed on the survey were playing with alphabet puzzles and magnetic letters, playing games to teach letter-word recognition, and having children practice sounds during read-alouds. Most of the teachers reported that children are able to play with alphabet puzzles and magnetic letters on a daily basis and all teachers reported using this activity at least monthly. The second activity listed, being able to play games, received a greater variety in responses in the frequency of use per month, but only one teacher reported to never use

this activity. The final activity listed, practicing sounds during read-alouds was not used as frequently on a daily basis as on a weekly basis, and the same number of teachers reported using this activity either once or twice a month or not at all.

The final component of emergent literacy skills is early writing. As children gain literacy knowledge, they will begin writing using inventive spelling and writing the word with the sounds that they are able to hear. “Although children’s invented spellings did not comply with correct spellings, the process encouraged them to think actively about letter-sound relations” (National Association for the Education of Young Children, 1998, p. 34). The two activities that could be used with preschool-aged children were listed under writing skills activities. This category had the least amount of variation between the teachers who responded to the survey. All of the teachers responded that they daily give children access to a variety of writing tools. In addition, nearly all of the teachers have children practice writing their names on a daily basis and the remaining teachers have children practice writing their names one to two times per week. The National Association for the Education of Young Children (1998) recommends “print-rich environments that provide opportunities and tools for children to see and use written language for a variety of purposes, with teachers drawing children’s attention to specific letters and words” (p. 38).

Researchers support the use of activities from the five emergent literacy categories equally and on a daily basis. The survey that was distributed to teachers gathered information on the frequency of use of activities from each of these five categories. According to the results of the survey, the categories that teachers are giving

the most classroom time include writing, print awareness, and alphabet knowledge. The two remaining categories, book knowledge and phonological awareness, have activities that are not as widely used on a daily basis by teachers in the study. These are the areas that had more discrepancy with reported use.

Limitations

This study had several important limitations to consider when examining the results. First, this study had a response rate of 42% (37 responses). It is possible that the teachers who responded to the survey are the ones who are using more research-based emergent literacy practices than other teachers. It is difficult to know the emergent literacy activities being used by teachers who did not participate in this study. Because of the relatively small sample size, this is likely not representative of the population of 4-year-old preschool teachers in Iowa.

Second, the survey relied on teachers accurately identifying the emergent literacy activities that are used in their classrooms. The accuracy of the teachers' responses is not guaranteed, as teachers may have wanted to please the researcher, or despite the disclaimer, were worried that their answers would be tied to them and be negatively interpreted by their principals. The study would have been more accurate if it had included an observation component by the researcher, as a means to ensure that teacher self-reports were accurate.

Finally, the survey only included a few emergent literacy activities for each of the areas. Preschool teachers may be using other recommended activities that are not represented in this study. The brief survey is also a limitation, as a longer survey would

have given more details as to the activities that are being used by preschool teachers. To supplement the survey, the researcher could have personally contacted or visited the preschool teachers and discussed in greater detail the emergent literacy activities that are used throughout the program.

Recommendations

Further research is needed in the area of voluntary preschool programs for 4-year-old children. In the future, a more comprehensive study would include more preschool teachers and a more sensitive surveying instrument. In addition to better measure the validity and reliability of the answers, it is suggested that the researcher visit preschool classrooms in the voluntary program. This would add a qualitative component to the study as well as gather more descriptive data about what programs are comprised of in the state of Iowa. It might also be useful to compare the voluntary preschool program to other early childhood education programs, such as Head Start, Even Start, and private nursery school programs.

APPENDIX B

PRESCHOOL LITERACY SURVEY

Please answer the following questions by marking in the circle.

Including this school year, how long has your school had a public preschool program?

- ☐ 1-2 years ☐ 2-5 years ☐ 5 or more years

Children attend your preschool for:

- ☐ Half days ☐ Full days ☐ Some full and part time students

On average, how many children are in each classroom?

- ☐ Less than 10 children
- ☐ 10-15 children
- ☐ 15-20 children
- ☐ More than 20 children

The public preschool program where I teach is located in:

- Keystone AEA 1
- Prairie Lakes AEA 8
- Grant Wood AEA 10
- Northwest AEA
- Green Valley AEA 14
- AEA 267
- Mississippi Bend AEA 9
- Heartland AEA 11
- Loess Hills AEA 13
- Great Prairie AEA

Including this year, how many years have you taught at the preschool level?

- ☐ 1-2 years ☐ 2-5 years ☐ 6-10 years
- ☐ 11-15 years ☐ 15 years or more

What is the highest level of education you have attained?

- ☐ High School ☐ Associate's Degree ☐ Bachelor's Degree
☐ Master's Degree ☐ Other _____

Do you have early childhood credentials?

- ☐ Yes ☐ No

On average, how much time each day is devoted to literacy instruction and activities in your classroom?

- ☐ Less than 1 hour
 ☐ 1-2 hours
☐ 2-3 hours
 ☐ 4 or more hours

Please check under the heading that designates approximately how often you use the following activities during literacy instruction in your classroom.

	Daily	1-2 times weekly	1-2 times monthly	Never
The teacher has children practice holding books and turning pages correctly				
The teacher has children retell stories				
The teacher rereads stories to children				
The teacher points to print while reading aloud				
The teacher uses a written schedule				
Children use literacy-related props during dramatic play				
Children practice identifying initial sounds in words				
The teacher reads nursery rhymes to class				
Children practice identifying syllable units and blending sounds in words				
Children are able to play with alphabet puzzles and magnetic letters				
Children are able to play games to teach letter-word recognition				
The teacher has children practice sounds during read-alouds				
Children are able to use a variety of writing tools				
Children practice writing names				

* These tasks were taken from a survey developed by Hawken, Johnston, and McDonnell (2005).

Are there other activities that are part of your literacy instruction not included in the list above?

APPENDIX C

REVISED PRESCHOOL LITERACY SURVEY

Please answer the following questions.

Including this school year, how long has your school had a public preschool program?

- ☐ 1-2 Years
- ☐ 3-5 Years
- ☐ 6 or more Years

Children attend your preschool for:

- ☐ Half Days
- ☐ Full Days
- ☐ Some full and some half day students
- ☐ Other, please specify: _____

What is your child to certified adult ratio?

- ☐ 5:1
- ☐ 8:1
- ☐ 10:1
- ☐ 12:1
- ☐ Other, please specify: _____

The public preschool program where I teach is located in:

- ☐ AEA 267
- ☐ Des Moines Public Schools
- ☐ Great Prairie AEA
- ☐ Grant Wood AEA
- ☐ Green Hills AEA
- ☐ Heartland AEA
- ☐ Keystone AEA
- ☐ Mississippi Bend AEA
- ☐ Northwest AEA
- ☐ Prairie Lakes AEA

Including this year, how many years have you taught at the preschool level?

- ☐ 1-2 Years
- ☐ 3-5 Years
- ☐ 6-10 Years
- ☐ 11-15 Years
- ☐ More than 15 Years

What is the highest level of education you have attained?

- ☐ GED (Passed the General Education Development Test)
- ☐ High School
- ☐ Child Development Associate (CDA) Credential
- ☐ Associates Degree
- ☐ Bachelor's Degree
- ☐ Master's Degree
- ☐ Other _____

For **HALF DAY** 4-year-old preschool programs, on average, how much time each day is devoted to literacy instruction and activities in your classroom? (Literacy instruction is defined as individual, small group, and large group instruction and activities with the primary purpose of teaching reading skills).

- ☐ Less than 1 hour
- ☐ 1-2 Hours
- ☐ 3-4 Hours

For **FULL DAY** 4-year-old preschool programs, on average, how much time each day is devoted to literacy instruction in your classroom? (Literacy instruction is defined as individual, small group, and large group instruction and activities with the primary purpose of teaching reading skills).

- ☐ Less than 1 hour
- ☐ 1-2 Hours
- ☐ 3-4 Hours
- ☐ More than 4 Hours

Teacher Read-Alouds

In teacher read-alouds, adults read and interact with children before, during, and after reading. Children are active participants as the story is read. The adult asks children questions about what is happening in the pictures, including wh-questions (who, what, where, when, why), and their predictions for what may happen next.

Are you familiar with read-aloud strategies?

- ☐ Yes
- ☐ No

How often do you engage in teacher read-alouds, as described above, in your classroom?

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Usually
- ☐ Always

In what type of setting(s) do you engage in teacher read-alouds?

- ☐ I don't use interactive book reading techniques
- ☐ Large group/whole class
- ☐ Small group (5 students or fewer)
- ☐ Individual student

For the following questions, please indicate how often you engage in each behavior.

As I read books to children, I ask open-ended questions.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Usually
- ☐ Always

As I read books to children, I encourage the children to talk about their own experiences related to the story.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Usually
- ☐ Always

As I read books to children, I ask wh-questions (who, what, where, when, why).

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Usually
- ☐ Always

As I read books to children, I model making predictions about the story.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Usually
- ☐ Always

As I read books to children, I encourage children to make predictions about the story based on the cover and title.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Usually
- ☐ Always

As I read books to children, I encourage them to make predictions throughout the story.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Usually
- ☐ Always

For each of the activities described below, please indicate how often you use each of the activities in your 4-year-old preschool classroom. The activities are divided into 2 parts, teacher-directed and child-directed activities. The answer options are never, rarely, sometimes, usually, and always.

Phonological Awareness

Teacher-Directed Activities

The teacher reads nursery rhymes to children.	Never	Rarely	Sometimes	Usually	Always
The teacher reads poetry to children, focusing on rhyming words.	Never	Rarely	Sometimes	Usually	Always
The teacher uses alliteration games to practice sounds in words. Alliteration is when words start with the same sounds (e.g.: “big bears bounce on beds”).	Never	Rarely	Sometimes	Usually	Always
The teacher instructs children in small groups, according to the phonological stage they have entered.	Never	Rarely	Sometimes	Usually	Always
The teacher instructs children in large (whole class) groups, regardless of phonological stage.	Never	Rarely	Sometimes	Usually	Always
The teacher instructs children one or two phoneme awareness skills at a time.	Never	Rarely	Sometimes	Usually	Always
The teacher instructs children a combination of three or more phoneme awareness skills at a time.	Never	Rarely	Sometimes	Usually	Always

Phonological Awareness

Child-Directed Activities

Children play rhythm games practicing sounds in words (e.g.: movement with songs, finger plays, and marches).	Never	Rarely	Sometimes	Usually	Always
Children clap out syllables in words.	Never	Rarely	Sometimes	Usually	Always
Children use visuals such as blocks or plastic chips to represent the sounds in words.	Never	Rarely	Sometimes	Usually	Always
Children engage in physical activities, such as hopping, to practice counting the number of phonemes in a word.	Never	Rarely	Sometimes	Usually	Always
Children use printed letters to identify and match sounds in words.	Never	Rarely	Sometimes	Usually	Always
Children practice saying just one part of a given word (e.g.: say first sound of the word "red.")	Never	Rarely	Sometimes	Usually	Always
Children are asked to verbally substitute one phoneme for another (e.g.: for book, instead of /b/, say /l/.)	Never	Rarely	Sometimes	Usually	Always
Children practice blending sounds together to form words (e.g.: put these sounds together: /b/, /a/, /t/.)	Never	Rarely	Sometimes	Usually	Always

Concepts about Print

Teacher-Directed Activities

As a book is read, the teacher models for children how to hold a book correctly.	Never	Rarely	Sometimes	Usually	Always
As a book is read, the teacher shows the front cover of the book.	Never	Rarely	Sometimes	Usually	Always
As a book is read, the teacher instructs where the title of a book is found.	Never	Rarely	Sometimes	Usually	Always
As a book is read, the teacher models for children that the words on the page tell the story.	Never	Rarely	Sometimes	Usually	Always
As a book is read, the teacher shows children where to find the beginning and the end of the story.	Never	Rarely	Sometimes	Usually	Always
As a book is read, the teacher shows children that text in books is read from top to bottom.	Never	Rarely	Sometimes	Usually	Always
As a book is read, the teacher shows children that text in books is read from left to right.	Never	Rarely	Sometimes	Usually	Always
As a book is read, the teacher points to print.	Never	Rarely	Sometimes	Usually	Always
As a book is read, the teacher models for children how to correctly turn the pages of a book (from left to right).	Never	Rarely	Sometimes	Usually	Always

As a book is read, the teacher asks students to point to identify letters on the page.	Never	Rarely	Sometimes	Usually	Always
As a book is read, the teacher asks student to point to identify words on the page.	Never	Rarely	Sometimes	Usually	Always
As a book is read, the teacher shows children the difference between capital and lowercase letters.	Never	Rarely	Sometimes	Usually	Always
As a book is read, the teacher shows children different punctuation marks as they appear in a story.	Never	Rarely	Sometimes	Usually	Always
The teacher displays children's writing around the room.	Never	Rarely	Sometimes	Usually	Always

Concepts about Print

Child-Directed Activities

Children use a dramatic play area, which includes print-related props (e.g. books, magazines, recipe cards, and shopping lists).	Never	Rarely	Sometimes	Usually	Always
Children are given time to look at books to practice holding a book, and turning pages from left to right.	Never	Rarely	Sometimes	Usually	Always

Comprehension/Vocabulary Activities

Teacher-Directed Activities

The teacher rereads stories to children.	Never	Rarely	Sometimes	Usually	Always
The teacher models how to retell the story after a story has been read.	Never	Rarely	Sometimes	Usually	Always
The teacher does retelling activities with the children after a story has been read.	Never	Rarely	Sometimes	Usually	Always
The teacher encourages children to participate in retelling activities after a story has been read.	Never	Rarely	Sometimes	Usually	Always
The teacher has a word wall in their classroom, with vocabulary words the students have been learning.	Never	Rarely	Sometimes	Usually	Always
The teacher makes conversation and poses thoughtful questions for children to answer.	Never	Rarely	Sometimes	Usually	Always
The teacher models for children how to use story context clues to figure out the meaning of a word.	Never	Rarely	Sometimes	Usually	Always
The teacher directly instructs new words by giving a definition, examples or the words, and asks questions that will cause the children to use the word.	Never	Rarely	Sometimes	Usually	Always

Comprehension/Vocabulary Activities

Child-Directed Activities

Children predict stories.	Never	Rarely	Sometimes	Usually	Always
Children practice retelling stories.	Never	Rarely	Sometimes	Usually	Always
Children connect prior experiences to the text.	Never	Rarely	Sometimes	Usually	Always
Children identify connections across texts (ex: books by the same author, books with similar topics).	Never	Rarely	Sometimes	Usually	Always

Alphabet Knowledge and Letter Sounds

Teacher-Directed Activities

The teacher hangs letters of the alphabet in the classroom at eye level.	Never	Rarely	Sometimes	Usually	Always
The teacher encourages the children to play with alphabet puzzles, magnetic letters, letter stamps, and/or sponges.	Never	Rarely	Sometimes	Usually	Always
The teacher has children identify letter sounds during read-aloud time.	Never	Rarely	Sometimes	Usually	Always
The teacher reads alphabet books aloud to children.	Never	Rarely	Sometimes	Usually	Always
The teacher introduces new letters as part of a lesson.	Never	Rarely	Sometimes	Usually	Always
The teacher introduces new sounds as part of a lesson.	Never	Rarely	Sometimes	Usually	Always
The teacher uses a word wall with the children's names in the class.	Never	Rarely	Sometimes	Usually	Always

Alphabet Knowledge and Letter Sounds

Child-Directed Activities

Children identify letter sounds during read-aloud time.	Never	Rarely	Sometimes	Usually	Always
Children learn the letters in their first name.	Never	Rarely	Sometimes	Usually	Always
Children play games that teach letter/word recognition.	Never	Rarely	Sometimes	Usually	Always
Children read alphabet books to themselves or with a small group of other children.	Never	Rarely	Sometimes	Usually	Always
Children use letter stamps or sponges.	Never	Rarely	Sometimes	Usually	Always
Children make letter collages.	Never	Rarely	Sometimes	Usually	Always
Children sort pictures by beginning sounds.	Never	Rarely	Sometimes	Usually	Always
Children sort pictures by ending sounds.	Never	Rarely	Sometimes	Usually	Always
Children make words using magnetic letters.	Never	Rarely	Sometimes	Usually	Always
Children make new words from a given word family (ex: cat, sat, mat).	Never	Rarely	Sometimes	Usually	Always

Writing Activities

Teacher-Directed Activities

Teachers write children's stories as the child tells them the story.	Never	Rarely	Sometimes	Usually	Always
Teacher re-reads the child created text with the child after the dictation.	Never	Rarely	Sometimes	Usually	Always
The teacher presents children with opportunities to use a variety of writing tools.	Never	Rarely	Sometimes	Usually	Always
The teacher engages children in shared interactive writing opportunities.	Never	Rarely	Sometimes	Usually	Always

Writing Activities

Child-Directed Activities

Children practice writing their names.	Never	Rarely	Sometimes	Usually	Always
Children practice tracing letters and words.	Never	Rarely	Sometimes	Usually	Always
Children engage invented spelling.	Never	Rarely	Sometimes	Usually	Always
Children use templates to help form letters.	Never	Rarely	Sometimes	Usually	Always
Children write in journals.	Never	Rarely	Sometimes	Usually	Always
Children write for meaningful purposes.	Never	Rarely	Sometimes	Usually	Always
Children make their own books.	Never	Rarely	Sometimes	Usually	Always
Children share their writing with other students.	Never	Rarely	Sometimes	Usually	Always

APPENDIX D

EMAIL TO SUPERINTENDENT

Dear Superintendent:

My name is Anne Berthelsen and I am a school psychology graduate student at the University of Northern Iowa. I am completing a research project in the area of early reading development and would like to learn more about the reading instruction used with the 4 year old voluntary preschool programs in Iowa. My thesis proposal has been reviewed and approved by the University's Institutional Review Board. I would like to invite your preschool teacher(s) to complete a brief survey that should not take longer than 10 minutes to complete. The teacher's answers will be kept confidential and their name and the name of their school are not part of the survey. Your participation in this survey is voluntary and the teachers are free to close the survey and withdraw from the study at any time. There will not be any negative consequences for not participating or withdrawing.

I have attached the survey to this email if you would like to review it. If you have any questions or concerns regarding this research project, you may contact me by replying to this email message. You can also contact my research supervisor, Dr. Kimberly Knesting at (319) 273-3840 or Kimberly.Knesting@uni.edu.

Before I can electronically administer the surveys I need district approval. If I have your permission to send the survey to the preschool teacher(s) in your district, could you please briefly respond to this email? It would also be helpful if you could include the name and/or email address of the 4 year old preschool teacher(s).

Thank you for your time and assistance with this project.

Sincerely,

Anne Berthelsen, MAE
University of Northern Iowa
Cedar Falls, IA 50613
annebert@uni.edu

APPENDIX E

EMAIL TO PRESCHOOL TEACHER

Dear Preschool Teacher:

My name is Anne Berthelsen and I am a school psychology graduate student at the University of Northern Iowa. I am completing a research project in the area of early reading development and would like to learn more about the reading instruction used with the 4 year old preschool programs in the state of Iowa. I would like to invite you to complete a brief survey that should not take longer than 5-10 minutes to complete. Your answers will be kept confidential and your name and the name of your school are not part of the survey. Confidential information obtained during this study will be stored on a secure server. However, given that the surveys can be completed from any computer (e.g., personal, work, school), we are unable to guarantee the security of computer on which you choose to enter your responses as well as the online transmission of the data.

The internet link provided below will take you to the Informed Consent information and survey. Please read the informed consent information on the first page of the survey. If you consent to complete a survey, please click on the "next" button. Your participation in this survey is voluntary and you are free to close the survey and withdraw from the study at any time. You will not have any negative consequences for not participating or withdrawing.

If you have any questions or concerns regarding this research project, you may contact me by replying to this email message. You can also contact my research supervisor, Dr. Kimberly Knesting at (319) 273-3840 or Kimberly.Knesting@uni.edu.

Thank you for your time and consideration.

Sincerely,

Anne Berthelsen, MAE
University of Northern Iowa
Cedar Falls, IA 50613
annebert@uni.edu

Please click on the link:

https://www.surveymonkey.com/s.aspx?sm=6lZhw_2fdltqsPwL3UT_2fhLCQ_3d_3d