

# **The Role of Literacy in School Readiness**

by

Brittney Noble

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Department of Language, Learning and Leadership  
State University of New York at Fredonia  
Fredonia, New York

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Department of Language, Learning, and Leadership

CERTIFICATION OF THESIS/PROJECT CAPSTONE WORK

We, the undersigned, certify that this project entitled The Role of Literacy in School Readiness by Brittney Noble Candidate for the Degree of Master of Science in Education, Literacy Birth-Grade 12, is acceptable in form and content and demonstrates a satisfactory knowledge of the field covered by this project.

  
\_\_\_\_\_  
Dr. Bird, Ph.D  
Master's Capstone Advisor  
EDU 659 Course Instructor  
Department of Language, Learning, & Leadership

May 5, 2016  
Date

  
\_\_\_\_\_  
Dr. Bird, Ph.D  
Department Chair  
Department of Language, Learning, & Leadership

May 19, 2016  
Date

  
\_\_\_\_\_  
Dean Christine Givner, PhD.  
College of Education  
State University of New York at Fredonia

June 15, 2016  
Date

## THE ROLE OF LITERACY IN SCHOOL READINESS

### ABSTRACT

School readiness is a problem for Kindergarten and grade one teachers and for school administrators who may not have a clear understanding of what the term includes or how it is measured. This problem of confusion of concept and measurement of “school readiness” leads a reading specialist to ask the question, what does research indicate to be the role and measurement of school readiness especially as related to literacy development? To address this question, an extensive literature review and synthesis were conducted. Results indicate four findings. First is that there appears to be no universally accepted definition for the term “school readiness.” Second is that school readiness appears to be defined in one of three ways: as a measurement of certain literacy skills (frequently oral language skills, letter recognition, letter sounds, phonological awareness, knowledge of print); as a measurement of certain behavioral skills (generally: emotional coping, problem solving, self-regulation); or as a measurement of a combination of behavioral and literacy skills. The third finding is that only a few researchers define readiness exclusively in terms of literacy skills, many define it exclusively in terms of behavioral skills, and some define it in terms of a combination of literacy and behavioral skills. The fourth finding is that when including literacy skills in the definition, there is no one literacy skill or set of skills that universally determine school readiness, and no one measurement or set of measurements for measuring those skills. These findings will be disseminated through an informational professional development brochure.

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## **Chapter 1: Introduction**

### **Statement of Problem**

Statistics indicate, “at least half of the educational achievement gaps already exist at the kindergarten entry level” (Rhode, 2005, p. 39). The problem related to this topic of educational achievement gaps is that “the ‘supply’ of readiness skills children bring to kindergarten varies widely” (Ackerman & Barnett, 2005, p. 14); thus kindergarten teachers will be presented with students that have a wide range of school readiness as defined and measured by multiple means. This range will require teachers to differentiate their instruction to meet the needs of all students in their classrooms. This range in readiness also means that there is a wide range of understanding and defining of the concept of “school readiness.” As a result, there appears to be confusion and lack of standardization of the term. This research study explores the concept of school readiness and focuses on school readiness measures and scores in order to determine the role of literacy in this concept. This problem of a wide ranging definition of school readiness can be addressed by asking the question, what does research indicate to be the role and measurement of school readiness especially as related to literacy development? The most appropriate way to address this question is to conduct an extensive literature review, synthesize the findings, and disseminate the results to teachers through some form of professional development.

### **Background**

My interest in this topic of school readiness derives from previous work experience and from my student teaching. This past summer, I was given the opportunity to work with children ranging in ages from 3 to 5 years old. These children had not attended kindergarten, but some did attend preschool. While working with these children, I incorporated literacy into our daily schedule. I have always had a passion for reading and writing, and since graduate school I have realized the importance of improving a young child’s literary skills. While working, I noticed that these children had a wide range of skills. In many cases, I observed that the children who had attended preschool had developed more literacy skills than those I know had not attended preschool. I also observed that among children who did not attend preschool, there were children

who performed better than their peers. These observations had me question what is essential for children to become “school ready.” After that summer, I worked in a preschool classroom. During a discussion with the teacher, she told me that the preschool curriculum is planned around the idea of getting children ready to enter kindergarten. From there I decided that I wanted to know what contributed to school readiness, what might be the cause of this wide range of readiness scores, and as a future teacher, I wanted to know what teachers could do to compensate for these ranges.

### **Terminology**

The goal of this research study is to determine a definition of “school readiness”; therefore no one definition can be given here. However, the term that does need to be defined for clarity of this study is “school.” For the purposes of this research, school will be defined as “an organization that provides instruction, as an institution for the teaching of children” (“school,” 2010). With this definition, organization-based instructional settings such as pre-schools can be considered “schools.” However, according to New York State “a minor who becomes six years of age on or before the first of December in any school year shall be required to attend upon full time instruction” (NYSED, 2006, para. 1). Therefore formal schooling in New York State starts at grade one, when the child reaches six years old, and “school” readiness refers being ready to enter grade one in New York State, the “readiness” part is determined at the conclusion of this research.

### **Theoretical Stance**

The theoretical stance for this research involves the theory that acknowledges a difference between literacies that exist within a school setting and literacies that exist in the home setting. This theory is literacy as a social practice (Gee, 1991). According to Gee (1991), literacy is “a socially accepted association among ways of using language, of thinking, and of acting that can be used to identify oneself as a member of a socially meaningful group” (p.3). Gee explains that a “Discourse” (p.3) is a “socially meaningful group” and identifies home

Discourse and school Discourse as separate Discourses. Acknowledging these two types of literacies is foundational to the concept of “school readiness,” which includes basic literacy skills that “will enable the child to be successful *in school* [italics added]” (UNICEF, 2012, p4). This theory supports the idea that if a child’s home Discourse is similar to school Discourse, then learning school literacy will be easier for the child than if the two Discourses are less similar.

### **Rationale**

According to guidelines set in 2006 by the New York State Board of Regents, New York State is “holding teachers and other school professionals accountable for all students’ achievement by setting standards, assessing progress and publicly reporting results” (NYSED, 2006, p.7). As a result, teachers are being held accountable for student progress and must have their students reach grade level proficiency. The larger the range across students’ scores at the school entry level, the harder it will be for teachers to close the gap between readiness scores and grade level proficiency during the first year of school (Rhode, 2005). While school readiness can be “adversely affected by various risk factors” (Ackerman & Barnett, 2005, p. 11), it can also be adversely impacted by confused or misunderstood definitions that teachers or parents have. Therefore this research study will try to determine a more standardized definition and to uncover the role of literacy in school readiness. This study and its results have value to both parents and school teachers, but also to education policy makers.

## Chapter 2: Literature Review

In order to address the research question of how research defines school readiness, a review of literature is a necessity. This literature review began with a search of the major education databases for empirical research studies on school readiness. Using key words of *school readiness, literacy, behavioral, sustained attention, self-regulation, and language*, a total of 16 studies were found that related to this topic of school readiness. These studies are reviewed below and are arranged in five categories. The first category contains articles in which the researchers define school readiness in terms related to literacy skills. The second category has articles with school readiness being defined in terms of behavioral skills. The third group presents a definition of school readiness that combines both behavioral and literacy based measurements but measures only one literacy skill. The fourth group presents a definition of school readiness that also combines both behavioral and literacy based measurements but measures two literacy skills. The fifth group also presents a definition of school readiness that combines both behavioral and literacy based measurements but measures three or more literacy skills.

### Defined in Literacy Terms

This section reviews research studies that examined school readiness from the perspective of readiness being defined in terms that related to a measurement of literacy skills. Cabell, Justice, Piasta, Curenton, Wiggins, Turnbull, and Petscher, (2011) approached school readiness in terms that focus on literacy skills children should have when entering kindergarten in order to be successful in school. However, they examined these skills in terms of the impact of certain teaching strategies by pre-school teachers on the development of these skills. This study “examined the extent to which teacher responsiveness education affected preschoolers’ language and literacy development” (p. 315) and its future impact on the overall skills needed in the school setting. The main research question addressed was “to what extent is there a relationship between teachers’ frequency of use of specific responsiveness strategies and children’s language development over the academic year?” (p 318). The researchers defined teacher responsiveness as “the capacity to be conversationally responsive partners with children” (p. 316). The

participants for this study were 330 children who were three years old and 49 preschool teachers. The researchers chose to implement intervention to a select group of children and looked at another set of preschool classrooms as a control group. The intervention had teachers complete “professional development focused on responsivity” (p. 316) while the teachers of the control group did not receive professional development on responsivity teaching. The preschool children were assessed in the beginning and the end of their preschool year. The assessments selected measured the children’s language and emergent literacy skills. Their language skills were measured using the CELF Preschool-2 and the Peabody Picture Vocabulary Test- III. The CELF Preschool-2 had subtests that were used to measure the children’s “use of morphology, pronouns, tense, and prepositions” (p. 322). It was also used to determine the children’s ability to “comprehend complex sentence structures” (p. 322). The Peabody Vocabulary Test-III had children look at four pictures and a point to the picture that corresponded to the spoken word. The children’s emergent literacy skills were measured using the Preschool Print, Word Awareness test and the Phonological Awareness Literacy Screening for Preschool. After the intervention, all the children were post-assessed. Findings indicated “teachers’ use of responsivity strategies was associated with gains in children’s vocabulary skills” (p. 326) and were also shown to enhance the preschoolers’ “emergent literacy skills in the area of print concept knowledge” (p. 326). According to the researchers, teachers who implemented responsivity strategies in the classroom helped children improve their literacy skills to aid in school readiness. Cabell, Justice, Piasta, Curenton, Wiggins, Turnbull, and Petscher, (2011) imply that “school readiness” is defined in terms of literacy skills that are within the classroom setting.

Baroody and Diamond (2012) imply a definition of school readiness in terms of literacy skills that are “essential” (p 78) for children entering kindergarten. Their study examined “associations among children’s self-reported literacy interest, their parents’ reports of home literacy environment (HLE), and their code-related skills” (p. 78). The question the researchers addressed was “are children’s self-reports of interest in literacy activities and parents’ reports of the home literacy environment associated with children’s code-related emergent literacy skills?” (p. 78). The participants were 81 four and five year olds and their parents. They were assessed in the fall and again in the spring of their preschool year. The researchers focused on assessing family demographics and the home literacy environment by using a questionnaire. The

researchers focused on assessing the children's oral language skills and literacy interest of the child. The children's oral skills were measured using the Peabody Picture Vocabulary Test-Third Edition, the Woodcock-Johnson III test of Achievement, and the FACES QRS Letter Naming assessment. The literacy interests of each child were measured using the Children's Interest measure, "which consists of 18 items that include reading, letters, writing, math, and science" (p. 83). The findings indicated "that children who report higher levels of literacy interest are likely to also know more letters and do better on tasks that require identification of letters and words" (p. 84). However, there was an inconsistency in the parent questionnaires, and therefore home literacy was not taken into consideration. Therefore, this study focused on just the children's literacy interests and how their views could positively or negatively impact their future literacy skills when entering formal schooling. Baroody and Diamond (2012) imply that "school readiness" is determined by what literacy skills are present within the children when entering formal schooling.

Burgess, Hecht, and Lonigan (2002) also imply a definition of school readiness in terms that relate directly to literacy and essential literacy skills needed for formal schooling. Researchers examined what impact the home literacy environment (HLE) had on children during the preschool years and the educational outcomes when the children entered formal schooling. The researchers wanted to determine the relationship between the home literacy environment and later literacy achievement. The participants were 115 children ages four to five years from middle income households. These children participated in a yearlong study and attended four different sessions. During these sessions, multiple assessments were administered that measured the children's oral language skills, phonological skills, and the home literacy environment. These literacy skills were measured using the Test of Psycholinguistic Abilities, the test of Grammatical Understanding, and the Woodcock Reading Master Test-Revised. These assessments allowed the researchers to calculate scores that included the wide range of literacy skills being assessed. The home literacy environment was measured using a questionnaire that was sent to the parents. The questionnaire was comprised of questions that addressed "family demographics, parental leisure reading habits, and storybook reading habits" (p. 415). After the completion of these assessments, data analysis indicated, "the relationship between HLE and the outcomes were robust" (p. 422). These findings showed that "during the developmental period studied the active aspects of the HLE are the most important contributors to growth" (p. 421) in

literacy skills. If the home literacy environment is active and children partake in literacy events, they are more likely to have a significant growth in literacy skills over the preschool year, thereby improving their school readiness skills before entering formal schooling.

Also implying a definition of school readiness in terms of literacy, Fagan and Lee (2013) explored how “mother and father cognitive stimulation mediated the association between adolescent age status of co-residential mothers and fathers and 48-month child school readiness” (p. 692). The participants were 5,950 children and their teenage mothers and fathers from across the United States. The children ranged in age from three to four years. The study followed the children and the parents for nine months. Data were collected using direct observation and testing that was completed by the children’s teachers. Data were collected on both the child and the parents. Data were collected on parents’ “risk factors” (p. 698). The authors define risk factors as “risk factors to encompass conditions that hinder positive parenting behavior and child outcomes” (p. 694). In order to determine school readiness, the researchers had teachers assess student performance while in the preschool setting. Six areas of literacy were assessed: letter recognition, letter sounds, early reading, phonological awareness, knowledge of print conventions, and matching word. The data informed the researchers that “family environment and children’s school readiness outcomes are interrelated” (p. 1533). The literacy skills were assessed using the PreLAS (Duncan, & De Avila, 1998), Peabody Picture Vocabulary Test Third Edition (Dunn & Dunn, 1997), and the Preschool Comprehensive Test of Phonological and Print Processing (Lonigan, Wagner, Torgesen, & Rashotte, 2002). Findings indicated “that the children of adolescent mothers and fathers scored lower on emerging literacy and math than those born to adult parents” (p. 704). These results suggest that children born into a family with teenage parents will struggle to attain the school readiness skills needed when entering the school setting. Fagan and Lee (2013) selected assessments that imply “school readiness” can be defined in terms that relate to literacy and literacy skills.

### **Defined in Behavioral Terms**

This section reviews research studies that examined school readiness from the perspective of being defined in terms related to a measurement of behavior. Although many studies were found that examined school readiness from this perspective, the two reviewed here

are selected because they represent the two major groups of those studies. Webster-Stratton, Reid, and Stoolmiller (2008) imply a definition of school readiness to be behavioral based skills that are essential for children when entering formal schooling. Their study examined the idea that “intervention offered to socio-economically disadvantaged populations” (p 476), specifically focusing on social and emotional aspects, and the “promotion of parent-school involvement” can improve children’s school readiness. The participants for this study were 120 preschool classrooms, and 14 elementary classrooms. Data were collected in the beginning of the school year and then a follow-up assessment was administered at the end of the school year. The intervention implemented consisted of teacher training, and a new curriculum known as The Dina Dinosaur Social Skills and Problem Solving Curriculum. The teacher training consisted of a four day session in which teachers read and discussed the text *How to Promote Social and Emotional Competence in Young Children* by Webster-Stratton (2010). The Dinosaur School Skills and Problem Solving Curriculum were designed to “promote children’s social competence, emotional self-regulation” (p. 476) such as “engagement with classroom activities, persistence, problem solving, and anger control” (p. 476). It was also designed to aid with “school behavior” (p. 476), such as “following teacher directions and cooperation” (p. 476). The assessments selected to assess the impact of the intervention measured “social and emotional competencies, conduct problems, teacher competencies, teacher efforts to involve parents and classroom environment” (p. 477) and were done through observations. Parent involvement was measured using the Teacher-Parent Involvement Questionnaire which asks to teachers to state “which parents participate in school activities, seem comfortable with the teacher and school environment, value education, support the teacher, and assist children with their homework” (p. 477). The children problem solving skills and feelings were tested using the Wally Problem Solving and Feelings Tests. The findings from this study indicate that there were “significant improvements” (p. 484), for children that received the intervention. According to the researchers, “focusing on promoting social and emotional learning and preventing conduct problems in these early years may put children on a trajectory leading to a cycle of lasting improvements in school achievement” (p. 485). Researchers determined that children who receive behavioral intervention at a young age would likely be more prepared for entering formal schooling. The research by Webster-Stratton, Reid, and Stoolmillers’ (2008) implies that school readiness can be defined in terms that relate to essential behaviors that are deemed acceptable within the school setting.

Denham, Bassett, Zinsser, and Wyatt (2014) also imply a definition of school readiness in terms that relate to behavioral skills. Their study examined “social–emotional competencies and their ability to predict later classroom adjustment and academic readiness” (p. 432). The participants for this study were 101 preschoolers that were three to four years old. The children were evaluated throughout their preschool and kindergarten years. Data were collected regarding the children’s social emotional competencies from the beginning and the end of their preschool year. The selected assessments measured “children’s self-regulation, emotion knowledge, and observed their relationship skills and emotion regulation” (p. 432). The children’s self-regulation was measured by using the Preschool Self-Regulation Assessment, which assessed skills such as “balancing and following directions” (p. 435). The children’s emotional knowledge was measured using the Affect Knowledge Test. This test allowed children to demonstrate their understanding of the main emotions: “happy, sad, angry, and afraid” (p. 433). These assessments were conducted throughout the preschool year. Then when entering kindergarten, midway into the school year, teachers observed the children and also filled out questionnaires and completed “readiness reports” (p. 432) on the children. These reports consisted of the data from the Teacher Rating Scale of School Adjustment, and the ECLS-K Academic Rating Scale. The Teacher Rating Scale of School Adjustment was comprised of “29-item measure that teachers complete to rate children’s approaches to learning” (p. 436). This determined the attitudes children had about completing tasks within the classroom setting. The ECLS-K Academic Rating Scale determines the children’s “behavioral and relational adjustment to the classroom” (p. 437). After analysis of the data, findings indicated that “foundational and more applied social–emotional competencies both directly and indirectly contribute to academic readiness” (p. 446). The researchers stated that “social–emotional competencies have unspecified indirect effects, on kindergarten school adjustment and academic readiness” (p. 446); therefore the researchers felt that more research needs to be done in order to determine if these aspects can impact a child’s school readiness. Denham, Bassett, Zinsser, and Wyatt (2014) select assessments that measure behavior skills, therefore they imply a definition of school readiness in terms of what behavior skills are essential for entering formal schooling.

### **Defined in Both Terms With One Literacy Skill Measured**

This section reviews research studies that examined school readiness from the perspective of behavioral skills plus one measurable literary skill. Razza, Martin, and Brooks-Gun (2010) explored “developmental pathways from children’s family environment to school readiness within a low-income sample” (p. 1528). The participants were 4,900 children from 20 cities across the United States. The study followed the children starting from birth until five years of age. The children were also grouped based on family income level and all were considered “poor or near-poor” (p.1528). Data were collected three times: when the child was born, when the child turned 3 years, and when the child turned 5 years old. Data included information on family environment, “sustained attention” (p. 1531), school readiness, and “poverty status” (p. 1531). Home visits were scheduled by observers who interviewed the parents and assessed the home living environment. The family environment focused on “parental behavior and mental health”(p. 1532) and “physical environment” (p.1532). These were assessed using the Homelife Interview and “items were summed so that higher scores indicate higher quality” (p. 1532). The higher the scores for “parenting stress and depression indicate poorer mental health” (p. 1532). Then to determine the child’s school readiness, each child completed the Peabody Picture Vocabulary Test, Third Edition. Behavioral school readiness was measured using the Child Behavior Checklist. For each item on the checklist, a child was rated based on if he or she could perform the behavioral task at hand. Findings indicated that “significant associations were found” (p. 1533) among family environment, low income, and a child’s school readiness. The data informed the researches that “family environment and children’s school readiness outcomes are interrelated” (p. 1533). These results indicate that family environment is a factor that impacts a child’s school readiness score. These researchers also defined school readiness as literacy and behavioral based. Razza, Martin, and Brooks-Gun (2010) selected assessments that measure both behavior and literacy skills; therefore they imply that school readiness can be defined in both behavior and literacy based terms.

Johnson, Martin, and Brooks-Gun (2013) investigated children who scored below their peers on the school readiness test and families that received these subsidies. They imply a definition of school readiness related to literacy and behaviors. The researchers were looking for a relationship between “subsidy-eligible families” (p. 1806) and the school readiness for children

entering kindergarten. These researchers proposed the idea that child-care “subsidies received during the preschool year may be expected to have a positive effect on children’s school readiness upon kindergarten entry” (p. 1806). Approximately 10,700 children participated in the first data collection sample; however as they aged, the number of participants decreased. Data were collected from multiple sources and from the time a child was 9 months old until five years old. The variables measured by data collection were the amount of subsidy a family received, the type of child care that the child received, and the level of school readiness measured. Various assessments of readiness were performed as the child aged. Each assessment time consisted of an interview with the primary care giver and a test to determine the child’s social and cognitive growth. However, when the child entered preschool and then kindergarten, the teacher was also questioned and the child was observed in the preschool and kindergarten settings. School Readiness was measured in two different aspects. The children were assessed based on their overall reading skills and their social-emotional development. Reading was measured using the Item Response theory and social-emotional development was measured using Preschool and Kindergarten Behavior Scales–Second Edition. Analysis of these measures indicated that the research “was lacking sufficient evidence to make a direct correlation” (p. 1821) between subsidies received and school readiness outcomes. The researchers concluded that “more work is needed to understand whether subsidy receipt does have the potential to impact school readiness” (p. 1821). This lack of evidence suggests that family subsidy may not be a factor in school readiness, even when the definition of school readiness includes both behavioral and literacy based concepts. Johnson, Martin, Brooks-Gun (2013) imply a definition of school readiness in that children must have essential literacy and behavior skills when entering formal schooling.

### **Defined in Both Terms With Two Literacy Skills Measured**

This section reviews research studies that examined school readiness from the perspective of behavioral skills plus two measureable literacy skills. Okado, Bierman, and Welsh (2014) focused on the factor of “parenting stress and demoralization, as well as provision of learning activities at home” (p. 1). They focused on the idea of school readiness in terms of classroom engagement, motivation, attention skills, and language and literacy skills. They tested the hypothesis “that parent demoralization and support for learning simultaneously influence

child school readiness” (p. 357). The participants were 117 kindergarten children with measured low literacy and language skills and from a low-income household. The methods to collect this data included a psychological test for the parents and the Parent Reading Belief Inventory. The school readiness skills were measured using multiple assessments and were obtained from the children’s teachers. The children’s teachers used the Academic Rating Scale (ARS) to determine the level of language development in each child. The scale was based on a five point system with zero being “not yet” (p. 360) proficient and four as “proficient” (p. 360) Attention skills were measured using the ADHD Rating Scale which determines if students have “trouble following directions and if they are easily distracted” (p. 360). Classroom engagement was measured by using “eight items describing positive classroom participation” (p. 360). This assessment measured if the student completed the task he or she were given. The last item assessed was motivation and was measured through the use of the Learning Behavioral Scale. This focused on if the child demonstrated the behavior that was acceptable within the school setting. Findings for these assessments indicated that, “parental demoralization is negatively associated with child school readiness, whereas parental support is positively associated with child school readiness” (p. 365). These findings indicated that a negative parental psychological state (demoralized) and positive parental support both have an impact on a child’s school readiness test scores. The researchers also related school readiness to the concepts of literacy and behavior based measurements.

Nix, Bierman, Domitrovick, and Gill (2013) focused on “promoting children’s social emotional skills” (p. 1000) to help improve their “academic and behavioral functioning” (p. 1000) when entering kindergarten. Their focus was to “examine the process of change and to determine the extent to which gains in the proximal language-emergent literacy and social-emotional skills targeted” (p. 1009) within the preschool year, “accounted for improvements in children’s kindergarten outcomes” (p. 1009). The participants were 356 children all about four years old and are enrolled in the Head Start program and were receiving individualized intervention. These children were followed throughout their preschool year and their “transition” (p. 1003) into kindergarten. Data were collected three times: when the children entered preschool, at the end of preschool, at the end of their kindergarten year. In the preschool year, five aspects were measure to help determine what skills the children were demonstrating: vocabulary, emergent literacy skills, emotion understanding, competent social problem solving

and positive social behavior. Vocabulary skills were measured using the Expressive One-Word Picture Vocabulary Test. Emergent literacy skills were measured using the Blending and Elision subscales from the Test of Preschool Early Literacy. The Children Emotion Skills and the Emotion Recognition Questionnaire also assessed emotional understanding. Competent social problem solving was measured using the Challenging Situations Task. The final component assessed during the preschool year was social behavior. This was measured using the Social Competence Scale and the Teacher Observation of Child Adaptation-Revised. All these assessments were administered at the beginning and end of children's preschool year. At the end of their kindergarten year, the children were assessed in only three components: reading achievement, learning engagement, and positive social behavior. Findings indicated that "the gains children made during preschool continued to predict their functioning 1 year later, after they had transitioned" (p. 1009) from preschool to kindergarten. Data allowed researchers to draw the conclusion that, "gains in children's vocabulary and emergent literacy skills" (p. 1012) within the preschool setting, "predicted reading achievement in kindergarten" (p. 1012). Data also indicated "gains in positive social behavior" (p. 1012) within the preschool setting, "predicted positive social behavior in kindergarten" (p. 1012). These researchers came to the conclusion that behavior and literacy based measurements can define school readiness.

Pilkauskas (2014) also defined school readiness in terms that relate to behavior and literacy. The researcher investigated "the associations between 3-generation co-residence in early childhood and school readiness" (p. 2587). It was completed using the "Early Childhood Longitudinal Study—Birth Cohort (ECLS-B)" (p. 2597). The initial participants were 10,700 children and data were collected on the children four times: 9 months old, 2 years old, 4 years old, and at the start of kindergarten. After the first interview with the parents at the four-year-old mark, only 8,950 children remained. Then again the number of children decreased to 6,550 when interviewed at the start of kindergarten. Data were collected using multiple assessments that measure literacy and behavior skills. The literacy skills were assessed using assessment created by the ECLS-B Program that focused on letter recognition and concepts about print. Behavior skills were assessed using the Preschool and Kindergarten Behavior Scales—Second Edition (Merrell, 2003). Findings indicated "no associations between three-generation co-residence during early childhood and school readiness for the full sample of children" (p. 2595).

These results indicate that children who come from a multiple generation household have no significant lack of school readiness skills.

### **Defined in Both Terms With Three or More Literacy Skills Measured**

Welsh, Robert, Nix, Blair, Bierman, and Nelson (2010) focused on school readiness in terms of literacy and behavior. They examined the “associations between growth in domain-general cognitive processes (working memory and attention control) and growth in domain-specific skills (emergent literacy)” (p. 43) within the preschool year, and “their relative contributions to kindergarten” (p. 43). The participants were 164 children from preschool within Pennsylvania and were approximately four and a half years old. About 68 percent of the participants’ households had incomes “below the national poverty level” (p. 45). The data were collected by various measures and involved multiple aspects of school readiness. Literacy skills and reading achievement were measured using a battery of assessments. The researchers used the Print Knowledge, Blending, and Elision scales of the Test of Preschool Early Literacy. Reading achievement was measured using the Woodcock-Johnson III Test of Achievement and the Test of Word Reading Efficiency. The assessments produced scores that were “standardized and averaged into a composite score representing reading achievement at the end of kindergarten” (p. 46). The children’s cognitive ability was measured by various means. The assessments consisted of the Backward Word Span, the Peg Tapping Task, and the Dimensional Change Card Sort. The Backward Word Span had the children “listen to a list of words read aloud and then to repeat the words in reverse order” (p. 46). The Peg Tapping Task measures children’s ability to follow direction and “successfully perform a task” (p. 46). The Dimensional Change Card Sort has the children sort cards based on color and shape. Researchers also measured the children’s language skills using the Expressive One-Word Picture Vocabulary Test. These assessments allowed the researchers to obtain a wide range of data that could be analyzed and synthesized. Findings indicated “concurrent associations between growth in cognitive skills (working memory and attention control) and growth in emergent literacy skills during the prekindergarten year” (p. 48). Welsh, Robert, Nix, Blair, Bierman, and Nelson (2010) used both behavioral and literacy based assessment to measure and implies a definition of school readiness.

Also explicitly defining school readiness in terms of literacy and behavior, Phillips, Gorton, Pinciotti, and Sachdev (2010) explored “visual and performing arts throughout the pre-school curriculum” (p. 111) and its ability to “improve the emergent literacy and school readiness of at-risk young children in community-based preschool settings” (p. 111). The participants were 183 children age four or younger. This study was conducted over a period of 13 months with an implementation of a new curriculum, PASELA. PASELA’s main focus is to “build a set of relationships between learning in the arts and learning in the other skills and subjects of the curriculum” (p. 114). Data were collected on half the children who received the new curriculum and the other half were selected as the control group. Data were collected using a battery of assessments that focused on the behavior and literacy skills needed in order for the child to be ready for school. The literacy skills were assessed using the Get Ready to Read (GRTR; Whitehurst and Lonigan 2003), Peabody Picture Vocabulary Test Third Edition (Dunn & Dunn, 1997), and Test of Early Reading Ability III (TERA; Reid et al. 2001). Behavior skills were assessed using The Early Learning Standards Inventory. Findings indicated that the researchers “obtained small, but tantalizing improvements on literacy- and learning-related and school-readiness skills among high-risk young children in community-based pre- school programs using the PASELA model” (p. 118). These results indicate that this program had an impact on children’s school readiness.

Also explicitly defining school readiness in terms of literacy and behavior, Pears, Fisher, Kim, Bruce, Healey, and Yoerger (2013) conducted research to determine if “children in foster care are at particular risk for academic and social difficulties in school” (p. 771). The participants were 192 children in foster care. The children had to be entering kindergarten within the next year in order to partake in this research study. Data were collected on the children twice: the beginning of the summer before entering kindergarten and at the end of the summer before entering kindergarten. Data were collected using a “battery of standardized tests for children and a structured interview and questionnaires for caregivers” (p. 776). The literacy skills were assessed using the Dynamic Indicators of Basic Early Literacy Skills (DIBELS; Good & Kaminski, 2002), and Concepts About Print test (Clay, 2000). Behavior skills were assessed using the Preschool Penn Interactive Peer Play Scale (McWayne, Sekino, Hampton, & Fantuzzo, 2002) and the Child Behavior Checklist 4–18 (CBCL; Achenbach, 1991). Findings indicated to the researchers “that children in foster care are at significant risk for school difficulties in the

academic and social arenas” (p. 786). These results indicate that children who come from a foster care setting will mostly have difficulties when entering the school setting. The researchers selected assessments that measured a child’s literacy and behavioral skills; therefore they imply a definition of school readiness in terms of behavioral and literacy based skills.

Yet another study that defines school readiness in terms of literacy and behavior is by Pears, Healey, Fisher, Braun, Gill, and Conte (2014), who conducted research to determine if “intervention would be efficacious in improving the literacy, pro-social, and self-regulatory skills of low SES children just prior to entering kindergarten.” (p. 4). The researchers implemented the intervention Kids In Transition to School Program. This program was designed to be “a high-intensity, short-term school readiness intervention (24 child sessions; 8 parent sessions) delivered in the summer before and first 2 months of kindergarten” (p. 2). A pilot study was completed to determine the impact this intervention had on children. The participants were 28 families that agreed to implement intervention. The children had to be entering kindergarten within the next two to three months in order to participate in this research study. Data were collected on the children twice: the beginning of the summer before entering kindergarten and at the end of the summer before entering kindergarten. Data were collected using a battery of assessments. The literacy skills were assessed using the Dynamic Indicators of Basic Early Literacy Skills (DIBELS; Good & Kaminski, 2002), and Concepts About Print test (Clay, 2005, 2013). Behavior skills were assessed using the Intention Attribution Stories (Dodge, Pettit, Bates, & Valente, 1995) and the Head Toes Knees and Shoulders (HTKS) Test (McClelland et al., 2007). Findings indicated that “children who begin school with foundational skills for reading, the skills necessary to make prosocial responses to peers, and the abilities to pay attention” (p. 14) will be more likely “to learn to read earlier, and exhibit appropriate behavior in the classroom” (p. 14). These results indicate that children who receive the intervention in the younger years will show more school readiness than their peers. Pears, Healey, Fisher, Braun, Gill, and Conte (2014) imply a definition of school readiness in terms of both multiple literacy and behavioral skills that are essential to formal schooling.

Ziol-Guest and Mckenna (2014) also defined school readiness in terms that relate to behavior and multiple literacy skills. They conducted research to determine if “the consequences of housing instability during the first 5 years of a child’s life for a host of school readiness outcomes” (p. 103). The participants were 4,898 children taken from the “from the Fragile

Families and Child Wellbeing Study (FFCW), a longitudinal study that examines the conditions and capabilities of new parents and the welfare of their children” (p. 104). Data were collected on the children three times: when they were one, three and five years old. Data were collected using a battery of assessments. The literacy skills were assessed using the Peabody Picture Vocabulary Test–III (PPVT; Dunn & Dunn, 1997) and the Woodcock– Johnson Letter–Word Identification test (WJ; Wood- cock & Johnson, 1990). Behavior skills were assessed using the Child Behavior Checklist/4-18 (CBCL; Achenbach, 1991). Findings indicated “the significant association between housing instability and young children’s school readiness” (p. 110). However, findings specifically indicate, “that housing instability is not negatively associated with language and literacy outcomes, but is with behavior problems among 5-year-old children” (p. 110). These results indicate that children who come from an instable home are more likely to struggle with behavior skills essential to be school ready, than with literacy skills.

### **Summary of the Review**

A search of the major educational databases found 16 research studies related to the question of defining school readiness. These studies were found using keywords of *school readiness, literacy, behavioral, sustained attention, and self-regulation*. The studies have been grouped according to the major sections implied in the research questions. The sections of this review define school readiness in terms related to literacy skills (4 studies), behavioral skills (2 studies), literacy and behavior with one literacy skill being measured (2 studies), literacy and behavior with two literacy skills being measured (3 studies), and literacy and behavior with three or more literacy skills being measured (5 studies). The age of the participants covered in this review range from three to seven years old, with most studies not indicating any minority or diversity among the participants, or specific location within the United States. The studies selected are from 2000 to present.

### **Chapter 3: Methodology**

To answer the research question, what does research indicate to be the role and measurement of school readiness, an extensive review of the literature was conducted. This chapter addresses the data collection process, the data analysis, and the synthesis. The data collection process describes in detail the process behind locating research articles. The data analysis discusses the connections that exist between the articles and determine findings. The synthesis summarizes the key findings from the data analysis.

#### **Data Collection**

Data for this research study consisted of 16 articles found as a result of an exhaustive search of leading educational databases. All articles were peer-reviewed. Articles were organized into five categories to determine the role of literacy in school readiness; the studies define school readiness in terms related to literacy skills (4 studies), behavioral skills (2 studies), literacy and behavior with one literacy skill being measured (2 studies), literacy and behavior with two literacy skills being measured (3 studies), and literacy and behavior with three or more literacy skills being measured (5 studies). These categories became the codes and themes for the data analysis, which is explained in the next section.

#### **Data Analysis**

The first category contains four studies that imply school readiness can be defined exclusively in terms of literacy based skills. Analysis of those articles shows a wide range assessments used to measure the literacy skills believed to be part of school readiness. Three studies use the Peabody Picture Vocabulary Test-III (Cabell, et. al,2011; Baroody & Diamond, 2010; Fagan & Lee, 2013). Other assessments include Behavior Based Definition of School Readiness and CELF Preschool=2 (Cabell et al., 2011), Woodcock-Johnson III Test of Achievement and FACES QRS Letter Naming (Baroody & Diamond, 2010), Test of Grammatically Understanding, Test of Psycholinguistic Abilities, Woodcock Reading Master Test-Revised (Burgess, Hecht, & Lonigan, 2002), and PreLas and Preschool Comprehensive test

of Phonological and Print (Fagan & Lee, 2013). Further analysis shows that the essential literacy skills identified as being needed by children in order for them to be “ready” for success within the formal school setting are oral language skills (Cabell, et al., 2011; Baroody & Diamond 2010; Burgess, Hecht, & Lonigan 2002.), phonological skills (Burgess, Hecht, & Lonigan 2002), and the four skills of letter recognition, letter sounds, phonological awareness, and knowledge of print (Fagan & Lee, 2013). Figure 1 presents this information in chart form.

Figure 1: Literacy Skills Measured for School Readiness

Skills Measured	Assessments For Measuring	Researchers
Oral Language Skills	Behavior Based Definition of School Readiness CELF Preschool-2 Peabody Picture Vocabulary Test-III	Cabell, Justice, Piasta, Curenton, Wiggins, Turnbull, & Petscher (2011)
Oral Language Skills	Peabody Picture Vocabulary Test III Woodcock-Johnson III Test of Achievement FACES QRS Letter Naming	Baroody & Diamond (2010)
Oral Language Skills Phonological Skills	Test of Grammatically Understanding Test of Psycholinguistic Abilities Woodcock Reading Master Test-Revised	Burgess, Hecht, & Lonigan (2002)
Letter Recognition Letter Sounds Phonological Awareness Knowledge of Print	PreLas Peabody Picture Vocabulary Test III Preschool Comprehensive Test of Phonological and Print	Fagan & Lee (2013)

A close examination of these findings reveals that there appears to be no universal measurement used exclusively for measuring the literacy skills thought to indicate school readiness. Although the Peabody Picture Vocabulary Test III was used in three studies, it was not used universally by all researchers. Overall, analysis of this category indicates that when school readiness is defined exclusively in terms that relate to literacy skills, those skills have been identified as oral language skills, letter recognition, letter sounds, phonological awareness, and knowledge of print. However there appears to be no universally accepted or used measurement of those literacy skills.

The second category contains the two selected studies that appear to be representative of the types of behavior associated with school readiness. These behavioral based skills are emotional coping, problem solving, and self-regulation. The assessments used to measure these skills are the Wally Problem Solving and Feelings Test, the Preschool Self-Regulation

Assessment Affect Knowledge Test, the Teacher Rating Scale of School Adjustment, and the ECLS-K Academic Rating Scale. Figure 2 presents this information in chart form.

Figure 2: Representative Behavioral Skills Measured for School Readiness

Skills Measured	Assessments For Measuring	Researchers
Problem Solving Skills Emotional Coping	Wally Problem Solving and Feelings Test	Webster-Stratton, Reid, & Stoolmiller (2008)
Self-Regulation Emotional Coping	Preschool Self-Regulation Assessment Affect Knowledge Test Teacher Rating Scale of School Adjustment ECLS-K Academic Rating Scale	Denham, Basset, Zinsser, & Wyatt (2014)

An examination of these analysis findings reveals that the three most common behavioral skills appear to be emotional coping, problem solving, and self-regulation. Like with the literacy skills, there appears to be no universal measurement used exclusively for measuring the behavioral skills thought to indicate school readiness. Overall, analysis of this category indicates that when school readiness is defined exclusively in terms that relate to behavior, those skills have been grouped in the major areas of emotional coping, problem solving, and self-regulation. However, there appears to be no universally accepted or used measurement of those behavioral skills.

Categories three, four, and five from the literature review contain studies that appear to define school readiness as a combination of behavioral skills and two or more literacy skills. Three studies use the Peabody Picture Vocabulary Test-III (Razz, et. al, 2010; Phillips, et. al, 2010; Ziol-Guest & Mckenna, 2014). Other assessments include Preschool and Kindergarten Behavioral Scales (Pilkauskas, 2014; Ziol-Guest & Mckenna, 2014), Woodcock-Johnson III Test of Achievement (Welsh, et. al, 2010; Ziol-Guest & Mckenna, 2014), and DIBELS Concept About Print (Pears, et. al, 2014; Ziol-Guest & Mckenna, 2014). Further analysis shows that the essential literacy skills identified as being needed by children in order for them to be “ready” for success within the formal school setting are vocabulary (Welsh, et al., 2010; Phillips, et. al, 2010; Pears, et. al, 2013; Pears, et. al, 2014; Ziol-Guest & Mckenna, 2014), emergent or early literacy skills (Okando, Bierman, & Welsh, 2014; Nix, et. al, 2013; Welsh, et. al, 2010; Phillips, et. al, 2010; Pears, et. al, 2013; Ziol-Guest & Mckenna, 2014), concepts about print or knowledge of print (Welsh, et. al, 2010; Pilkauskas, 2014; Pears, et. al, 2013; Pears, et. al, 2014), and fluency (Welsh, et. al, 2010; Phillips, et. al, 2010; Pears, et. al, 2013; Pears, et. al, 2014).

Figure 3 presents this information in chart form.

Figure 3: Behavioral and Literacy Skills Measured for School Readiness

<b>Skills Measured</b>	<b>Assessments For Measuring</b>	<b>Researchers</b>
<b>Behavior:</b> Sustained Attention <b>Literacy:</b> Vocabulary	<b>B:</b> Child Behavior Checklist <b>L:</b> Peabody Picture Vocabulary Test III	Razz, Martin, & Brooks-Gun (2010)
<b>Behavior:</b> Social-Emotional Develop. <b>Literacy:</b> Basic Reading Skills	<b>B:</b> Kindergarten Behavior Scales (2 <sup>nd</sup> ed) <b>L:</b> Item Response Theory	Johnson, Martin, & Brooks-Gunn (2013)
<b>Behavior:</b> Classroom Engagement Attention Skills <b>Literacy:</b> Oral Language Emergent Literacy	<b>B:</b> ADHD Rating Scale Learning Behavior Scale <b>L:</b> Academic Reading Scale	Okado, Bierman, & Welsh (2014)
<b>Behavior:</b> Social-Emotional Skills <b>Literacy:</b> Emergent Literacy Skills Oral Language	<b>B:</b> Children Emotional Skills Test Emotion Recognition Questionnaire Challenging Situations Task Social Competence Scale <b>L:</b> Expressive One-Word Picture Vocabulary Test Test of Preschool Early Literacy	Nix, Bierman, Domitovick, & Gill (2013)
<b>Behavior:</b> Attention Skills <b>Literacy:</b> Letter Recognition Concepts About Print	<b>B:</b> Preschool and Kindergarten Behavior Scales <b>L:</b> Homemade literacy assessment	Pilkauskas (2014)
<b>Behavior:</b> Working Memory Attention Skills <b>Literacy:</b> Emergent Literacy Skills Print Knowledge Blending, Elision Fluency, Vocabulary	<b>B:</b> Peg Tapping Task Dimensional Change Card Sort <b>L:</b> Expressive One-Word Picture Vocabulary Test of Preschool Early Literacy Woodcock-Johnson III Test of Achievement Test of Word Reading Efficiency Backward Word Span Test	Welsh, Robert, Nix, Blair, Bierman, & Nelson (2010)
<b>Behavior:</b> Early Learning Skills <b>Literacy:</b> Emergent Literacy Skills Vocabulary Fluency	<b>B:</b> Early Learning Standards Inventory <b>L:</b> Test of Early Reading Ability III Get Ready to Read Test Peabody Picture Vocabulary Test III	Phillips, Gorton, Pinciotti, & Sachdev (2010)
<b>Behavior:</b> Social Skills/ Behavior <b>Literacy:</b> Print Knowledge Phonemic Awareness Alphabetic Principle Vocabulary, Fluency Comprehension	<b>B:</b> Preschool Penn Interactive Peer Play Scale Child Behavior Checklist <b>L:</b> DIBELS Concepts About Print	Pears, Fisher, Kim, Bruce, Healey & Yoerger (2013)

<p><b>Behavior:</b> Attention Skills</p> <p><b>Literacy:</b> Phonemic Awareness Alphabetic Principle Vocabulary, Fluency Comprehension Print Knowledge</p>	<p><b>B:</b> Intention Attribution Stories Head Toes Knees and Shoulders Test</p> <p><b>L:</b> DIBELS Concept About Print</p>	<p>Pears, Healey, Fisher, Braun, Gill, &amp; Conte (2014)</p>
<p><b>Behavior:</b> Behavior Skills Emotional Skills</p> <p><b>Literacy:</b> Vocabulary Word Identification Early Literacy Skills</p>	<p><b>B:</b> Preschool and Kindergarten Behavior Scales</p> <p><b>L:</b> Peabody Picture Vocabulary Test III Woodcock-Johnson III Test of Achievement</p>	<p>Ziol-Guest &amp; Mckenna (2014)</p>

A close examination of these findings reveals that there appears to be no universal measurement used exclusively for measuring the literacy and behavioral skills thought to indicate school readiness. Although the Peabody Picture Vocabulary Test III was used most frequently when only literacy skills were measured, analysis shows that when measuring literacy *and* behavioral skills, the Peabody was not used as frequently. As Figure 3 indicates, there appears to be no consistent or frequent use of any one literacy measure. Analysis also shows that for measuring behavioral skills, no one assessment was used universally or frequently. However, two measures, the Child Behavior Checklist and the Preschool and Kindergarten Behavior Scales, were both used more than once. Further, for all the studies that examined a combination of both behavioral and literacy skills, no universal pairing of skills was found. That is, for school readiness defined in terms of both behavioral and literacy skills, no one behavioral skill was consistently paired with one literacy skill for measurement; for example, attention skills were not always paired with vocabulary skills for measuring school readiness. Instead, all studies paired a variety of skills, with no apparent consistent or frequent pairing of skills. Overall, analysis of this category indicates that when school readiness is defined in terms that relate to both literacy and behavioral skills, the measured literacy skills have been vocabulary, emergent or early literacy, concepts about print or print knowledge, and fluency. However there appears to be no universally accepted or used measurement of those literacy skills or the behavioral skills with which they are paired.

## Synthesis

This analysis examined the literature relating to five categories tied to the research question of what does research indicate to be the role and measurement of school readiness? The categories were school readiness in terms related to literacy skills, to behavioral skills, to behavioral skills and one literacy skill, to behavioral skills and two literacy skills, and to behavioral skills and three or more literacy skills. An analysis of the “defined by literacy skills only” category indicates that, although only a relatively few studies use only literacy skills to define school readiness, when school readiness is defined exclusively in terms that relate to literacy skills, those skills have been identified as oral language skills, letter recognition, letter sounds, phonological awareness, and knowledge of print. However there appears to be no universally accepted or universally used measurement of those literacy skills. In the category where school readiness is defined by behavioral skills only, analysis indicates that those skills can be identified as the major areas of emotional coping, problem solving, and self-regulation. However, there appears to be no universally accepted or universally used measurement of those behavioral skills. In the category where school readiness is defined by measurement of a combination of literacy and behavioral skills, the measured literacy skills have been vocabulary, emergent or early literacy, concepts about print or print knowledge, and fluency. However, again there appears to be no universally accepted or used measurement of those literacy skills or of the behavioral skills with which they seem to be randomly paired.

A synthesis of these findings from each category produces four findings for this research study about the role of literacy in school readiness. The first finding is that no fixed definition or measurement has been found to exist for the term among researchers; that is, there appears to be no universal measurement of school readiness. Second is that school readiness appears to be defined and measured among researchers in one of three ways: as a measurement of certain literacy skills (frequently oral language skills, letter recognition, letter sounds, phonological awareness, and knowledge of print); as a measurement of certain behavioral skills (generally emotional coping, problem solving, and self-regulation); or as a measurement of a combination of both behavioral and literacy skills. A third finding is that only a few researchers appear to define readiness exclusively in terms of literacy skills while many studies appear to define school readiness exclusively in terms related to behavioral skills, and many others appear to define

readiness in terms of both literacy and behavioral skills. A fourth finding is that among researchers who use or include literacy skills as a measure of school readiness, there is no one literacy skill or set of skills that determine school readiness, and no one measurement or set of measurements for measuring those literacy skills. However, the Peabody Picture Vocabulary Test III was an assessment that was commonly used to measure literacy skills considered essential for school readiness. This new knowledge from these findings will form the basis of a professional development project intended to inform teachers and literacy specialists on key aspects of school readiness. This professional development project is detailed in the next chapter.

## **Chapter 4: Results and Application**

### **Results of the Review**

After completing a review of the literature and a synthesis of the data to determine what research has been conducted on school readiness, this researcher has determined four key findings. The first is that there appears to be no fixed or accepted definition or universal measurement found to exist among researchers for the term “school readiness.” The second is that school readiness appears to be defined and measured among researchers in one of three ways: as a measurement of certain literacy skills (frequently oral language skills, letter recognition, letter sounds, phonological awareness, and knowledge of print); as a measurement of certain behavioral skills (generally emotional coping, problem solving, and self-regulation); or as a measurement of a combination of both behavioral and literacy skills. The third finding is that only a few researchers appear to define readiness exclusively in terms of literacy skills, while many others define it exclusively in terms of behavioral skills, and some others define it in terms of a combination of literacy and behavioral skills. The fourth finding is that among researchers who use or include literacy skills as a measure of school readiness, there is no one literacy skill or set of skills that universally determine school readiness, and no one measurement or set of measurements for measuring those literacy skills.

### **Application of Results to a Professional Development Project**

These findings have significance to preschool and early elementary teachers. These findings can aid teachers in gaining an understanding of the complexity of the term “school readiness” and an understanding that there is no one universally accepted way to define school readiness. These results are applicable to a professional development project because they will also help teachers recognize that without a universal definition, there cannot be a universal measurement for school readiness. Given the informational nature of this new knowledge, the most appropriate way to inform teachers of this knowledge is to design and produce a brochure for professional development.

## **Design of Professional Development Project**

The design of the Professional Development Project is a brochure. Teachers have busy schedules, and finding time to investigate what research says about defining and measuring school readiness can be difficult for teachers. Therefore, the design of a brochure that informs teachers of the findings of this research study can be beneficial for teachers because it provides them with a great deal of information in a small, portable, storable, and readable format to help them understand the complexity of the term “school readiness.” The intent of this project is to increase teachers’ awareness and understanding of school readiness, which may in turn help them to then help children become more “school ready.”

### **Literacy coaching [project] goals and objectives.**

The goal of this Professional Development brochure is to assist pre-kindergarten and kindergarten teachers, as well as administrators, to increase their understanding and knowledge of what it means for a child to be “school ready.” After reading the brochure, teachers will have a better understanding of what comprises school readiness, and therefore be more conscious of the types of measurement they use to determine school readiness. The objective for this brochures is that teachers who read it will be aware of what skills (literacy and behavioral) may comprise school readiness. The second objective is that these teachers will then ask their administrators for a clear definition of how their school defines school readiness and what measures or assessments their school administers accepts as evidence or determining school readiness.

### **Proposed audience and location.**

This proposed professional development project is for the professional audience of early childhood teachers and teachers in the early elementary grades. The brochure will be easily accessible and can be accessed at the leisure of the teachers. The brochure will be distributed to various school buildings. On the back of the brochure there will be a URL that will allow teachers to access the online version of the brochure. The link will also be distributed to various

schools to be forwarded to teachers within the building. This extra feature allows teachers to have access to the brochure online at any time.

### **Proposed project format and activities.**

The format of this proposed project will be a brochure (see Appendix A) that contains skills and assessments for determining a child's school readiness. The cover will consist of pictures and a title that catches the readers' eyes. The inside will consist of information that can be beneficial to teachers. The final page will also contain a challenge for teachers: to discover precisely how their school (or district) defines "school readiness" and what measures are used and by whom to determine that readiness. Also on the last page will be the URL for a Google Drive document where teachers can evaluate the brochure and the content, and provide feedback.

### **Proposed resources for project.**

The main resource necessary for this project would be the brochure itself. However, to conserve paper and make the brochure available to a larger audience, a digital version of the brochure will also be created. Therefore access to a computer with internet is essential for readers to view the brochure online and also to complete the evaluation mentioned at the end of the brochure. This can be accessed through a Google Drive document. Access will be free and available to anyone.

### **Proposed evaluation of project.**

To evaluate the effectiveness and usefulness of the content and the format of the brochure for professional development, the last page of the brochure will contain the URL to an online survey through Google Drive. The evaluation survey (see Appendix B) will include four multiple-choice questions, one extended response question, and space for suggestions and comments and feedback. The questions will ask participants to explain how their prior knowledge of school readiness may or may not have changed as a result of reading this brochure. Readers will also be asked to evaluate the effectiveness of the brochure and provide their feedback in regards to the usefulness of the brochure itself as a professional development venue.

**Project Ties to Professional Standards**

This professional development project ties to the Professional Standards of the International Literacy Association (ILA) because their Standard 6 for classroom teachers requires them to “*recognize the importance of, demonstrate, and facilitate professional learning and leadership as a career-long effort and responsibility*” (IRA, 2010, p. 15). This professional development will provide classroom teachers with professional learning opportunities and allow them to engage in professional learning. In addition, this form of professional development also ties to ILA Standard 6, teachers who read this brochure will be participating in professional development and by completing the evaluation survey at the end of the brochure; they will also be evaluating the professional development they have received.

## Chapter 5: Discussion and Conclusion

### Overview of Study and Findings

School readiness is a problem: for children who bring a low supply to the school entry level of Kindergarten, for Kindergarten teachers who may not have a clear understanding of the term or how it is measured, for Kindergarten and early grades teachers who encounter children with a wide range of school readiness as defined and measured by multiple means; and for school administrators who may or may not have a strong understanding of what the concept of school readiness is or how it is to be measured. This problem of a wide range of understanding and defining of the concept of “school readiness” leads a reading specialist to ask the question, what does research indicate to be the role and measurement of school readiness especially as related to literacy development? The most appropriate way to address this question is to conduct an extensive literature review and synthesis. Results indicate four findings. First is that there appears to be no fixed or accepted definition or universal measurement found among researchers for the term “school readiness.” Second is that school readiness appears to be defined and measured among researchers in one of three ways: as a measurement of certain literacy skills (frequently oral language skills, letter recognition, letter sounds, phonological awareness, and knowledge of print); as a measurement of certain behavioral skills (generally emotional coping, problem solving, and self-regulation); or as a measurement of a combination of both behavioral and literacy skills. The third finding is that among researchers, only a few define readiness exclusively in terms of literacy skills, many define it exclusively in terms of behavioral skills, and some define it in terms of a combination of literacy and behavioral skills. The fourth finding is that among researchers who use or include literacy skills as a measure of school readiness, there is no one literacy skill or set of skills that universally determine school readiness, and no one measurement or set of measurements for measuring those literacy skills. These findings are relevant to the professional development of kindergarten and elementary teachers, and will be disseminated to them in the form of an informational brochure.

### **Significance of the Findings**

These findings are significant because they provide research-based knowledge to teachers and school administrators that will help them clarify their understanding about the sometimes vague term “school readiness.” This new knowledge is significant because it offers professional development to teachers and can help teachers gain a better understanding of school readiness and the role of literacy in it, while ultimately helping children in becoming more school ready. These findings are also significant to the field of literacy. They contribute new knowledge about the role of literacy within the definition of school readiness and help show gaps in the existing research.

### **Limitations of the Findings**

The findings for this study do have limitations. One limitation is that they are synthesized from a small pool of relevant studies. The majority of the studies found on school readiness focused on behavioral skills; very few studies focused specifically on literacy skills for readiness. Many of the studies used generalized populations and therefore lacked a mention of diversity. Also, many studies were unclear about the details of the participants and locations of the studies, thereby also ignoring the issue of diversity and possible regional definitions of school readiness.

### **Conclusion: Answer to the Research Question**

The research question for this study is what does research indicate to be the role and measurement of school readiness especially as related to literacy development? After conducting this study and performing a synthesis of the research, this researcher determined four findings. First there is no fixed definition or universal measurement for school readiness, and second there are three ways to define school readiness: as a measurement of certain literacy skills (frequently oral language skills, letter recognition, letter sounds, phonological awareness, and knowledge of print); as a measurement of certain behavioral skills (generally emotional coping, problem solving, and self-regulation); or as a measurement of a combination of both behavioral and literacy skills. Third only a few researchers define readiness exclusively in terms of literacy

skills, many define it exclusively in terms of behavioral skills, and some define it in terms of a combination of literacy and behavioral skills. Fourth when literacy skills are included in the measure of school readiness, there is no one literacy skill or set of skills that universally determine school readiness and no one measurement or set of measurements for measuring those literacy skills. Taken together, these findings suggest that the role and measurement of school readiness is not universally defined or measured, and especially as related to literacy development, the findings suggest that the most common and most frequently measured literacy skills are oral language skills, letter recognition, letter sounds, phonological awareness, and knowledge of print. However, the findings also suggest that related to literacy development, there is no common measurement or assessment tool used to measure the development of those common literacy skills. Therefore, research suggests that the role of literacy in school readiness is less significant to researchers than is the role of behavioral skills.

Reflecting on the above answer brought to mind an article on the holistic approach to school readiness and this quotation: “school readiness is a complex concept that, overall, relates to a child’s readiness at age 5 to learn in a school environment” (Gaynor, 2015, p. 27). By this definition, “school readiness” means ready for school, and “school” according to Merriam-Webster, means “an organization that provides instruction, as an institution for the teaching of children.” Therefore, in a very general sense, school readiness means ready for learning within a formal structured environment where purposeful teaching occurs. As Gaynor (2015) explains, “children who enter school not yet ready to learn, whether the cause is an academic, social, and/or emotional deficit, will continue to have difficulties” (p. 28). This implies that in order for a child to be “school ready,” they must have essential behavioral (social and emotional) skills and literacy (academic) skills in order to be successful within the classroom setting. The findings for this research support this principle because they demonstrate that school readiness remains a vague and non-specific term as the research indicates.

**Recommendations for Future Research**

Many of the studies did focus on both literacy skills and behavioral skills. While future research could be conducted to focus specifically on literacy, I recommend that researchers combine theory with their research to explore whether a definitive set of literacy skills can be determined as essential for school readiness. Specific studies on just literacy would add to this topic and also add to the understanding of the role literacy plays in school readiness. Many of the studies mentioned factors that can increase or decrease a child's school readiness abilities. Perhaps further research that incorporates the measurement of school readiness and factors that impact school readiness would also be beneficial.

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## **Appendix A: Format of Professional Development Project**

The format for this professional development will be a brochure. It will have cover page, two inside sections, and a back.

### Cover Page:

This section will contain the questions, “What does it mean to be school ready?  
How can we measure school readiness?”

### Section One:

This section will contain what research indicates to be essential school readiness skills. It will list the behavioral and literacy skills that this research has proven essential for children to have acquired before entering formal schooling.

### Section Two:

The second page will contain common assessments that have been used to measure these essential skills.

### Back Page:

The back will contain a URL that will link readers to an online version of the brochure. It will also have teachers question how their school (or district) defines and measures school readiness. It will also contain a URL that links readers to a Google Drive that contains a questionnaire to evaluate this professional development.

**Appendix B: Evaluation of Professional Development Project**

Google Drive Evaluation Survey

Statement	Rating			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Now that I have read this brochure, I have a better understanding of school readiness and how it can be measured.	1	2	3	4
This information will benefit me in the classroom setting.	1	2	3	4
This professional development could be easily accessed.	1	2	3	4
I will recommend this information to a colleague.	1	2	3	4

What would you add or remove from this professional development?

Any further suggestions or comments: