

**ACCOUNTING FOR DIFFERENCES IN LITERACY ABILITY  
AMONG CHILDREN ENTERING KINDERGARTEN**

by

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A Master's Thesis/Project Capstone  
Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Master of Science in Education  
Literacy Birth to Grade 12  
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Fredonia, New York

May 2015

Capstone Certification Page

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

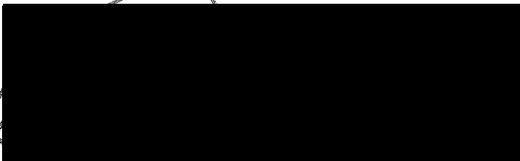
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We, the undersigned, certify that this project entitled ACCOUNTING FOR DIFFERENCES IN LITERACY ABILITY AMONG CHILDREN ENTERING KINDERGARTEN by SANDRA L. SHARPE, Candidate for the Degree of Master of Science in Education, Literacy Birth to Grade 12, is acceptable in form and content and demonstrates a satisfactory knowledge of the field covered by this project.



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## **ACCOUNTING FOR DIFFERENCES IN LITERACY ABILITY AMONG CHILDREN ENTERING KINDERGARTEN**

### **ABSTRACT**

This capstone project explores the question of factors that may account for variance in literacy ability among children entering Kindergarten. This researcher has personal interest in this topic because of her own experience as a Kindergarten teacher. The most appropriate way to address this research question is with an exhaustive literature review and research synthesis. The synthesis produced five findings. First is that participation in a structured, formal preschool has a positive impact on the literacy development and school readiness of all children, regardless of their diversity or non-diversity, or socio-economic status (SES). Second, the quality and type of instruction a child receives in preschool has an impact on that child's literacy growth, and third, the impact from attending preschool is not directly influenced by a child's SES or demographics. Fourth is that home literacy experiences have a greater impact on literacy development than SES regardless of the SES level. Fifth is that SES levels are factors in language and literacy development only indirectly because they can impact family stress, a mother's well-being, and size and number of literacy activities in the home; low socioeconomic status and a mother's level of education do not automatically mean poor literacy development, neither do they hinder literacy development when there is rich home literacy environment. The application of this new knowledge will result in professional development for Kindergarten and grade one teachers, and will take the form of a video accessible for free on YouTube and Teacher Tube.

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## Chapter 1: Introduction

### Statement of Problem

The Common Core State Standards (CCSS) have, among other things, helped move preschool literacy instruction to the forefront of hot topics in education. According to the yearly “What’s Hot What’s Not” survey by literacy researchers (Cassidy & Grote-Garcia, 2014), “preschool literacy instruction and experience” is considered a “hot topic” by more than 50% of the literacy professionals who responded. According to the latest enrollment figures from the National Center for Education Statistics (NCES) (2014), the percentage of 3-year olds (41%) and 4-year-olds (66%) enrolled in “preliminary programs” (including kindergarten and preschool) in 2012 was “higher than the percentage in 1990 . . . but not measurably different from the percentages in 2000 or 2011” (National, 2014, para 1). These percentages, although increasing, do emphasize the fact that “when U.S. children enter school, their reading skills vary widely” (Waldfogel, 2013, para 1). The idea of “literacy gaps at school entry” (Waldfogel, 2013, para 2) is not new; in 1998, the National Academy of Sciences sponsored the now classic study *Preventing Reading Difficulties in Young Children* (Snow, Burns, & Griffin, 1998). Since then, much has been researched and written on the role of parents in the literacy development of preschool children, However, as the NCES statistics show, other factors such as formal literacy instruction exist that influence preschool literacy development. This problem of the influences and their impact on literacy development leads to the research questions for this proposal: what factors may account for differences in literacy ability among children entering kindergarten, and what might a reading specialist do to address these differences? The most appropriate way to address this question of influential factors is by conducting an extensive literature review, synthesizing the findings, and conveying the results using some form of professional development for teachers and reading specialists.

### Background

In my current position as a Kindergarten teacher, I see in my classroom children who enter school with varying degrees of reading ability and skills. I have studied their scores on the

beginning of the year benchmark assessments the school conducts to measure phonological awareness. Because there is very little ethnic or linguistic diversity among the students in my class (and in the school), I looked for other possible factors to explain or account for why some students scored significantly lower than others on this assessment. I found that some factors which differentiated my students and which might account for this range of scores were differences in home life, family dynamics, and socioeconomic status. Then I searched a little deeper and found that those students who had not attended a formal preschool educational setting, such as Universal Pre-K, a private preschool center, or Head Start, did not score as high as those who did. In addition to those differences in benchmark scores, I observed the students during their lessons. Those students who were doing well and progressing in their studies were also the same students who had attended some form of preschool. The coincidence sparked my interest and carried, I felt, the potential for research. So that is why I decided to explore this topic of determining and accounting for differences in literacy ability in Kindergarten classes.

### **Terminology**

There are a few key terms which will be used often in this proposal and may require clarification. For this study, “Kindergarten” refers to the year of school-based instruction before the first formal year of mandated school instruction (grade 1) in New York State. The term “literacy ability” is used broadly in this study to refer to literacy aspects such as print and letter recognition, alphabetic knowledge, phonemes and phonetics, as well as vocabulary and word knowledge. All of these aspects are components of emergent literacy.

### **Theoretical Stance**

The theoretical stance that supports this research is the view of literacy as a social practice. Gee (1991) explains that 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). This theory also connects to the theory of literacy development, especially Chall (1999) and the concept of a developmental continuum. This continuum starts with emergent literacy and the beginning of print awareness where children

learn to associate certain images with certain meanings and in certain social contexts. The most common example is children who learn that the big M (the “golden arches”) means the McDonalds restaurant with food and play land. This common example of association is also a good example of literacy ability.

### **Rationale**

Based on their own observations and experiences, most Kindergarten teachers will likely agree with Waldfogel’s (2013) statement that “when U.S. children enter school, their reading skills vary widely” (para 1). What these same Kindergarten teachers may not be aware of or agree on are the factors that contribute to these variances. There is no question that parental involvement is a major factor in a child’s literacy development; however, there are other factors. The purpose of this research is to identify possible factors to account for differences in the literacy ability level of children entering Kindergarten, and to determine ways in which knowledge of those factors may help a reading specialist assist teachers in Kindergarten and grade 1 who work with students of varying literacy abilities. This research is important to the field of education because it will contribute knowledge that is directly applicable to an early elementary classroom and as a possible means to early prevention of reading struggles in students as they progress through higher grade levels.

## Chapter 2: Literature Review

### Introduction to the Review

In order to address the research question of accounting for differences in literacy ability among children entering Kindergarten, a review and synthesis of the empirical research studies related to this topic is the most appropriate method. This literature review began with a search of the major education databases for empirical research studies on influences. Keywords and phrases in the search included *preschool literacy development*, *emergent literacy*, *early literacy*, *measuring early literacy growth*, *causes of kindergarten literacy gaps*, and *factors influencing literacy growth*. From a preliminary review of the literature, two categories of factors emerged. These categories are Formal Schooling Before Kindergarten and Home Literacy Experiences (HLE).

### Formal Schooling Before Kindergarten

The category of formal schooling before kindergarten refers to any formalized school setting that children attend either full or part-time on a weekly basis prior to attending Kindergarten. These settings include Universal Pre-K school, Head Start Programs, or a private preschool in a church for example. These programs are usually open to all children. The impact of this type of schooling was studied by Weiland and Yoshikawa (2013), who specifically looked at the impact of preschool on child subgroups. They defined these groups by family income, race or ethnicity, or child gender. To determine whether certain “subgroups benefit statistically more from the prekindergarten program than others” (p. 2115), Weiland and Yoshikawa studied 2,018 four and five year old participants enrolled in the Boston Public Schools (BPS) public prekindergarten program during the years 2008-2010. The participants were “racially, linguistically, and socioeconomically diverse” (p. 2117), and of low socioeconomic status (SES) because “approximately 69% of sampled children were eligible for free or reduced lunch” (p. 2117). All participants were assessed for receptive vocabulary, pre-reading and reading skills using two norm-referenced literacy assessments. Analysis of data indicates that “participation in the prekindergarten program led to statistically significant improvements” (p. 2123) in literacy

and language skills. In addition, children in two diverse subgroups, the low SES and the Hispanic or Black, benefited more from the program than those not in those subgroups. These findings indicate that participation in prekindergarten “brought about educationally and statistically significant improvements in multiple domains of school readiness” (p. 2124). Findings from this study suggest that participation in formalized preschool literacy instruction may be a factor that accounts for differences in literacy ability in Kindergarten especially for children in diverse subgroups.

In another study which also examines the impact of prekindergarten as a whole, Peisner-Feinberg, Schaaf, LaForett, Hildebrandt, and Sideris (2014) examined the effects of the Georgia pre-K Program on children’s school readiness skills. The researchers compared the school readiness of 611 pre-K children to the readiness of 570 children who did not attend pre-K. Participants were “generally similar on most demographic characteristics, including gender, ethnicity, family income, Limited English Proficiency (LEP), Individualized Education Plan (IEP) status, and education level of the child’s primary caregiver” (p. 6). All participants were assessed upon their entrance to Kindergarten using five literacy assessments, which measured letter knowledge, letter-word identification, phonological awareness, phonemic awareness and vocabulary skills. Researchers found that “participation in Georgia’s Pre-K program had significant positive effects on children’s language and literacy skills” (p. 10) in all the areas assessed with the exception of vocabulary skills. Researchers conclude that the Georgia Pre-Kindergarten is beneficial for “enhancing school readiness skills for all children-boys and girls, those from families of different income levels, and children with differing levels of English language proficiency” (p. 10). Findings from this study suggest, as does the Weiland and Yoshikawa (2013) study, that participation in formalized preschool literacy instruction may be a factor that accounts for differences in literacy ability in Kindergarten especially for children in diverse subgroups.

Unlike the previous two studies which address preschool as a whole, the study by Mashburn (2008) examined specific characteristics of state-funded preschool programs to determine which characteristics may have the greatest impact on school readiness. Using data from previous multi-state and state wide studies, Mashburn measured three forms of pre-K quality. These began with the nine characteristics of pre-K programs according to the National Institute for Early Education Research (NIEER), which included information about teacher

education, staff development, class size, health screenings and family support opportunities, and school meal opportunities. The additional two measures of pre-K quality were teacher-child interactions, and individual-level outcomes. A total of 2, 439 students from 671 pre-K classrooms in 11 states were selected. Data were collected data through researcher observations, teacher reports, and family demographic surveys as well as through administering a battery of assessments to the pre-K students. These assessments included the Peabody Picture and Vocabulary Test (PPVT) the Peabody Picture and Vocabulary Test-Revised (PPVT-R) the Oral Expression Scale from the Oral and Written Language Scale (OWLS), and the Woodcock-Johnson III Test of Achievement Sound Awareness, Rhyming Subtest with a focus on rhyme awareness, letter naming and receptive vocabulary. Data analysis of the three forms of pre-K quality indicated that “the quality of instructional interactions was positively associated with all measures of academic and language development” (p. 742). Therefore, the characteristics of pre-K programs that appear to produce the greatest impact on literacy development include those that contain quality instructional interactions between teachers and students.

Looking at the characteristics of literacy instruction, Muter, Hulme, Snowling, and Stevenson (2004) examined the specific instruction of the phonics approach. Researchers assessed “relationships among early phonological skills, letter knowledge, grammatical skills, and vocabulary knowledge as predictors of word recognition and reading comprehension” (p. 665). Participants included 90 four and five year old British students (53 girls, 37 boys) who received one hour of literacy instruction per day, which consisted of a “highly structured approach with a strong emphasis on phonics” (p. 668). Data were collected three times over a two year period. Time One consisted of six subtests from the Phonological Abilities Test, the British Picture Vocabulary Scale II (BPVS II), and the Hatcher Early Word Recognition Test. Time Two consisted of all of the assessments from Time One plus the Word Order Correction Test, the Morphological Generation Task, which is “similar to” (p. 669) the Grammatic Closure subtest from the Illinois Test of Psycholinguistic Abilities (ITPA), and the British Abilities Scales II (BAS II) Word Reading Test. Time three consisted of the Hatcher Early Word Recognition Test, the BAS II and the Neale Analysis of Reading Ability II (NARA II), which is a test of “prose reading, assessing accuracy and comprehension” (p. 669). Data analysis indicated that phoneme sensitivity and letter knowledge “demonstrate critical roles for the development of early word recognition skills,” (p. 679), while vocabulary knowledge and

grammatical skills “play additional significant roles for reading comprehension” (p. 679). In other words, word recognition skills and reading comprehension ability may rely on children’s phonological skills developed through formal instruction of phonics. Therefore, a characteristic of pre-K programs that appears to produce positive impact on literacy development is formal instruction in phonics.

Similar to the Muter, Hulme, Snowling, and Stevenson (2004) study, the study by Justice, Kaderavek, Fan, Sofka, and Hunt (2009) also focuses on specific literacy instruction in preschool classrooms, but they focus on teacher-student interactions and the specific instruction of print referencing. The researchers wanted to “determine the effectiveness of print referencing intervention when it is implemented by preschool teachers for improving the print knowledge” (p. 67) of children from a low-SES home, with parents who were unemployed, or who were diagnosed with a specific developmental problem. Participants of this study were 106 preschool children (59 boys and 47 girls) attending 23 classrooms; 14 classrooms formed the intervention group and 9 classrooms formed the comparison group. Teachers in the intervention group classrooms were trained in print referencing instruction and were videotaped for analysis. Both groups used the same reading materials. All children were assessed in the Fall and Spring for alphabet knowledge, knowledge of print, name writing ability, language development (sentence structure and word structure), and expressive vocabulary using the Clinical Evaluation of Language Fundamentals Preschool-2 (CELF-P2). Results of this study indicate “that preschoolers’ participation in print-focused reading sessions for an academic year resulted in educationally significant gains in children’s print concept knowledge, alphabet knowledge, and name-writing ability” (p. 67) compared with the comparison group. Therefore, a characteristic of pre-K programs that appears to produce positive impact on literacy development is formal instruction in print referencing.

While the previous two studies address specific types of preschool instruction, the study by Wasik, Bond, and Hindman (2006) focuses specifically on teacher instruction behavior. Researchers studied 10 Head Start classrooms to help teachers provide greater opportunities for language and vocabulary development, which in turn may also increase literacy development. Researchers hoped to find “which teacher behaviors seemed to be particularly related to the language outcomes” (p. 70), and if it was “possible to substantially increase vocabulary in disadvantaged children who attended Head Start Centers” (p. 70). Of the 207 children

participating in the study, 139 were in the intervention group and 68 in the control group. The children ranged in age from 2 years 8 months to 4 years 10 months. The teachers for the 10 classrooms received training in explicit oral language and book reading strategies prior to the study. This training included active listening, providing feedback, and modeling rich language. Teachers were observed six times and were rated on three specific components: “utilization of trained strategies, material use as part of the lesson, and integration of the theme throughout activities to facilitate the consistent use of vocabulary” (p. 68). Students were assessed on expressive and receptive language development and alphabet knowledge using the Peabody Picture Vocabulary Test (PPVT–R) and the Expressive One-Word Picture Vocabulary Test (EOWPVT–III). Data were collected after one month of the intervention and then again after nine months. Data analysis showed that “children in the intervention group had significantly larger vocabularies at the posttest than children in the control group” (p. 68); these vocabularies were in both receptive and expressive language. Researchers found that “interventions to increase the amount of talk can have positive effects on children’s vocabularies” (p. 70). Therefore a characteristic of pre-K programs that appears to produce positive impact on literacy development is teacher instruction behavior that involves active listening, providing feedback, and modeling rich language.

In another study which also looks specifically into teacher instructional behaviors, but those involving interactive book reading strategies and language development in preschool classrooms, Wasik and Bond (2001) examined “the effects of a book reading approach on the language skills of at-risk preschool children” (p. 243). The study investigated both shared book reading and extension activities supporting the use of the vocabulary presented in books. Participants in this study included 127 children (63 in the intervention group and 64 in the control group) ages 3 years 11 months to 4 years 7 months who attended a Title I early learning center in Baltimore, Maryland. Their teachers were trained in using interactive book reading strategies. The children were assessed (both prior to and after the 15 weeks of intervention) for receptive and expressive language development as well as vocabulary development using the Peabody Picture Vocabulary Test—III (PPVT-III). Data analysis showed differences in the intervention group compared to the control group in that intervention group children “scored significantly better on the PPVT-III” (p. 247) and they also scored much higher on the “expressive and receptive vocabulary measures” (p. 247). Researchers concluded that in a “Title

In preschool, it is possible to implement a classroom intervention that can have positive effects on vocabulary development in young children” (p. 248). Therefore, a characteristic of pre-K programs that appears to produce positive impact on literacy development, especially at-risk students, is teacher instruction behavior that involves interactive book reading strategies and vocabulary development.

Moving from pre-school teacher instructional behaviors to preschool curriculum, Xue and Meisels (2004) researched the impact of preschool (“early literacy instruction” p. 191) curriculum on children of various SES levels. In this study, SES includes gender, ethnicity, family income, parent education, age, and whether English is the language used primarily in the home. Participants included 13,609 kindergarten children from 2,690 classrooms and 788 schools in the first year of a longitudinal study. Researchers collected data from teachers’ reports about the children’s learning, and from student assessments. The students were assessed on phonics (alphabet principle, phonemic awareness, word recognition, decoding, relationships between sounds and spellings) and integrated language arts (listening to stories, performing plays and skits, journal writing, and dictating stories to the teacher). Results indicated that the instructional approach of a curriculum that combines “integrated language arts and phonics is more effective than either method used alone” (p. 220) and appears to have a positive learning influence on “kindergarten children from affluent families as well as poor families” (p. 220). However, researchers also stated that the “balance of these two elements may need to be adjusted according to child characteristics such as entering ability” (p. 220). Therefore, this study finds that a pre-school curriculum involving phonics and integrated language has more impact on children’s literacy growth and preparation for Kindergarten than does the child’s SES.

In a study which used the participants, assessments, and data from the Xue and Meisels (2004) study, Magnuson, Meyers, Ruhm, and Waldfogel (2004) looked specifically at whether children of low SES benefit from preschool enrollment. For their study, the researchers defined low SES as being from “economically disadvantaged” (p. 117) families. Upon analyzing the data, the researchers found that “children who attended a center or school-based preschool program in the year before school entry perform better” (p. 115) on the entrance assessments and that the effects of attending preschool “are largest” (p. 115) for economically disadvantaged children; however, attendance in early education programs “among children from low-income families and with less educated parents remains relatively low” (p. 115). Therefore, just like the

Xue and Meisels (2004) study found, low-SES does not negatively affect literacy development when formal pre-school literacy instruction is involved, but low-SES does appear to inhibit literacy development when attendance at pre-school becomes an issue.

Magnuson, Ruhm, and Waldfogel (2007) look further into determining the long-term effects of pre-K programs, and which types of pre-K appear to be most beneficial for diverse children. Data for this study were from the Early Childhood Longitudinal Study-Kindergarten Class of 1998-1999 (ECLS-K), and included academic assessments administered in the fall and the spring, child, parent, teacher, and school administrator surveys, and teacher observational ratings. Researchers looked particularly at the state funding of preschool programs, as well as demographics (ethnicity, gender, SES), home and family environment, and neighborhood and state characteristics of the students. Results of this study indicate that attendance at preschool had a positive impact on school readiness for all students, regardless of their demographic factors; further, “structural indicators (such as levels of teacher education) suggest that prekindergarten programs, particularly in public school settings, are typically higher quality” (p. 44). Therefore, similar to the findings from the previous two studies, child demographics, such as low-SES, do not appear to negatively impact school readiness when some form of pre-K instruction is present.

In a study which looks at the impact of a combination of pre-school and home literacy environment (HLE) with its “exposure” to literacy, Crain-Thoreson and Dale (1992) question “the significance of verbal precocity” (p. 421) or linguistic precocity, which they define interchangeably as the “development of children who talked early” (p. 421). They also question whether precocity has any “implications for later related skills such as reading” (p. 421), and whether literacy development is “dependent on language skill compared with literacy exposure” (p. 421). Participants of this study were 25 children (9 boys and 16 girls) considered “linguistically precocious” (p. 423) at 20 months of age and who remained so through their preschool year. Data analysis showed that “verbally precocious children are not likely to be early readers” (p. 424), that there was “correlational evidence that language and literacy are separable abilities at 4 ½ years” (p. 424), and that “exposure to instruction in letter names and sounds during the preschool years is positively associated with verbally precocious children's performance on measures of phonological awareness, invented spelling, word decoding, and concepts of print before kindergarten entry” (p. 427). From these findings, the researchers

determined the importance of the HLE in literacy development even with children who are verbally advanced.

### **Home Literacy Experiences**

Part of the home literacy environment includes home literacy experiences. This review category of home literacy experiences refers to the literacy activities that take place in the home; these include but are not limited to, such activities as reading and writing of various types, access to reading material, parent-child reading interactions, literacy interactions with older siblings, and access to a computer. Taking literacy experiences as a whole, VanSteensel (2006) called them the “home literacy environment (HLE)” (p. 367). His intent was to determine a “conceptualization” (p. 367) of that environment and possible “social and cultural contexts [of] the home literacy experiences” (p. 369) especially for children of low SES. For the purpose of the study, VanSteensel defined SES as based not on economics but on the mother’s ethnicity and level of education. Participants in the VanSteensel study were 116 students with a mean age of 6.4 years from 19 primary schools in one city in the Netherlands. The data were collected in two ways: for the home literacy environment, parents completed questionnaires about “frequency of activities” (p.371), and for the children’s literacy development from kindergarten through second grade, “standardized school tests and an observation form were used” (p. 371). From the parental questionnaire data, three profiles of home literacy environment were created: a “rich” literacy environment, a “child-directed” literacy environment, and a “poor” (p. 372) literacy environment. Data analysis showed that “the majority of the native Dutch families have a ‘rich’ literacy environment,” and that “most ethnic minority families have child-directed” home environments (p. 375), which suggested that many “minority children are frequently exposed to school-related literacy activities in their homes” (p. 375). VanSteensel claimed that “the observed variability in literacy practices within low-income and ethnic minority groups has consequences for our understanding of the relation between socio-demographic variables and literacy outcomes” (p. 369). VanSteensel also determined that “measures of the HLE may well be better predictors of children’s literacy scores than static factors such as SES or ethnicity” (p. 369), which as VanSteensel pointed out matched what Goldenburg (2004) found earlier. In addition, the three HLE profiles related to SES and ethnicity “provided quantitative evidence

against the often-assumed one-to-one relation between socio-cultural factors and home literacy experiences” (p. 378). Therefore, an important finding is that home literacy experiences may be more significant in literacy development than a child’s SES.

In another study that also addresses home literacy environment, Christian, Morrison, and Bryant (1998) examined the HLE and its relationship with childcare, maternal education, and academic performance. Participants of this study were 538 kindergarten students in the same school district in North Carolina with an average age of 5 years, 5 months; half were male and half were female, with 50% white, 49% African American, and 1% of other ethnic backgrounds. Parents of the participants completed a questionnaire about “total months in child care, maternal education, ethnicity, gender, and scores on the Family Literacy Environment Scale” (p. 506). Additional data were the children’s IQ scores and the results of several literacy assessments administered to the children. Results indicated that “children from less educated, lower family literacy environments were clearly at greatest risk of poor academic skills upon entrance to kindergarten” (p. 511). However, “high literacy environments among families whose mothers had less education actually placed children at a higher level of academic competence than children from mothers with more formal education but who focused less on literacy in the home” (p. 511). Therefore, just as VanSteensel (2006) found later, the HLE “emerged as a powerful predictor of children’s academic skills” (p. 515) and was more significant for literacy growth than SES especially as measured by maternal education.

Unlike VanSteensel (2006) and Christian, Morrison, and Bryant (1998) who focused on development of literacy skills, LaParo, Justice, Skibbe, and Piñata (2004) looked at possible causes of specific language impairment (SLI), which may have a direct impact on literacy development upon entrance into Kindergarten. LaParo, Justice, Skibbe, and Piñata (2004) observed various factors of demography, such as maternal education, depression, and sensitivity (mother-child interactions), ethnicity, HLE, and SES (income level) in order to determine “the extent to which select maternal, child, and demographic factors were associated with persistence or resolution of specific language impairment (SLI) in preschool children” (p. 291). In this two year longitudinal study, participants were 73 children beginning at age 3 who exhibited specific language impairment. Data were collected on the selected demographics by using interviews with the mothers, checklists and surveys, and a Home Observation for the Measurement of the Environment Inventory (HOME), which measures “the quality and quantity of stimulation and

support available to a child in the home environment” (p. 296). After analyzing the data, researchers found that ethnicity and low-SES had a negative influence on language development when mothers “received significantly lower sensitivity scores and significantly higher depression scores” (p. 300). Sensitivity and depression are “frequent consequences” (p. 300) of low-SES. In addition, “the present findings suggest the importance of working closely with mothers of children with language impairment to optimize child-caregiver relationships” (p. 300). Researchers stated that the “present work implies the importance of maternal sensitivity and maternal depression to differentiation and also suggests that household income and the quality of home environment may play important roles in the resolution of SLI” (p. 301). Therefore, like VanSteensel (2006) and Christian, Morrison, and Bryant (1998), this study finds the significance of the HLE as an influence on child development. In this case the major influence is on child language development, which may affect literacy development upon entrance into Kindergarten.

Also studying language development, Hoff (2003) examined families from different SES to determine how SES may influence “productive vocabulary development” and whether that influence may be of “environmental specificity” (p. 1368), meaning “supportive environments benefit all aspects of development and unsupportive environments impede them (global environment)” (p. 1368). For the study, 63 children ages 16 to 31 months who were comparable in language development, and their mothers participated: 33 children had parents with a high-SES where both parents were college educated and worked in authoritative positions; the other 30 students had parents with a mid-SES where both parents were high school educated but had a higher education than technical training and worked in service positions. All mothers served as the primary caregivers of their children and none of them worked outside of the home for more than 15 hours per week. Hoff connected SES with level of maternal education, and used “measures of maternal speech to capture both linguistic properties of the input the children received and social properties of the interactions they experienced” (p. 1370). Hoff also used children’s speech samples as a measure of vocabulary development. Data showed children from high-SES families had a higher vocabulary development than those from mid-SES, but “vocabulary differences indicate ability differences only on the assumption of equal opportunity to acquire vocabulary” (p. 1375), which may be a direct result of a global environment. Also, these vocabulary experiences were not “equally available to children across socioeconomic

strata” (p. 1375). In addition, researchers indicated that variability in language experiences produced “variability in children’s vocabulary development, regardless of SES” (p. 1375). Therefore, children from higher-SES may have higher vocabulary development upon entrance to Kindergarten, but this influence is based on the global environmental influences of the child’s HLE experiences rather than on the child’s SES.

Burchinal, Jurgens, and Roberts (2005) also examined global environmental experiences, but their study specifically looked at strengthening pre-reading skills by examining home literacy practices or the HLE. Researchers examined “four specific measures of home literacy practices: shared book reading frequency, maternal book reading strategies, child’s enjoyment of reading, and maternal sensitivity” (p. 345). Researchers also explored “whether a global measure of the home environment could contribute over and above these specific home literacy practice measures in predicting children’s early language and literacy development during the preschool years” (p. 345). Participants were 72 African American children between the ages of 3 and 5 years who were enrolled in a child care center and their mothers or primary guardians. The mothers or guardians in this longitudinal study were interviewed annually using the Home Observation for the Measurement of the Environment Inventory (HOME) to assess how much they read to their children and how much their children seemed to enjoy being read to. Mothers or guardians were also regularly observed while reading to their children, and “maternal sensitivity” towards the children was also observed and coded. Children were assessed for their receptive and expressive language development and vocabulary from age 3 to kindergarten using the Peabody Picture Vocabulary Test-Revised (PPVT-R), Clinical Evaluation of Language Fundamentals-Preschool (CELF-P) and the Test of Early Reading Ability (TERA). While results of the study indicated the parental factor of “maternal sensitivity was significantly related to children’s receptive vocabulary [growth]” (p. 345), results also showed that “the global measure of overall responsiveness and support of the home environment contributed over and above the specific literacy practice measures in predicting children’s early language and literacy development” (p. 345). Researchers found that the “measure of the overall quality and responsiveness of the home environment was the most consistent and strongest predictor of children’s literacy and language skills” (p. 356). Therefore, children from supportive home environments may have higher language and literacy skills upon entering Kindergarten than those who do not.

From home environment and external factors, Samuelson, et al. (2005) shift focus to examine home environment and the internal factor of genetics. They studied 627 sets of same-sex 4 and 5 year old twins in Australia, Norway, Sweden, and the United States. Researchers were looking for the impact of “shared-environment, non-shared environment, and genetic influences” (p. 708) on literacy development and for possible impact differences among countries. Most participants were enrolled in a preschool setting, and while the United States and Australia preschool settings included some literacy activities, Norway and Sweden’s did not. There were no significant differences in parental education amongst the participants, and all children were monolingual in their country’s dominant language. Parents completed a questionnaire on home literacy environment, and each child was assessed individually for pre-reading literacy skills. Some specific assessments were the Rapid Object Naming (RON) and Rapid Color Naming (RCN) subtests from the Comprehensive Test of Phonological Processing (CTOPP), the vocabulary subtest of the (WPPSI-R), the Grammatic Closure subtest from the Illinois Test of Psycholinguistic Abilities (ITOPA), and the Word Identification subtest from the Woodcock Reading Mastery Test-Revised (WRMT-R). Data analysis consisted of correlating assessment scores with parental questionnaire scores, both within and among countries. Results of the study indicated that shared environment had a “greater impact” (p. 719) on literacy development than shared genes, and that while shared genetics impacted literacy ability, individual genetics also had an influence on verbal ability. Researchers found that there were two sources of “shared-environment influence, one affecting general verbal ability, phonological awareness, rapid naming, and print awareness, and the second affecting the latter three variables, print awareness especially” (p. 719). These findings suggested to the researchers that environmental variables may influence pre-reading skills and early literacy development to a greater extent than genetics. Samuelson, et al., concluded that “individual children in all countries might avoid failure in early reading development if their pre-reading skills were strengthened prior to formal instruction” (p. 719). Therefore, home environment seems to have a greater influence than genetics on language and literacy development of children prior to their entering Kindergarten.

Findings from the previous studies suggest the important influence the home literacy environment (HLE) has on the literacy development of children, but none of the studies mention children with specific reading disabilities (RD). Rashid, Morris, and Sevik (2005) focused on

the relationship between HLE and reading achievement in children with RD. Participants were chosen by “either a low achievement-based or an IQ-achievement discrepancy-based definition for RD” (p. 4) as measured by the Kaufman Brief Intelligence Test (K-BIT) and the Woodcock Reading Mastery Test-Revised (WRMT-R) and Wide Range Achievement Test-3 (WRAT-3) reading subtests. These assessments were also used for data collection. Participants were 65 African American or European American children (44 boys), with a mean age of 7 years who were enrolled in Grade 1 or 2. In addition to the assessment data, parents completed a questionnaire about the “child’s early development, home literacy activities, family demographics, social support” (p. 5) and about parent level of education and occupation. Parent education level and occupation were used to determine socioeconomic status (SES) in this study. Results from the study indicated that HLE may be “significantly related to pre-reading skill (language, phonological awareness), the more direct relationship between home literacy and actual reading achievement is less robust, at least among students with early-identified RD” (p. 8). Researchers suggested that results may also be related to the age of the participants, which was older than most studies on the influence of HLE. In addition, Rashid, Morris, and Sevik (2005) suggested the possibility that “parents of children with RD do not emphasize literacy activities in the home because of their children’s difficulty with reading” (p. 10) and that the HLE may have a “greater impact on early reading development but less significant once the child has learned to read” (p. 10). Therefore, while the HLE seems to have an impact on children’s early literacy development, that impact may be less for children with specific reading disabilities (RD) not because of their disabilities but because the parents do not emphasize literacy activities and therefore the size of the HLE decreases.

Expanding upon the idea of the positive influence a Home Literacy Environment (HLE) has on literacy development, Weigel, Martin, and Bennett (2010) examined particular factors within the home environment (family routines, family resources, and parent stress) to determine the influences they exert on early literacy development. Participants of the study included 85 parents (80 mothers and 5 fathers) who were primarily white, of a middle-SES and fairly well-educated (24% earned a bachelor’s degree, 32% earned a graduate degree) and their 85 children (40 girls and 45 boys) who were at least 3 years old, but not in Kindergarten. Data were collected through a parent questionnaire to investigate family routines, family resources, and parent stress; further data were from assessment of children’s print knowledge and emergent

writing skills using the Child's Emergent Literacy Task (CELT). The same questionnaire and assessments were administered one year later. Data showed that family assets and children's literacy scores in print knowledge were "positively correlated with family routines" (p. 14) and a "child's reading interest was positively correlated with family resources" (p. 14). In contrast, "a child's reading interest was negatively correlated with parenting stress" (p. 14). Analysis indicated that "those parents reporting greater family resources also reported more regular routines in the family" (p. 13), while greater parental stress "was associated with lower resources and routines" (p. 13). Researchers determined that "the greater the reported resources and routines, the more frequent the parent-child activities" (p. 14). Therefore, less parental stress and more resources and routines in a home literacy environment appeared to lead to more parent-child literacy interactions in the home, thereby increasing the size of the HLE and its positive influence on literacy development.

Bracken and Fischel (2008) more closely examined family resources and routines; they explored the relationships among various types of family reading behavior, between aspects of family reading behavior and children's early literacy skills. They also looked at how family demographics (parental education, parent and child age, family size) related to family reading behavior, and at the role family reading behavior played in predicting preschool literacy development. Their purpose was to determine whether low-SES might play a role in a child's literacy development because of the possible impact of SES on home environment. Bracken and Fischel defined SES based on household income, level of parental education, and ethnicity. Participants of this study were 233 preschool age students of low-SES who attended full-day, full-week Head Start from September through June. The primary caregiver completed a Family Reading Survey which contained five survey items relating to the home literacy environment (HLE). Students were assessed for their reading readiness, receptive vocabulary skills, letter knowledge, and knowledge of story and print concepts using Get Ready to Read! screen from the National Center for Reading Disabilities, the Peabody Picture Vocabulary Test-III (PPVT-III), the letter naming task developed for Family and Child Experiences Survey (FACES), and the Letter-Word Identification subtest of the Woodcock Johnson-Revised Test of Achievement (WJ-RTA). After analyzing the data collected, researchers found "parent-child reading interaction played a significant role in predicting early literacy skills above and beyond the influence of family demographic variables" (p. 60), and that child interest in reading was also a result of

parent-child interactions. In addition, researchers found there was “a tremendous variation in the reading behavior of families of low-SES” (p. 62); however, “important literacy activities” were also “taking place” (p. 62) in these low-SES homes. Therefore, Bracken and Fischel conclude that home literacy environment may be a greater influence in literacy development than low-SES. In addition, “family reading behaviors and associated variation in the skills” (p. 64) students bring with them to school may provide important information for teachers in that “recognition of such variation may impact the approach taken to teaching literacy skills in the classroom” (p. 64).

### **Summary of the Review**

This literature review contains reviews of 20 research studies related to the question of factors that may account for differences in literacy ability among children entering Kindergarten. These studies were found through searches of academic databases using the keywords of *preschool literacy development*, *emergent literacy*, *early literacy*, *measuring early literacy growth*, *causes of kindergarten literacy gaps*, and *factors influencing literacy growth*. From a preliminary review of the literature, two categories of factors emerged: Formal Schooling Before Kindergarten and Home Literacy Experiences (HLE). The Formal Schooling Before Kindergarten category contains eleven studies that range from 1992 to 2014. Two studies examine the impact of pre-school on literacy development, three examine teacher practices, two look at curriculum, three study the influence of SES on literacy development when instruction is involved, and one looks at the influence literacy instruction has on students who are verbally precocious. The Home Literacy Experiences category contains nine studies that range from 1998 to 2010. Four of the studies examine the impact of HLE and SES on literacy development, two studies examine the influence of HLE on literacy development and language development, one study compares the influence of HLE and genetics, one looks at specific components within the HLE, and one examines the influence of HLE on older children with specific reading disabilities.

### **Chapter 3: Methodology**

To address the research question of what factors may account for differences in literacy ability among children entering kindergarten, and what might a reading specialist do to address these differences, an extensive review of the literature was conducted. This chapter addresses the data collection process, the data analysis, and the synthesis of that data. The data collection section describes how the research studies were found for this particular study and what was done to organize the data. The data analysis section provides an examination of all the research studies collected and draws connections among common themes. The synthesis section summarizes what was found as a result of the data analysis and identifies findings for this study.

#### **Data Collection**

Data for this research synthesis consist of the 20 research studies found through the data collection process of exhaustively searching the leading educational databases for peer-reviewed research studies. Data were then organized into two categories: formal schooling before Kindergarten and Home Literacy Experiences. These categories emerged from an analysis of the preliminary data. These categories became the codes and themes for further data analysis, which is explained in the next section.

#### **Data Analysis**

To begin, all collected studies were analyzed to determine categories and themes for the data. Studies within each category were then analyzed and synthesized to produce new findings. Findings from each category were then further synthesized to produce results related to the research question for this study. The remainder of this section details the analysis process and the results.

The first category of studies are those examining formal schooling before Kindergarten. Of the 11 studies in this category, two (Weiland & Yoshikawa, 2013; Peisner-Feinberg, Schaaf, LaForett, Hildebrandt, & Sideris, 2014) examine the impact of preschool as a whole on literacy development and specifically its impact on diverse groups of children. Together these studies

show that attending preschool prior to Kindergarten does have a positive impact on children's literacy development and school readiness regardless of the diversity or non-diversity of the children. Along with those two recent studies, two earlier ones (Magnuson, Meyers, Ruhm, & Waldfogel, 2004; Magnuson, Ruhm, & Waldfogel, 2007) show that child demographics, including low SES, do not decrease the impact of attending preschool. However, something that does appear to influence the impact of preschool is the quality and type of instruction. Mashburn (2008) determines that the quality of the instruction is a key characteristic of a preschool for influencing literacy development in children. The types of instruction that appear to have a strong positive impact on literacy development are instruction in phonics (Muter, Holme, Snowling, & Stevenson, 2004), print-focused instruction (Justice, Kaderavek, Fan, Sofka, & Hunt, 2009), and instruction that involves active listening, providing feedback, and modeling rich language (Wasik, Bond, & Hindman, 2006). For "at-risk" children, instruction using interactive book reading and vocabulary building provides positive impact (Wasik & Bond, 2001). A preschool curriculum that integrates English Language Arts with phonics instruction appears to benefit all children regardless of SES (Xue & Meisels, 2004). Together these studies show that quality instructional interactions between teachers and students while incorporating the formal instruction of phonics, print referencing, teacher active listening and interactive book reading in preschool prior to Kindergarten have a positive impact on children. Together these studies also show that preschool literacy instruction has a greater impact on literacy development prior to Kindergarten than does a child's socioeconomic status. Besides considering SES, one study (Crain-Thoreson & Dale, 1992) looks into the influence preschool literacy instruction has on children who are verbally advanced for their age, and finds that preschool literacy instruction has a positive influence on literacy development regardless of a child's level of language development.

The second category of studies are those examining home literacy experiences. Of the nine studies in this category, one (VanSteensel, 2006) studied the concept of home literacy experiences and found that measures of home literacy experiences may be better predictors of positive literacy development and school success than a child's demographic factors such as socioeconomic status (SES) and ethnicity. When SES is measured by maternal education level, research shows that home literacy experiences have a greater impact on literacy development than SES regardless of the SES level (Christian, Morrison, & Bryant, 1998), and that low vocabulary

growth is more of a result of home literacy experiences than of SES levels (Hoff, 2003). Using a broader measure of SES, one study (LaParo, Justice, Skibbe, & Piñata, 2004) finds that SES levels are factors in language and literacy development only indirectly because they impact a mother's sensitivity and depression, which do produce direct influence on a child's language and literacy growth. Burchinal, Jurgens, and Roberts (2005) find that it is the overall quality of the home literacy environment, not specific experiences alone, that provide a better impact on and predictor of a child's literacy development. Another study (Samuelson, et al., 2005) finds the role of the home literacy environment to be even more significant than the genetics of the child. However, specific home literacy experiences, internal factors such as the availability of resources, family routines, and parent-child literacy interactions, have been found to have more of an influence on literacy development than SES (Bracken & Fischel, 2008). The impact of SES appears to be indirect; Weigel, Martin, and Bennett (2010) find that family stress resulting from SES, and not demographics, impacts the home literacy experiences by decreasing the number of parent-child activities. Another study (Rashid, Morris, & Sevik, 2005) found that for older children with specific reading disabilities (RD), it was not the disability that reduced the impact of home literacy experiences, but the size and number of home literacy experiences in the home.

## **Synthesis**

The results emerging from the analysis of each of the two categories can now be synthesized (combined) into findings that address the research question for this study: accounting for variance in literacy skill levels among Kindergarten children. The first category of studies are those examining formal schooling before Kindergarten. Analysis shows that attending pre-school prior to Kindergarten does have a positive impact on children's literacy development and school readiness regardless of the diversity or non-diversity, or socio-economic status (SES) of the children. In addition to the pre-school experience as a whole, certain factors within a preschool also provide positive impact: the quality of instruction, and the type of instruction with phonics, print-focus, and active listening, feedback, and language modeling by the teacher. A preschool curriculum that integrates English Language Arts with phonics instruction appears to benefit all children regardless of SES. Together these studies show that quality instructional

interactions between teachers and students while incorporating the formal instruction of phonics, print referencing, teacher active listening and interactive book reading in preschool prior to Kindergarten have a positive impact on all children, regardless of a child's SES or reading disability or level of language development. Analysis also shows that the often perceived negative impact of low SES is not a direct factor but only indirectly in that it may hinder a child's attendance at preschool.

Three significant findings emerge from this category. First is that participation in a formalized preschool, which included structured literacy instruction, has a positive impact on the literacy development and school readiness of all children, regardless of their diversity or non-diversity, or socio-economic status (SES). Second, the quality and type of instruction a child receives in preschool has an impact on that child's literacy growth, and third, the impact from attending preschool is not directly influenced by a child's SES or demographics. Therefore preschool accounts for differences in literacy ability among Kindergarten children because children who do not receive this positive preschool impact which their peers do will usually have lower levels of literacy skills when entering Kindergarten.

The second category of studies are those examining home literacy experiences. Analysis of the data reveals that measures of home literacy experiences may be better predictors of positive literacy development and later school success than a child's demographic factors such as socio-economic status (SES) and ethnicity. Home literacy experiences have been found to have a greater impact on literacy development than SES regardless of the SES level. SES levels are factors in language and literacy development only indirectly because they can impact family stress and a mother's sensitivity and depression as well as the size and number of literacy activities in the home. Home literacy experiences include the home literacy environment, which has been shown to be even more significant to literacy development than the genetics of a child. Specific home literacy experiences include such things as availability of resources, family routines, and parent-child literacy interactions, all of which have been found to have more of an influence on literacy development than SES.

Two significant findings emerge from this category. First is that home literacy experiences have a greater impact on literacy development than SES regardless of the SES level. Specific home literacy experiences include such things as the home literacy environment, availability resources, family routines, and parent-child interactions -- all of which have been

found to have more of an influence on literacy development than SES. Second, SES levels are factors in language and literacy development only indirectly because they can impact family stress and a mother's sensitivity and depression as well as the size and number of literacy activities in the home. Low socioeconomic status and a mother's level of education do not automatically mean poor literacy development, neither do they hinder literacy development when there is a rich home literacy environment.

One insight that emerges from this analysis is that while several studies (VanSteensel, 2006; Hoff, 2003; Christian, Morrison, & Bryant, 1998; LaParo, Justice, Skibbe, & Piñata, 2004; Bracken & Fischel, 2008) addressed socio-economic status (SES), as a possible factor influencing literacy development, the definition of this factor varies widely among the studies. Some use the concept of family income level and parents working outside the home, some include ethnicity, some include maternal education, and one uses maternal education level exclusively. This variance means that for this study, while home literacy experiences have been found to have a greater influence than SES on a child's literacy development prior to entering Kindergarten, the applicability of these findings may be limited.

The second part of the research question for this study deals with application: what might a reading specialist do to address these differences? Applying these findings to the job of a reading specialist means that first the specialist gains the new knowledge produced in these findings. The first piece of knowledge is that variance in literacy ability among Kindergarten children may be caused by attendance and non-attendance at a preschool and by the instructional quality at a preschool. The application of this knowledge is that each year before school starts, the specialist should help the Kindergarten teacher discover which entering students attended a preschool and which preschool they attended. This activity will help the teacher identify which students may need additional help to improve their literacy ability levels. The second piece of knowledge is that variance in literacy ability among Kindergarten children may be caused by the quality and quantity of home literacy experiences and not by socioeconomic status however the specialist defines it. The application of this knowledge is that the reading specialist can coach the teacher in instructional practices for the lower literacy ability students that will mirror the literacy experiences the higher literacy ability students already had at preschool or at home. These practices may include phonics instruction, interactive book reading, print-focused instruction, language modeling, and constructing a literacy rich environment.

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

### **Results of the Review**

After completing a review of the literature to determine what research has been conducted to date on which factors may account for differences in literacy skill level among children entering Kindergarten, this researcher has determined five key findings from this synthesis. The first is that participation in a formalized preschool, which included structures literacy instruction, has a positive impact on the literacy development and school readiness of all children, regardless of their diversity or non-diversity, or socio-economic status (SES). Second, the quality and type of instruction a child receives in preschool has an impact on that child's literacy growth, and third, the impact from attending preschool is not directly influenced by a child's SES or demographics. Fourth is that home literacy experiences have a greater impact on literacy development than SES regardless of the SES level. Fifth is that SES levels are factors in language and literacy development only indirectly because they can impact family stress and a mother's sensitivity and depression as well as the size and number of literacy activities in the home. Low socioeconomic status and a mother's level of education do not automatically mean poor literacy development, neither do they hinder literacy development when there is a rich home literacy environment.

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

Findings from this study carry implications and importance for reading specialists. The second part of the research question for this study asks what a reading specialist might do to address these differences. The primary thing for a reading specialist to do would be to pass the findings along to Kindergarten and grade one teachers and help them determine activities they could do to help students who have under-developed literacy skills in Kindergarten and grade one. Passing along information is a form of professional development. The most appropriate format to convey this information is a professional development video.

## **Design of a Professional Development Project**

The design of this professional development project will be a video to be shared freely on the internet, specifically shared on YouTube and Teacher Tube. This professional development video is intended for Kindergarten and grade one teachers. The information and instruction that the teachers will receive when they watch this video will be supported by the findings from this research synthesis. The video will begin by showing the problem that this synthesis study addresses, explaining how this researcher determined some answers to the problem by conducting a research synthesis, and concluding with some practical suggestions for Kindergarten and grade one teachers to help them increase the literacy abilities of their students who appear to have lower ability levels than their Kindergarten classmates. Further details are discussed in the subsections that follow.

### **Literacy Coaching Project Goals and Objectives**

The fundamental goal of this professional development video project is to support Kindergarten and grade one teachers who are working with students to help them increase the literacy abilities of their students who appear to have lower ability levels than their Kindergarten classmates. The learning objectives and intended learning outcomes for teachers who watch this video are that they will be able to gain knowledge about factors influencing these variances in literacy ability and create a list of instructional activities they may use in their classrooms with their lower ability level students.

### **Proposed Audience and Location**

This proposed professional development project is for the professional audience of classroom teachers in Kindergarten and grade one. A reading specialist can share the YouTube video website through an email so teachers can watch it at their leisure, or it can be shown in an organized time of professional development where Kindergarten and grade one teachers watch the video together and collaborate in a classroom in the school or the room which is used specifically for professional development.

### **Proposed Project Format and Activities**

This professional development will take the form of an online video. The video will include the problem and a synthesis this study addresses. It will explain how this researcher determined some answers to the problem by conducting a research synthesis, and then it will conclude with some practical suggestions for Kindergarten and grade one teachers to help them increase the literacy abilities of their students who appear to have lower ability levels than their Kindergarten classmates. Some activities will include how to bring home literacy activities into the classroom environment so students who are lacking this support can get it at school. Viewers will be asked to evaluate the video (see Appendix) both for its content and format, and then email their evaluation and comments directly to this researcher.

### **Proposed Resources for Project**

The primary resource needed for this form of professional development is an internet-capable computer or equivalent device to access the YouTube or Teacher Tube sites. Because these sites are a free resource, this format offers a cost effective form of professional development for school districts. The link to the video will provide potential users 24/7 access to the information and available activities to assist with literacy activities they may want to use in the classroom.

### **Project Ties to Professional Standards**

This professional development project ties to the Professional Standards of the International Literacy Association (ILA) because their Standard 6 requires reading specialist candidates to “recognize the important of, demonstrate, and facilitate professional learning and leadership as a career-long effort and responsibility” (IRA, 2010). Educators who voluntarily view this professional development video will meet this Standard by demonstrating participation in professional development as a professional responsibility. This professional development project also ties to the following New York State Teaching Standards (NYSED, 2011): Teaching Standard II: *Teachers know the content they are responsible for teaching, and plan instruction*

*that ensures growth and achievement for all students.* This teaching standard aligns with the purpose of this professional development video, which is to help Kindergarten and grade one teachers ensure growth and achievement for students who appear to have lower ability levels than their Kindergarten classmates or to help grade one students who also have low literacy abilities.

## **Chapter 5: Discussion and Conclusion**

### **Overview of Study and Findings**

This capstone project explores the question of what are some factors that may account for variance in literacy ability among children entering Kindergarten. This researcher has personal interest in this topic because of her own experience as a Kindergarten teacher where she saw children enter school with varying degrees of reading ability and skills. The most appropriate way to address this research question is with an exhaustive literature review and research synthesis. A synthesis of the found research was conducted and produced five findings. First is that participation in a formalized preschool, which included structured literacy instruction, has a positive impact on the literacy development and school readiness of all children, regardless of their diversity or non-diversity, or socio-economic status (SES). Second, the quality and type of instruction a child receives in preschool has an impact on that child's literacy growth, and third, the impact from attending preschool is not directly influenced by a child's SES or demographics. Fourth is that home literacy experiences have a greater impact on literacy development than SES regardless of the SES level. Fifth is that SES levels are factors in language and literacy development only indirectly because they can impact family stress and a mother's sensitivity and depression as well as the size and number of literacy activities in the home. Low socioeconomic status and a mother's level of education do not automatically mean poor literacy development, neither do they hinder literacy development when there is a rich home literacy environment.

### **Significance of the Findings**

These findings are significant to the field of classroom practice because they contribute new knowledge to account for variance of literacy ability among Kindergarten children, and this knowledge could impact teachers' curriculum design and instruction. This study shows that participation in formalized preschool which includes structured literacy instruction accounts for differences in literacy ability in Kindergarten, that low-socioeconomic status and a mother's level of education does not hinder literacy development when there is a structured home literacy environment, and home literacy experiences have a significant positive influence on a child's

literacy, language, and vocabulary development. These findings are also significant to the field of literacy generally because they provide a research-based identification of factors that account for differences in literacy ability among Kindergarten children, and Kindergarten and grade one teachers have the knowledge and a possible means for early prevention of reading struggles in students before they progress through higher grades.

### **Limitations of the Findings**

The findings for this study do have limitations. One is that they are based on the existing research, and that existing research into factors influencing early literacy development has proven to be small in number. There were limitations on what articles I could find and access. For example, I was only able to access published articles. I also found gaps in the research, such as time periods. There was no classroom research into actual efforts of Kindergarten teachers to raise the literacy levels of students who were behind in literacy achievement. In addition, I was unable to find research on other possible factors within the home literacy environment, such as the influences of older siblings on younger siblings.

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

The research question for this research study is, what factors may account for differences in literacy ability among children entering Kindergarten, and what might a reading specialist do to address these differences? After conducting this study and performing a research synthesis, this researcher determined five findings. First is that participation in a formalized preschool, which included structured literacy instruction, has a positive impact on the literacy development and school readiness of all children, regardless of their diversity or non-diversity, or socio-economic status (SES). Second, the quality and type of instruction a child receives in preschool has an impact on that child's literacy growth, and third, the impact from attending preschool is not directly influenced by a child's SES or demographics. Fourth is that home literacy experiences have a greater impact on literacy development than SES regardless of the SES level. Fifth is that SES levels are factors in language and literacy development only indirectly because they can impact family stress and a mother's sensitivity and depression as well as the size and

number of literacy activities in the home. Based on these findings, one answer to this research question is that attendance at a preschool that offers quality teacher instruction in literacy and the quality of child's home literacy experiences, regardless of socioeconomic status, appear to account for variances in literacy ability among children entering Kindergarten. As an application of this answer, reading specialists can inform teachers in Kindergarten and grade one of these factors and share ideas and activities to help teachers supplement a child's literacy achievement.

### **Recommendations for Future Research**

The limitations of the findings of this research provide a basis for these recommendations for future research. Because existing studies are few, the first recommendation is for more research that explores this topic of accounting for differences in literacy ability among children entering Kindergarten. Specific studies that would make contributions to this area are those who examine teachers who used specific strategies to supplement successfully the literacy development of students in Kindergarten and grade one. In addition, there could be more research into other possible factors that make up the home literacy experience, and into whether teachers have tried to replicate these home factors in the Kindergarten classroom.

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**Appendix: Evaluation of Professional Development Video****Google Forms Evaluation Survey**

Thank you in advance for taking the time to complete this survey. This information will be kept anonymous, and will be used to enhance future forms of professional development.

**Viewing Situation**

alone  
 group

private area  
 school location

time of day  
 other location \_\_\_\_\_

**Evaluation Rating**

1. **How useful did you find this information?**
  - a. Very useful
  - b. Somewhat useful
  - c. Not useful at all
  
2. **How likely are you to use integrated curriculum in your classroom?**
  - a. Very likely
  - b. Somewhat likely
  - c. Not likely

**Feedback**

1. **What is something you particularly liked in the video?**
  
2. **What is something you were expecting to learn or see but it was not there?**
  
3. **What is one thing you would change about this video?**