

ABSTRACT

Title of dissertation: LITERATE BEHAVIORS IN AFRICAN AMERICAN
HEAD START FAMILIES: A MULTIPLE LITERACIES
PERSPECTIVE

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Low literacy and illiteracy have been documented among low-income African American children. The problems associated with low literacy and illiteracy often extend into adulthood, with potentially devastating consequences. Low-income African American caregivers are frequently portrayed as devoid of any interest in their children's literacy development and achievement. Additionally, it has been suggested that these caregivers provide homes that are literacy impoverished, often without any literacy activities (e.g. shared book reading, visits to the library) occurring on a routine basis.

Qualitative researchers have documented specific literacy practices in which low-income families engage. Frequently, these literacy practices are a function of the context in which the family is currently embedded. Although a qualitative literature exists regarding these literacy practices, its utility is limited due to small sample sizes and lack of quantitative documentation on their contribution to children's language and literacy development. This study attempted to bridge the gap between the qualitative and quantitative literatures.

Fifty-one low-income African American mother-child dyads participated in this exploratory family literacy study. The contribution of multiple literacy practices, both traditional and non-traditional, was examined in relation to child language and literacy outcomes. It was found that most low-income African American families engaged in multiple literacy practices. Analyses revealed that although the quality of the home literacy environment contributed to children's language and literacy development, child receptive language explained most of the variance in children's preschool literacy development.

Recommended areas for future research directions included standardization of an instrument to capture literacy practices that have been highlighted in *both* the qualitative and quantitative literatures. Additional recommendations for practitioners included providing parent training that encouraged families to use non-traditional literacy practices to help facilitate their children's literacy development.

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by

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Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2004

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This Accomplishment Is Proudly Dedicated To...

Waddell, my best friend for 14 years, my husband, my biggest cheerleader, my largest source of support. One woman should not be so lucky as to have a wonderful companion, husband, and father to three children all in one, but I do. I understand the blessing that you are in my life. I love you and will be forever grateful to God for giving us to each other. We're a perfect fit!

My babies here on Earth...Jason, Jocelyn, and Jordan. Each of you in your own special way has helped me understand what the true pleasures in life are...little fingers, fat legs, messy hands, sweet kisses, runny noses, quiet stories, singing too loudly – but just right for us, days at the park, nights in the backyard, not-so-funny-knock-knock jokes, teary eyes, toothless smiles, and countless “I love you’s” just because. I treasure our precious moments – those remembered and those forgotten too soon, and the memories yet to come. Thank you for choosing me.

And to those in Heaven, Mommy loves you too.

Acknowledgements

This research was supported by a Head Start Scholars Graduate Student Research Grant from the Department of Health and Human Services – Administration for Children and Families. I am most grateful to the children and mothers of Head Start for participating in this study.

Additionally, I wish to thank the administration and staff of Head Start for their assistance.

Brenda, I don't really know where to begin...Our relationship extends beyond what most students could ever expect from an advisor. Thank you for your kindness, support, good humor, toughness, and friendship the past five years. Through you, I have a full understanding of what mentorship really means. Thank you for helping me navigate this process – I could not have accomplished it with anyone else. You're the best!

David, thank you for your unwavering support and assistance. You made this process seem more navigable and possible. Thank you for your kindness over the years. Thank you for offering me an opportunity to join your research project with at-risk teenage mothers. And thank you for demonstrating what faculty mentorship is really about. I won't forget it.

Dr. Wigfield, Dr. Guthrie, and Dr. Saracho, thank you for your willingness to serve as advisors for this project. Your feedback and support helped me learn more about being a researcher, and I appreciate it.

I could not have completed this dissertation without the assistance of Elynn Lewis. I want to thank you for your flexibility and support during data collection and entry. I wish you the best as you begin your career as an educator, you're going to be awesome.

Dr. Ann Battle – You have been a friend, a mentor and a shoulder to lean on during the past few years. I appreciate that I have gotten the opportunity to know you, and your presence in my life is a gift. Thank you.

Mommy – You set the example years ago. You are the proof that you can be a mother and have a career, and do both equally well. Thank you for your support, encouragement, and for being the role model that every girl should have to look up to.

Ms. Agnes – I am aware that this is as much your graduation as mine. Thank you for your unconditional, never-ending, and selfless support. Thank you for helping in so many ways to raise my children. Thank you for being who you are and for accepting me in your life as your daughter. Thank you for your love and encouragement and for your early mornings and your late nights. Thank you for the many, many, many, many meals! Thank you for helping me understand and appreciate what marriage, and mothering, and cooking, and gardening were all about (I'm still working on the cooking part). And most of all, thank you for sharing yourself with my children. I couldn't have dreamed of a better mother-in-law, and they couldn't have gotten a better Ma-Ma, and I am so grateful.

Jewel Kerr Jackson and Joi Kerr Walker – I cannot count the days that you helped me get through. Your homes and hearts were always open to my children so that I could get the job done. We didn't choose to be sisters, but we have chosen to be friends. I love you! Thank you to your husbands too, because they also supported me during these years.

I want to extend a special thank you to my uncle, Alphonso Gillis. Thanks for helping me with my document, and for everything over the years. You're # 1!

And to my extended family...thank you for your support over the years. If I tried to name you all, I would certainly leave someone out. Please believe that your names are etched in my heart and in my memory. Thank you each for helping me achieve this goal.

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Chapter I

Introduction & Conceptualization

In recent years, family literacy intervention has been identified as an effective approach for improving the literacy levels of parents and children, thus reducing the incidences of intergenerational transmission of illiteracy or low literacy. The literature on family literacy has focused primarily on programmatic issues related to defining, developing, and implementing family literacy programs. There is a more limited literature on family literacy research, but it has to some extent studied processes that occur in families that best promote literacy development. However, there has been minimal quantitative research that examines within group differences in literacy practices within the low-income African American community, and how differences in those practices affect children's performance on literacy outcomes.

Family Literacy

“Family literacy” reflects the processes that occur between family members which both promote and facilitate literacy development and use. Although the term family literacy is often described as difficult to define, (Morrow, Paratore, and Tracey, 1994, as cited in Morrow 2001),

The Family Literacy Commission offers the following description of family literacy:

1. Family literacy encompasses the ways parents, children, and extended family members use literacy at home and in their community.
2. Family literacy occurs naturally during the routines of daily living and helps adults and children “get things done”.
3. Examples of family literacy might include using drawings or writing to share ideas, composing notes or letters to communicate messages, keeping records, making lists, following written directions, or sharing stories and ideas through conversation, reading, and writing.
4. Family literacy may be initiated purposefully by a parent, or may occur spontaneously as parents and children go about the business of their daily lives.

5. Family literacy activities also may reflect the ethnic, racial, or cultural heritage of the families involved. (p. 60).

Thus, family literacy theory and practice is based on the belief that literacy emerges and is facilitated through literacy related social interactions between individuals. According to researchers (Auerbach, 1989; Baker, 1999; Purcell-Gates, 1997; Taylor & Dorsey-Gaines, 1988), families facilitate these literacy interactions based on culturally specific and contextually salient practices. For example, the use of the Bible and religion-related materials is a culturally specific practice in many African American homes (Baker, 1999; Elish-Piper, 1997; Purcell-Gates, 1997; Taylor & Dorsey-Gaines, 1988). This type of literacy use, along with other multiple practices, will be discussed in Chapter Two. Although there is a quantitative literature that documents these practices (Baker, 1999), as well as a qualitative literature (Elish-Piper, 1997; Purcell-Gates, 1997; Taylor & Dorsey-Gaines, 1988), a thorough examination of how these culture-specific practices relate to literacy outcomes would be beneficial to developing intervention efforts geared toward improving the literacy levels within the low-income African American community. Additionally, there is a need to examine variability in literacy practices and development within a group of low-income African American families. According to Garcia Coll and her colleagues (1996), utilizing a within-group design is critical when studying minority populations. Frequently there are culture-specific differences within the population that may be overlooked when using between-group designs.

Theoretical Basis

Research related to family literacy is frequently grounded both in Vygotsky's (1978) sociocultural theory and in Bronfenbrenner's (1979) ecological systems theory.

Vygotsky (1978) proposed that children interact with others in social contexts and that these interactions are critical to shaping the learning, thinking, and behavior of the child. He also proposed that human behavior should be studied within the context of the environment in which it is situated, and should not be studied independently. A decontextualized study of human behavior would assume a level of independence between the individual and the environment which does not exist. A key component of Vygotsky's theory is the idea that less experienced individuals rely on more experienced individuals to facilitate their growth and development. Also key is the notion that development is culture-specific, and may differ between cultural groups. This premise substantiates arguments for and acknowledgement of differences in the use of literacy practices from one culture to another.

Critical to Vygotsky's theory is the zone of proximal development (ZPD). The ZPD is defined as the distance between what an individual can do independently and what he or she can do with the support of a more knowledgeable, experienced, and capable peer or adult. Activity within the ZPD would encourage the developing child to reach just beyond his or her current level of understanding and proficiency. The support provided by the more skilled individual would gradually decrease as the learner's competencies increased. Additionally, once a level of mastery has been obtained, new levels of challenge would be presented within the learner's new ZPD.

When considering the relationship of the ZPD to literacy development, the child's emerging literacy would best be enhanced when the adult or other more skilled individual (e.g. siblings, other relatives within the household) provides scaffolding that supports the use of and engagement in literate behaviors. In the home, there are multiple opportunities for the more skilled adult or sibling to provide scaffolding to the child as she or he engages in literate behaviors. Vygotsky's notion of scaffolding by more skilled others (i.e. providing enough support to move the individual just beyond his or her current ability level, with a gradual decrease in support as the individual becomes more competent) materializes in the home when older siblings, parents, grandparents, or other relatives support the child's efforts at participating in literate practices. Those efforts may include: composing lists, writing notes to family members, reading books, and clipping coupons.

Rogoff (1990) expanded on Vygotsky's notion of the zone of proximal development with her notion of guided participation. According to Rogoff, less experienced children are guided in their participation of activities that are culturally salient. This guidance is done by more knowledgeable and skilled individuals and occurs "through collaboration and shared understanding in routine problem-solving activities" (Rogoff, 1990, p. 191). Similar to Vygotsky's theory, the learner gradually assumes more responsibility for the learning task as he or she becomes more competent. As the learner and the more skilled individual participate in problem-solving activities related to literacy, the learner gains a better understanding of the processes involved and the importance of engagement in literate practices. As the learner's understanding increases, the individual responsible for guiding that learner allows him or her to begin to assume more responsibility for the learning activity. For example, when the child sees

the mother writing a note to an older sibling (Taylor & Dorsey-Gaines, 1988), the child begins to view that practice as culturally important. The child may request assistance writing a note of his or her own, and would be expected to eventually assume full responsibility for writing notes to others.

A more complex theoretical model has been postulated by Bronfenbrenner (1979). According to his ecological theory, individuals develop within the context of a number of ecological systems. Each of these systems is connected with the individual and with one another, and may either support or cause damage to the developing individual. The microsystem is the innermost layer in Bronfenbrenner's model. This system is the one that the individual is most personally and immediately influenced by. The individual may be influenced by, and may also influence, the context in which the event is taking place (e.g. at home, at church, in school). When considering the critical role of the family in the emerging literacy of the child, this system is of the most interest. Study of processes in the microsystem would include an examination of literacy interactions within the home between the child and other family members which may both influence and be influenced by a number of factors, including: differences in the quality of the caregiver-child relationship, differences in the behavior of the child, and the quality of the home environment. For low-income and minority individuals, the microsystem could serve as a buffer that helps to modify the effects of the outermost layer, the macrosystem. Focusing on and incorporating family strengths when considering literacy development could prove to be a positive influence for those living in poverty and in poverty stricken communities.

The mesosystem is Bronfenbrenner's second layer in his ecological model. This layer deals with interactions between two or more of the systems in the child's ecology. If, for

example, the learner attends a neighborhood school, one may be interested in the interaction between the school and the community which could influence the child. That interaction could be an outreach program designed by the school to encourage parental involvement or an effort by the school faculty to place books in the homes of all children in the school. Regardless of the specific outreach effort, studying similarities or differences in the individual's behavior in these different settings can inform researchers about differences in the use of literacy depending on the context. Bronfenbrenner's third layer is the exosystem. It also includes links between systems, but the individual need not be present in order to be affected. For example, when a caregiver seeks education to increase his or her literacy levels in order to gain steady employment, the developing child is indirectly affected. The outermost layer of Bronfenbrenner's model is called the macrosystem. This system is related to the values, customs, and laws of the culture in which the developing individual is embedded. A consideration of these systems is important when considering family literacy intervention, as changes in any of the systems described, without effective support in the others, could fail to affect the desired change (deJong & Leseman, 2001; Leseman & deJong, 1998).

Taken together, Vygotsky's, Rogoff's, and Bronfenbrenner's theories suggest that the study of family literacy should: (1) consider the family within the context of the environment in which they are embedded, (2) explore families' engagement in culture-specific literacy practices, and (3) examine the quality of the interaction in the family and its potential to promote literacy development.

Rationale

Low-income minority children are at high risk for low academic achievement, particularly in the literacy domain. There is evidence that these children consistently score below their White, middle-class counterparts on measures of emerging literacy (e.g. knowledge about print, phonological awareness, language functioning) (Adams, 1990; Beach, 1996; Blachman, Ball, Black, & Tangel, 1994; Bus & van IJzendoorn, 1999; Davidson and Snow, 1995; Rush, 1999; Snow, 1983, 1991) and reading (Campbell, Hombro, & Mazzeo, 2000; Donahue, Finnegan, Lutkus, Allen, & Campbell, 2001). There is also evidence that this disparity continues into adulthood (Kirsch et al., 2000).

Researchers are aware of factors that influence literacy development in young children. Factors that have been studied include: maternal educational level, maternal IQ, caregiver beliefs related to literacy acquisition, caregiver involvement in school, the affective quality of the caregiver-child relationship, and the quality of the home literacy environment.

Researchers have found that increased levels of maternal education correlate with children's scores on measures of receptive vocabulary, expressive vocabulary, and their metalinguistic awareness abilities (Burchinal et al., 1997; Chaney, 1994; Payne, Whitehurst, & Angell, 1994). However, individuals pursuing this line of research have failed to consider the qualitative evidence (e.g. Taylor, 1983) that parents with lower levels of education frequently provide literacy support in other ways (e.g. using literacy for survival purposes, such as to clip coupons, read bus schedules, or to read street signs).

Caregiver involvement in the school context has been noted as a factor that influences children's academic achievement (Hill, 2001; Hoover-Dempsey, Bassler, & Brissie, 1987;

Hoover-Dempsey & Sandler, 1997). Specifically, researchers have identified the caregivers' amount and type of school involvement, along with the caregiver's perceived sense of competence to act effectively, as factors that contribute to children's academic achievement. There is evidence pointing to the negative experiences that low literate or illiterate caregivers have faced in the school context. Those experiences have led to a system of beliefs that often causes caregivers to feel alienated and ostracized within the school context, resulting in decreased levels of participation (Hill, 2001; Hoover-Dempsey, Bassler, & Brissie, 1987; Hoover-Dempsey & Sandler, 1997).

One factor that is repeatedly noted in the literature to predict literacy development is parent-child engagement in storybook reading (Adams, 1990; Bus & van IJzendoorn, 1995; Dickinson & DeTemple, 1998). This research has demonstrated that repeated experiences with storybook reading increases children's sense of story structure as well as their exposure to vocabulary. Exposure to storybooks has also been shown to increase the child's use of decontextualized language (Davidson & Snow, 1995; Dickinson & Snow, 1987; Snow, 1983, 1991), a skill that increases the child's knowledge of story structure and aids in reading comprehension. This research assumes that: 1) literacy is developed in a unidirectional fashion, from caregiver to child; 2) storybook reading is the most effective way to foster the skills necessary for later success in reading; and 3) parent-child book reading events are the primary source for literacy practices in all homes. Scholars have asserted that this view is congruent with a deficit perspective, ultimately disregarding other qualitatively documented, multiple literacy practices in which the family may engage (Auerbach, 1995a, 1995b; Taylor & Dorsey-Gaines,

1998). Additionally, this view neglects other family members as active participants in literacy practices (e.g. grandparent, siblings, extended family members, etc.).

Finally, the quality of the home literacy environment has been shown to predict children's later reading achievement (Dickinson & DeTemple, 1998; Fitzgerald et al., 1991; Manning & Manning, 1984; Morrow, 1983). Typically, this line of research has addressed such indicators as: number of books in the home, number of books owned by the child, number of subscriptions to newspapers and magazines, and the frequency of the caregiver's engagement in reading. Many of these indicators require that the caregiver spend money to acquire these items. In low-income homes, purchasing these items may not be the top priority of caregivers whose primary concerns are related to paying the rent, paying child care expenses, paying utilities, and providing other basic necessities for the family. Research on the home literacy environment should also consider different, less traditional ways that low-income, minority caregivers provide literacy interactions with their children.

When studying low-income and minority populations, researchers have called for a closer examination of within group processes (Garcia Coll et. al, 1996). This examination would allow scholars to make statements about similarities and differences in patterns of behavior that are culture-specific, and not colored by confounding factors such as socioeconomic status or race. For example, differences in parenting style, including values and goals, may materialize in differences in teaching behaviors exhibited by low-income parents, ultimately affecting differences in the academic achievement of their children (Hill, 2001). Additionally, this within-group examination could explore how different behavior patterns contribute to the emerging

literacy of the young child. Examining differences in literacy practices in a low-income Head Start population would be an important step toward actualization of this goal.

Some qualitative researchers have described multiple literacy interactions that occur in low-income homes which are related to literacy (Baker, 1999; Elish-Piper, 1997; Purcell-Gates, 1997; Taylor & Dorsey-Gaines, 1988). Those interactions include: literacy for survival sake (e.g. clipping coupons, reading a bus schedule), for organizational/record keeping purposes (e.g. shopping lists), to fulfill institutional requirements (e.g. completing school forms), for correspondence (e.g. writing letters to friends and family), for religious purposes (e.g. reading the Bible), or for recreation. Although these multiple literacy interactions are well documented in a qualitative manner, these data have not been well documented quantitatively.

Leseman and deJong (1998) stated that, “testing of the hypotheses generated by the ethnographic accounts within a quantitative research paradigm is lacking” (p. 297). Their recent study, conducted in the Netherlands, was designed specifically to address this issue. The authors examined low-income, inner-city children from the Netherlands to determine which aspects of the home literacy environment contributed to the child’s language and literacy development. They found that together, the effects of home literacy factors (i.e., literacy opportunity, instruction, and cooperation) accounted for more variance in language and achievement outcomes than either facet independently. Leseman and deJong’s study represented an initial effort to bridge the gap between the quantitative and qualitative literature. An examination of the processes used by African American low-income minority families in this country that have been described in the qualitative literature is warranted.

To summarize, there is evidence that disputes the perception that children in low-income minority families live literacy impoverished lives. The evidence is qualitative in nature, providing rich descriptions of daily literacy related interactions between caregivers and their children (see Chapter Two). This qualitative evidence provides a compelling argument for conducting quantitative studies that address the multiple literacies extant in low-income African American families. In this vein, the contribution of non-traditional practices to literacy development were examined. The present study sought to:

1. document the frequency and types of multiple literacy practices that occur in low-income African American families;
2. examine the relationship among various multiple literacy practices; and
3. determine the contribution of these multiple literacy practices to literacy outcomes.

Research Questions & Hypotheses

1. What are the multiple literacy practices that occur in low-income African American families?
2. What factors influence low-income African American children's emergent literacy?

Hypothesis 2a. Family engagement in multiple literacy practices will be associated with emerging literacy skills, receptive and expressive language, and higher levels of interest in literacy in low-income African American children.

Hypothesis 2b. Multiple literacy practices and quality of the home environment will significantly contribute to higher levels of emerging literacy, language, and higher levels of interest in literacy, beyond the contribution of maternal education.

Hypothesis 2c. Children with a sibling, grandparent, or other extended family member who engages in literacy interactions with them will have higher levels of emerging literacy skills, language, and higher levels of interest in literacy than those who do not.

Chapter II Literature Review

Current State of Field – Importance of Issue

In this new millennium, both educators and parents must prepare all children to be able to function effectively in a highly literate society. In order to function effectively, individuals need to be able to demonstrate literate behaviors, including the ability to use written language for personal expression and the ability to think and write like authors (Beach, 1996; Palinscar, David, Winn, & Stevens, 1991). Cooper (1997) states that the processes involved in literacy acquisition include the ability to read, write, listen, speak, and communicate effectively. With the knowledge that “approximately 80% of the population above the age of 12 now needs higher literacy competency for full participation in society,” it seems inconceivable that a person born in an industrialized country may not have the tools necessary to read and write effectively (Guthrie, 1996, p. 435). Yet, the United States Department of Education reports that between 40 and 50 million adult Americans, age 16 and over, are ill equipped to function in today’s society (Gadsen, 1995; Snyder, 1999).

This chapter will review the state of literacy in the United States, Maryland, and the District of Columbia for both adults and children, with a closer examination of differences between racial and socioeconomic groups. Additionally, this chapter will examine consequences associated with low levels of literacy in the present society. Approaches to understanding literacy in minority families, including deficit and non-deficit approaches will also be addressed. Finally, this chapter will propose an integration of multiple approaches to examining literacy in low-income minority families.

Current State of Literacy – US, Maryland, District of Columbia

National Test Results: The National Assessment of Adult Literacy (NAAL) is a large-scale survey that randomly selects and surveys individuals living within the United States (Kirsch, et al., 2000). This survey is administered every ten years. The survey described here, conducted in 1992, sampled thirteen thousand individuals aged 16 and over in their homes. An additional 1,000 participants were randomly selected from concurrently running state-level surveys, and over 1,100 inmates were randomly selected from state and Federal prison systems.

According to literacy experts, adults who scored in level one (21-23% of the respondents) or level two (25-28% of the respondents) do not have the basic skills necessary to function effectively in society. That is, they cannot locate information in a table, cannot use a street map to locate an intersection, cannot find two pieces of information in a sports article, and cannot complete an application for social security. (Kirsch, et al., 2000)

The United States Department of Education reports that fewer than 5% of Americans scored at level 5 on the prose and document portions of the NAAL. This is the highest possible literacy level that one can attain. Conversely, 21% and 23% of Americans scored at Level 1 on the prose and document portions, respectively. Locally, 20% of the adults in the state of Maryland and 37% of the adults in the District of Columbia performed at the lowest performance level, Level 1 (Kirsch et al., 2000). These adults “cannot read newspapers easily, understand manuals for the operation of mechanical equipment, write letters, fill in any but the simplest form, or in other ways function as informed citizens capable of maintaining the type of jobs

which will increasingly be available in the 21st century” (Snow, 1991, p.5). In essence, these adults are functionally illiterate.

The evidence regarding children is similarly troubling. Data reported by the National Assessment of Educational Progress (NAEP) have shown that African American and Hispanic students, ages nine, thirteen, and seventeen, consistently score significantly below their White, non-Hispanic counterparts on measures of proficiency in reading (Campbell, Hombo, & Mazzeo, 2000). Currently, the NAEP defines four levels of performance on measures of reading: below basic, basic, proficient, and advanced. Students identified as performing at the below basic level have not demonstrated any of the necessary skills or knowledge required for the basic level of proficiency or above. Students who perform at the basic level demonstrated a partial mastery of the knowledge and skills that are fundamental for proficient work at a given grade level. These students are able to make relatively obvious connections between the text and personal experiences, and they are able to make simple inferences. Students identified as proficient demonstrate solid academic performance. These students display an overall understanding of the text and are able to extend the ideas in the text by making inferences, drawing conclusions, and making connections with their own experiences. Finally, advanced students demonstrate superior performance at their grade level. These students are able to generalize about topics in the reading selection, are able to judge text critically, and can provide detailed answers which indicate careful thought. A description of the performance of children on the NAEP follows.

The 2000 NAEP data reveal differences in reading performance by both race and socioeconomic status. On the 2000 NAEP, significantly more Black and Hispanic students scored at the basic level than White students (63% and 58% versus 27%, respectively). The data

also reveal that significantly more White students score at the proficient and advanced levels than Black and Hispanic students (40% versus 12% and 16%, respectively). Differences in performance by socioeconomic status, as measured by eligibility for free or reduced-cost lunch, also revealed significant differences between groups of students. Of students who were eligible for free or reduced-cost lunch, 60% scored at the below basic level, 12% scored at the proficient level, and 2% scored at the advanced level. Conversely, 26% of ineligible students scored at the below basic level, 30% scored at the proficient level, and 11% at the advanced level (Donahue, Finnegan, Lutkus, Allen, & Campbell, 2001).

When reviewing the data from both the National Assessment of Adult Literacy Survey and the National Assessment of Educational Progress, it seems clear that individuals who are members of minority groups and who live in poverty are at great risk for lower levels of literacy achievement. These differences in achievement in general, and literacy development in particular, have been found as early as the preschool years (Dickinson & DeTemple, 1998; Juel, 1988; Lonigan, Burgess, Anthony, & Barker, 1998; Rush, 1999; Whitehurst, Arnold, Epstein, Angell, Smith, & Fischel, 1994; Whitehurst, Zevenbergen, Crone, Schultz, Velting, & Fischel, 1999).

Methodological Issues

It should, however, be noted that although there is research that links poverty and low levels of academic achievement, no causal relationship has been identified (Gadsen, 1995). In fact, when Iverson and Walberg (1983) reviewed the literature on home environments and children's academic achievement, they found that indicators other than socioeconomic status

(e.g. quality of parent-child interactions, parental attitudes and beliefs, and level of activity within the family) were more strongly correlated with children's academic achievement. In his groundbreaking meta-analysis of over 100 studies that linked socioeconomic status and achievement, White (1982) found that although the two variables were positively correlated, the relationship was quite weak ($r = .22$).

Finally, a critical issue in this type of research is the confounding of race and socioeconomic status. Burchinal and her colleagues (Burchinal, Campbell, Bryant, Wasik, & Ramey, 1997) have cautioned that "ethnicity and poverty are confounded, with almost half (45%) of African American children living in a family experiencing economic hardship" (p. 935). Bradley, Corwyn, McAdoo, and Garcia Coll (2001) found that the combined effects of ethnicity and poverty status revealed home environments that were far less facilitative than when either variable was considered independently.

Another perspective on this issue is offered by Willie (2001) He examined differences in student achievement based on socioeconomic status of the school (identified as poverty-concentrated, socio-economically mixed, or affluent-concentrated based on the proportion of students in the school who were eligible for free or reduced-cost lunch). After controlling for socioeconomic status, Willie found that for both Black and White students as a group, the proportion of those performing above the national norm was higher in schools identified as affluent-concentrated than for those identified as poverty-concentrated. Unfortunately, 92% of all students enrolled in poverty-concentrated schools were Black while 77% of all students enrolled in affluent-concentrated schools were White. Although Willie found group achievement differences by race, he attributed those differences to bias in test construction (e.g. the measures

used have been constructed in such a way that they reflect the knowledge and understanding of members of the dominant group in society rather than those of the minority group) and differences in the quality of educational and environmental experiences between Black and White students.

Pursuing a related line of research, White, Reynolds, Thomas, & Gitzlaff (1993) noted that researchers risk reaching faulty conclusions about the relationship between socioeconomic status and academic achievement when they fail to examine disaggregated data. These authors reexamined standardized achievement scores and socioeconomic data on 30,000 students. When examined at the school level, socioeconomic status (defined as school eligibility for Chapter I services) accounted for 72% of the variance in achievement levels. When these data were disaggregated and socioeconomic status was examined at the individual level (defined as individual eligibility for free/reduced-cost lunch), less than 20% of the variance was accounted for. The authors cautioned that the conflicting research on the links between socioeconomic status and academic achievement could be reduced if researchers use disaggregated rather than aggregated data to make their judgments.

Despite these caveats, achievement differences among different racial and socioeconomic status groups have been identified. As such, the investigation of factors that contribute to low levels of literacy achievement and performance among low-income minority individuals continues to be an important research agenda.

Consequences Associated With Low Literacy/Illiteracy

In the United States, there are deleterious consequences associated with the problem of illiteracy and low literacy. Consequences for children may include: an inability to use reading to master other subject areas, low academic achievement, poor self-esteem, placement in special education, and failure to complete high school – resulting in continuing low literacy (Allington, 1995; Jacobson, Olsen, Rice, & Sweetland, 2001). For adults, a major consequence may be living a life of poverty (DeBruin-Parecki, Paris, & Siedenburg, 1996, 1997; Gadsen, 1995). Other consequences include unemployment or underemployment, involvement in criminal activity, and intergenerational transfer of illiteracy or low literacy (Daisy, 1991; DeBruin-Parecki, Paris, & Siedenburg, 1996, 1997; Gadsen, 1995; Rush, 1999; Scarborough, Dobrich, & Hager, 1991). These consequences prevail, even when the caregiver realizes the importance of providing positive adult role models as literacy users. They may lack the knowledge and skills to provide that model (Daisey, 1991; Fitzgerald, Spiegel, & Cunningham, 1991).

Because of these consequences, it is important to prevent illiteracy during childhood. Understanding the factors that promote literacy development is an important step toward creating interventions to address literacy. A review of the factors which have been documented to contribute to literacy development follows.

Factors that Contribute to Literacy Development

Researchers have investigated a number of factors that influence a child's cognitive performance and academic achievement. Factors identified by researchers include a variety of parental, child, and school dimensions. Because of the integration in the literature of studies

examining academic achievement and literacy development, some studies described below have cognitive performance or academic achievement as outcome variables.

Researchers have traditionally focused on a number of individual child and environmental factors when examining and making predictions about children's emerging literacy development. Those factors have included: quality of mother-child interactions in general, book reading interactions in particular (Beals & Smith, 1992; Bus and van IJzendoorn, 1995), quality of the early language environment in the home (Baker, Mackler, Sonnenschein, & Serpell, 2001; Snow & Dickinson, 1991), phonological awareness of the child (Bus & van IJzendoorn, 1999), children's concepts about print (Chaney, 1994), and home literacy environment, determined through observations in the home and by parental self-report measures (Dickinson & DeTemple, 1998; Frijters, Barron, & Brunello, 2000). These factors have been assessed with a variety of populations (e.g. individuals of low and high socioeconomic status, minority populations, and special needs populations).

Child Factors

When attempting to predict children's literacy development, researchers have often relied on measures of phonological awareness. Researchers have repeatedly demonstrated that phonological awareness may be one of the most important predictors in children's later acquisition of reading (Adams, 1990; Beach, 1996; Blachman, Ball, Black, & Tangel, 1994; Bus & van IJzendoorn, 1999; Rush, 1999). According to the National Research Council (1998), phonological awareness is defined as the conscious ability to attend to the sounds of language as distinct from its meaning (p. 52). In their meta-analysis of phonological awareness training

studies, Bus and van IJzendoorn (1999) found that phonological awareness, although not the single strongest predictor of reading development, predicts later reading skills. Chaney (1994) also found that measures of metalinguistic awareness, including tests of phonological awareness, were positively related to overall language development, performance on the Peabody Picture Vocabulary Test, and knowledge about the purposes of print. In a longitudinal study of children in first through fourth grade, Juel (1998) found that children who eventually became poor readers lacked adequate phonological awareness skills in first grade. Blachman and her colleagues trained kindergarten teachers and assistants of low-income, inner-city children to provide small group activities designed to increase children's phonological awareness (Blachman, Ball, Black, & Tangel, 1994). After an 11 week intervention, the researchers found that children who received the training in phonological awareness performed significantly better on a battery of literacy measures than those who did not receive the intervention. Measures included the following tasks: segmentation, the ability to name letters, the ability to name letter sounds, and the ability to read phonetically regular words – real and nonsense.

Children's knowledge about print has also been measured and used to predict their emerging literacy development. Chaney (1994) found that children's print awareness, defined as their ability to: sing the alphabet; sort letters, numbers, and shapes into groups; name letters, numbers, and shapes, and; answer questions related to book structure, directionality, and purpose of words on a page, was related to the child's overall language development.

An additional child characteristic that is implicated in children's literacy development is motivation (Beach, 1996; Cooper, 1997; Guthrie, 1996; Guthrie & Alao, 1997). Beach described motivational aspects of classrooms that fostered literacy development. Those aspects included:

children viewing themselves and others as real readers and writers, shared ownership of knowledge (i.e. teachers acknowledge and respect children's varying viewpoints and opinions), a classroom curriculum that allows children to construct meaning from print, and students having opportunities to work in flexible grouping situations and with various classmates at different points. Very few attempts to measure motivation in very young children have been made, primarily due to the difficult nature of examining this construct with such young children.

Caregiver Factors

Researchers have examined the extent to which caregivers, particularly the mother, influence children's achievement in general, and literacy development in particular. Brody, Stoneman, and McCoy (1994) hypothesized that caregivers who experienced more distress and conflicted family relationships would have children who performed less well on a number of developmental outcomes in kindergarten. The authors studied one hundred-seventeen former Head Start children and their caregivers in order to determine which protective and risk factors influence children's literacy and socioemotional competency in kindergarten. They found that caregivers with higher levels of self-esteem, who endorsed independence-promoting developmental goals for their child, and who were involved in responsive and challenging caregiver-child interactions had children who performed better on measures of socioemotional functioning, cognitive development, and literacy development. Burchinal and her colleagues (1997) found that increased maternal responsiveness was related to increased cognitive performance through age 8.

Researchers have also examined the degree to which parent-child book reading interactions influence children's literacy development (Adams, 1990; Bus & van IJzendoorn, 1995; Dickinson & DeTemple, 1998; Lonigan & Whitehurst, 1998; Pellegrini, Brody, & Sigel, 1985; Pellegrini, Perlmutter, Galda, & Brody, 1990). Dickinson and DeTemple (1998) identified the parent-to-child book reading interaction as the "most commonly recognized way in which parents support their children's literacy development" (p. 243). Adams (1990) stated that children from "culturally mainstream" environments enter school with approximately 1,700 hours of storybook reading as compared to the approximately 25 hours received by their low-income counterparts (p. 85). Research has demonstrated that repeated experience with storybooks increases children's understanding of story structure and exposes children to rich vocabulary that they may not otherwise have been privy to (Adams, 1990; Dickenson & DeTemple, 1998).

Cognitive functioning of the caregiver has also been implicated in influencing the child's academic achievement, both directly and indirectly (Burchinal et al., 1997). Chaney (1994) found that level of maternal education was positively correlated with scores on an interview designed to measure family literacy environment, the child's metalinguistic awareness, the child's print awareness, and with the child's score on the Peabody Picture Vocabulary Test. Additionally, Payne, Whitehurst, and Angell (1994) used the mother's intelligence level (as measured by results on an adaptation of the Quick Test) and educational level as predictors of children's language ability. The authors found that although the mother's level of education and intelligence contributed to the child's receptive and expressive language ability, the contribution of the home literacy environment was greater. The authors further suggested that children's

language ability is influenced by the intelligence and education level of the parent through the influence of the home literacy environment. They posited that this influence is present because parents with higher levels of education and higher scores on intelligence measures may be more likely to provide home environments that support language and literacy development.

An additional caregiver characteristic that has been implicated in influencing children's academic achievement is the caregiver's level of involvement in the school (Hoover-Dempsey, Bassler, & Brissie, 1987). Hoover-Dempsey and Sandler (1997) reviewed the literature on why parents become involved in their children's education. They revealed that parents made the decision to become involved (or not to become involved) based on (1) their beliefs about the role that parents should play in their child's education (e.g. helping with homework, volunteering in classrooms, attending parent-teacher meetings), (2) their perceived efficacy for helping their child (e.g. an understanding of whether or not their children benefit in a positive way from their assistance), and (3) their perceptions about whether or not the child and the school want them to be involved. Additional support for the idea that parental participation influences academic achievement has been found. Hoover-Dempsey and her colleagues (1987) found that parents' level of involvement and participation in their child's elementary schooling varied depending on levels of teacher efficacy and school socioeconomic status. In a year-long case study, Goldenberg, Reese, and Gallimore (1992) found that all of the parents in the study considered home support for school learning activities a critical component of parental involvement in their child's education.

Baker, Sonnenschein, Serpell, Fernandez-Fein and Scher (1994) examined ways that children from low- and middle-income families experienced literacy as they transition into

formal education (i.e. pre-kindergarten). The authors collected daily diary entries that documented the child's engagement in home activities. Additionally, the caregivers were interviewed in the home using an Ecological Inventory. The authors found that engagement in behaviors which were considered literacy facilitative occurred in all of the families. However, they found that there were sociocultural differences between middle- and low-income parents in the emphasis placed on literacy as a fun activity (middle-income) and literacy as a specific skill to be learned (low-income). These results document that there are differences in the belief systems of low-income and middle-income caregivers which may lead to different patterns of teaching behaviors in the home (e.g., emphasis on skill-oriented literacy tasks versus emphasis on literacy tasks meant to encourage enjoyment in literate practices).

Others have described the impact of a lack of parental participation in their child's education. When describing their family literacy initiative, Come and Fredericks (1995) described a "communication chasm" that often occurs with low-income and minority families (p. 566). The authors state that low levels of involvement in schools by these groups of parents is often perceived as disinterest in their child's education. Disputing this misconception, Come and Fredericks described patterns of exclusion from the school culture which have driven these parents away. They further described efforts to include low-income families as an integral part of the literacy program at a local elementary school. Each of these successful family literacy programs developed their program based on needs and wants that were identified by the parents, a demonstrated collaboration between parents and teachers, involving parents in the decision-making processes within the school, clear and consistent communication, and by having all stakeholders commit to continuous involvement.

Similarly, Dickinson and DeTemple (1998) assert that low-income and minority parents, who are typically viewed as being less involved in their child's educational experience, should be viewed as potential resources from which educators can gain valuable insight into the developing skills of the young child. Further, they documented that low-income and minority parents are able to provide fairly accurate and reliable assessments of their child's developing literacy levels. Dickinson and DeTemple (1998) also found that parental reports of children's literacy development accurately predicted children's emerging literacy and vocabulary development at the end of kindergarten and first grade, and also predicted first-grade teachers' reports of the child's literacy development. Additionally, Scarborough, Dobrich, and Hager (1991) demonstrated that parental reports of the child's engagement in literacy related activities during the preschool years identified poor readers in Grade 2.

Parents' belief systems and perceptions regarding literacy learning have been implicated in their children's developing literacy skills (Anderson, 1995; DeBaryshe, 1995; Fitzgerald, Spiegel, & Cunningham, 1991). Anderson (1995) examined differences in the literacy knowledge and perceptions of children whose parents espoused either a traditional readiness or an emerging perspective of literacy development. Parents who believed more strongly in a readiness perspective would be more inclined to formally teach letters and letter sounds while parents following an emerging literacy perspective would be more inclined to emphasize the pleasure of engagement in literacy, relying on the social interactions that facilitate positive attitudes and beliefs about participation in literacy. The author found that, although children's perceptions about literacy learning appeared congruent with those of their parents, either readiness or emergent, those different perspectives did not result in significant differences on

measures of the children's early literacy knowledge. The authors acknowledged that the results of this study were surprising, given the widespread acceptance of the idea that a readiness perspective to emerging literacy is limiting for young learners.

Other researchers have investigated the relationship between parental beliefs and children's interest in literacy. For example, DeBaryshe (1995) examined parental beliefs (i.e., children should engage in literacy for enjoyment versus engaging in literacy to learn specific skills and competencies) and found that parental beliefs regarding literacy development directly influenced the child's interest in literacy. Fitzgerald, Spiegel, & Cunningham (1991) found that parents with lower literacy levels valued both literacy artifacts (e.g. availability of paper and pens, reading to child) and literacy events (i.e. skill-oriented/readiness activities such as flash cards and workbooks) while parents with higher literacy levels valued literacy artifacts but not skill-oriented literacy events. The authors did not examine the socioeconomic status of caregivers in the sample, therefore no examination of group differences was available.

Whitehurst and his colleagues have described a reading intervention program that was designed to improve the language skills of preschool children called dialogic reading (Lonigan & Whitehurst, 1998; Whitehurst, Arnold, Epstein, Angell, Smith, & Fischel, 1994; Whitehurst, Epstein, Angell, Payne, Crone, & Fischel, 1994; Whitehurst & Lonigan, 1998; Whitehurst, Zevenbergen, Crone, Schultz, Velting, & Fischel, 1999). In this training program, the child learns to tell stories by responding to open-ended questions posed by parents or child care providers. This occurs gradually, with the adult initially asking questions which can be answered directly from the text and gradually asking questions that require higher levels of inference from the child. Additionally, the authors described a cycle of probing, practice, teaching, feedback,

and repetition in which the child's expressive language is enhanced as a key factor of the intervention (Lonigan & Whitehurst, 1998). Whitehurst and his colleagues have demonstrated positive effects of this intervention on the receptive language development of children from low-income, middle-income, and upper-income family groups (Lonigan & Whitehurst, 1998; Whitehurst, Arnold, Epstein, Angell, Smith, & Fischel, 1994; Whitehurst, Epstein, Angell, Payne, Crone, & Fischel, 1994; Whitehurst & Lonigan, 1998; Whitehurst, Zevenbergen, Crone, Schultz, Velting, & Fischel, 1999).

Catherine Snow and her colleagues (Davidson and Snow, 1995; Dickinson & Snow, 1987; Snow, 1983, 1991) have argued that exposure to storybooks increases the use of decontextualized oral language, defined as "language used with distant or unfamiliar audiences, with whom little background knowledge is shared" (Davidson and Snow, 1995, p. 19). Snow's and her colleagues' research has demonstrated that decontextualized language is a critical prerequisite to successful literacy development. This decontextualized language is experienced by children when they are read to by a caregiver. This experience allows the child to become familiar with the structure of stories, to have experience with vocabulary which might not otherwise be used, and to develop knowledge that aids in story comprehension (Juel, 1988). However, Baker and her colleagues (2001) found that the use of decontextualized talk during storybook reading was not associated with later reading comprehension. The authors stated that the influence of storybook reading may be indirectly related to third grade reading achievement through their influence on reading activities at home.

Other research (Neuman, 1996; Neuman, Caperelli, & Kee, 1998) has noted the importance of the parent-child interaction during storybook reading time as a key factor in

facilitating children's literacy development. Neuman (1996) attempted to determine whether she could predict patterns of parent-child interactions during storybook reading based on the type of text that was involved. The texts were (1) highly predictable language and familiar sequences, (2) episodic predictable texts, or (3) narratives. She examined conversational interactions between parents and children during parent-child reading time and found differences in the parent-child interaction based on the type of text. When reading more predictable text, parents engaged the children in less cognitively challenging conversation (e.g. reading along with text, labeling objects or events). Conversely, when reading narrative texts, parents tended to engage in conversation with the child that required higher levels of thinking and reasoning (e.g. making connections with the text and personal experiences, reviewing story details, plot, or theme). Neuman also found that parents who identified themselves as less proficient readers engaged in more conversational exchanges when reading predictable text (although the exchanges did not require higher level cognitive processing by the child) than when reading narrative text. Conversely, she found that parents who self-identified as proficient readers engaged in more conversational exchanges (which also required higher levels of cognitive functioning) when reading narrative text.

It should be noted, however, that some researchers have questioned the magnitude of the contribution of caregiver-child book reading to children's emerging literacy (Auerbach, 1995; Bus & van IJzendoorn, & Pellegrini, 1995; Scarborough & Dobrich, 1994). In their meta-analyses of studies that examined parent-child book reading behaviors, both Scarborough and Dobrich (1994) and Bus, van IJzendoorn and Pellegrini (1995) found that the relationship between shared book reading and several measures of literacy and language achievement was

modest. Additionally, Auerbach (1995) stated that many intervention programs are premised on the assumption that problems in children's literacy development could be solved if these parents read to their children every day. Auerbach dismissed this assumption and indicated that intervention models of this type assume that something is wrong in the home and that it can be "fixed" through a model of this nature. Instead, she proposed a sociocultural approach that considers the strengths of the family members. This approach would use the strengths of the experiences from the home environment to inform literacy instruction in the schools rather than trying to impose the belief systems of the school culture into the home. Auerbach's recommendations for designing and implementing family literacy research and initiatives will be discussed later in this chapter.

Finally, measures of the home literacy environment have been widely used to make predictions about the emerging literacy of children as well as to later reading acquisition. This information is typically gathered by researchers through self-report measures and home visits (Dickinson & DeTemple, 1998; Fitzgerald et al., 1991; Manning & Manning, 1984; Morrow, 1983; Scarborough & Dobrich, 1994; Scarborough, Dobrich, & Hager, 1991).

Researchers' definitions of the home literacy environment vary. Most definitions have typically included one or more indicators of the following: number of books in the home, number of books owned by the child, number of visits to the library, frequency of parent-child book reading episodes, frequency of child's private engagement with books, frequency of child's request to engage in shared book reading episodes, and frequency of the caregiver's private reading (Baker, 1999; Christian, Morrison, & Bryant, 1998; Daisey, 1991; Dickinson & DeTemple, 1998; Frijters, Barron, & Brunello, 2000; Goldenberg, Reese, & Gallimore, 1992;

Manning & Manning, 1984; Marvin & Mirenda, 1993; Neuman, 1996; Payne, Whitehurst, & Angell, 1994; Scarborough, Hagar, & Dobrich, 1991; Senechal, LeFevre, Hudson, & Lawson, 1996). Payne, Whitehurst, and Angell (1994) examined the relationship between low-income children's home literacy environment and their receptive and expressive language ability. They found that children's performance on measures of receptive and expressive vocabulary was significantly correlated with a number of home literacy environment features. Included among the strongest correlations were those between the child's vocabulary and frequency of reading with the child, age when reading with the child began, number of picture books in the home, and frequency of trips to the library. Christian, Morrison, and Bryant (1998) examined sources of influence on children's academic achievement in kindergarten. They found that the home literacy environment predicted children's performance on measures of receptive vocabulary (as measured by performance on the Peabody Picture Vocabulary Test-Revised), reading recognition (as measured by performance on the reading recognition subscale of the Peabody Individual Achievement Test-Revised), letter recognition (as measured by the child's ability to correctly identify upper case letters of the alphabet), and general information (as measured by performance on the general information subscale of the Peabody Individual Achievement Test-Revised).

Because of the profound nature of literacy difficulties found among low-income, minority children, scholars have advocated the importance of addressing family characteristics that can potentially promote literacy development much earlier than the commencement of formal schooling. In line with this focus on family literacy, there have been efforts to study patterns of behaviors in families which may not have been captured by conventional studies in the field. Through a number of highly detailed research studies with low-income and minority populations,

researchers have been able to describe a variety of non-traditional family literacy practices (Delgado-Gaitan, 1991; Elish-Piper, 1997; Heath, 1983; Neuman & Gallagher, 1994; Neuman, Hagedorn, Celano, & Daly, 1995; Purcell-Gates, 1994; Purcell-Gates, L'Allier, & Smith; 1996; Taylor & Dorsey-Gaines, 1988). What is not as clear is whether, and if so, how much, engagement in these non traditional literacy interactions influences the emerging literacy of the child.

Perspectives on Literacy Development

Deficit Approach

According to Auerbach (1995), deficit perspectives on literacy development in families “blame marginalized people for their own marginalization (locating the source of their problems with genetic, cultural, or linguistic deficiencies)” (p. 645). In response to this approach, Auerbach proposed a social contextual model for facilitating literacy development in low-income and minority families. This approach to family literacy would empower the family, instead of removing power by forcing mainstream values and practices into the home environment.

It is a commonly held view that low-income and minority families are indifferent to or uninterested in their child’s literacy development. For example, Daisey (1991) described parents of children with low literacy levels as parents who “appear to pass on their lack of literacy, disinterest in books, and negative attitude toward school to their children...children in these homes do not experience the positive, secure, and enjoyable atmosphere of reading a story with a trusted adult. Moreover, these youngsters and their families have no reading consciousness” (p. 11). It is alarming that such sweeping indictments can be made against families whose literacy

use and development may not be congruent with mainstream society. This deficit perspective permeates the literature on literacy development. It includes both blatant accusations of apathy by low-income and minority individuals toward education and subtle indictments that this population is missing some critical element that would allow them to succeed in society, blaming “the victim for the crime” (Delpit, 1995, p. 38). The belief is that this missing element must be identified and infused into the lives of these families in order to compensate for their inadequacies (Gadsen, 1994; Hendrix, 1999).

Scholars (Auerbach, 1989, 1995; Elish-Piper, 1997, 2000; Hendrix, 1999; Neuman, 1996; Purcell-Gates, 1993; Tett, 2000) have described family literacy intervention models that seek to impose middle-class literacy behaviors on low-income families. These deficit models disregard strengths that the family may have which are potential sources of literacy engagement with the children, and instead seek to “treat” these low-income minority families in an effort to make their literacy behaviors more congruent with those of the mainstream society (Au, 1995; Auerbach, 1989; Barratt-Pugh, 2000). Additionally, because the significance of the home environment is ignored or devalued by the school environment, there frequently leads to a sense of disenfranchisement by the minority population (Tett, 2000).

Researchers have discussed the differences in achievement between low-income minority and mainstream students as one that results from a mismatch between experiences in the home and those behaviors required to demonstrate competency in school (Au, 1995; Barratt-Pugh, 2000; Delpit, 1995; Heath, 1983). Heath identified these differences in the use of oral language as critical to the success or failure in school of children. That is, children from middle-class homes in which oral language patterns reflect those of the school were more likely to experience

success whereas those from lower-class homes were not. Barratt-Pugh (2000) also discussed the mismatch between literacy practices in homes and schools. She noted that the mismatch does not become problematic until these students enter into formal schooling and find that their literacy practices are devalued and de-emphasized. She further recommended that educators serve as bridges between the home and the school. In this case, the educator would include literacy behaviors from the home as part of the instructional routine while providing appropriate scaffolding to the child while school literacy practices are learned. Gradually, the educator would decrease this support as the student became more competent in the school arena. Finally, Delpit (1995) recommended that classrooms be structured in such a way that home language patterns are accepted and valued, while at the same time, school-related language patterns that are necessary for success in society (i.e. acquisition of power) are taught.

Despite the emphasis on deficits in families of low-income and minority children, there are data that demonstrate that these parents do facilitate and encourage their children's literacy development (Auerbach, 1989, 1995a, 1995b; Elish-Piper, 1997, 2000; Fitzgerald, Speigel, & Cunningham, 1991; Tett, 2000). Typically, these researchers have used a sociocultural perspective when examining issues related to literacy in these families. Much of this work has taken a qualitative approach, espousing a sociocultural perspective for studying literacy development in low-income and minority families. The work of those researchers is discussed below.

Sociocultural Approach

As discussed above, there is evidence regarding socioeconomic and race differences in academic achievement in general and literacy development in particular. Researchers have sought to examine the roots of these differences in literacy development and have attempted to demonstrate ways that low-income minority families engage in literacy practices. As such, they have begun to move away from deficit perspectives and have started looking at ways in which literacy is used within particular cultures (Anderson, 1995; Au, 1995). An examination of culturally specific literacy use could reduce differences by minimizing the mismatch between school and home (Au, 1995; Elish-Piper, 1997; Heath, 1993; Taylor, 1983; Taylor & Dorsey-Gaines, 1988).

Auerbach (1989) described several faulty assumptions in the family literacy field that have been refuted by available data. The first assumption that Auerbach described relates to the home environment. She asserted that the transmission model inaccurately assumes that children from minority homes have a limited amount of material available which supports literacy learning. She further stated that these homes are presented as “literacy impoverished”, with limited reading materials and with parents who neither read themselves nor read to their children, who do not provide models of literacy use and do not value or support literacy development” (p. 169). Auerbach cited research which documented otherwise. Specifically, she presented evidence from a variety of qualitative and quantitative studies (e.g. Delgado-Gaitan, 1987; Snow, 1987; Taylor & Dorsey-Gaines, 1988) which showed that low-income minority families do in fact use literacy in a variety of ways, with a variety of materials. Greater attention will be given to these studies below. Auerbach asserted that low-income minority families may place a greater

emphasis on literacy development because they “frequently see literacy and schooling as the key to mobility, to changing their status, and preventing their children from suffering as they did” (p. 170). Additionally, she asserted that a lack of support in the macrosystem (e.g. provision of support for dealing with housing, child care, and medical issues) could potentially place children at risk more than a perceived level of disinterest in literacy by the caregiver (Auerbach, 1995b).

The second faulty assumption made by many researchers is that the direction of literacy interactions was solely from parent to child. Auerbach (1989) described literacy interactions in families of non-native English speakers as happening from parent to child, child to parent, and possibly between siblings. She further stated that these interactions facilitate literacy development as much for these families as traditional parent to child interactions. Hendrix (1999) echoed this concern when he discussed ways in which family literacy programs have failed their participants. He described an “isolationist methodology” that typically excludes members of the family other than the mother and one young child (p. 341).

A third assumption discussed by Auerbach related to family contexts of successful readers. The author, again citing numerous in-depth qualitative studies, indicated that there is no one “correct” home environment from which successful readers emerge. Instead, there are a number of factors which contribute to literacy development. Among those factors were: frequency of child’s outings with adults, emotional climate of the home, level of financial stress in the home, enrichment activities, and parental involvement in schools.

The fourth assumption described by Auerbach related to school contributions to the acquisition of literacy. She disputed the commonly held belief that the quality of the home environment directly correlates with children’s performance in school – that, in fact, the effects

of the home environment may outweigh the effects of school all together. The author again cited research which demonstrated that variables in the school environment, particularly the quality of the education, contribute equally to children's literacy development.

The final assumption discussed by Auerbach (1989) related to the social context of family literacy. She described a number of social contextual issues with which low-income and minority families contend (e.g. demanding work schedules, family health problems, safety and well-being of children in the neighborhood, etc.). She recommended that these issues be addressed as part of the provision of service from the school institution, rather than using them as justification for continuing the belief that caregivers are simply not interested in promoting the literacy development of their children.

Auerbach (1995) reviewed three perspectives to designing and studying family literacy: the intervention-prevention perspective, the multiple literacies perspective, and the social change perspective. Family literacy planners claiming to advocate the intervention-prevention perspective believe that low literacy levels in America stem from undereducated parents and their inability or unwillingness to teach their children literacy skills and behaviors. These efforts are based on the belief that parents do not value education and that those parents transmit that devaluing on to their children, resulting in an intergenerational transfer of low literacy or illiteracy. Intervention efforts attempt to change parent's belief systems and behaviors, making those beliefs and behaviors more congruent with mainstream society. Additionally, these programs offer bleak descriptions of home environments of people from low-income backgrounds, often using terminology that implies some sort of pathology.

According to Auerbach (1995), proponents of a multiple-literacies perspective describe low literacy levels as the result of a sort of mismatch between home and school literary practices. They recommend that research and programmatic efforts be directed at understanding and integrating home and community literacy practices into the school environment. As such, the development of family literacy initiatives would include input from parents and community members and staffing would represent the culture of the students.

Advocates of the social change perspective have a belief system similar to those espousing the multiple literacies perspective. In addition to the belief system espoused by the multiple literacies perspective, these programs focus on making institutional changes and to eradicating forces that help keep low-income and minority populations marginalized. A careful examination of power issues is undertaken (within families, within classrooms, within institutions, and within institutions) in order to determine areas that should be targeted for effective change. In family literacy programs following this perspective, participants determine program goals and are included as part of the decision making body.

Empirical Support for Sociocultural Approach: Shirley Brice Heath (1983) was instrumental in helping researchers understand ways in which literacy is used differently in different communities. For three years, she studied two working class families (one European American and one African American) and one middle class family (European American) in the Piedmont Carolinas region using qualitative research methods. During this period, Heath documented differences in literacy practices in each community and also documented differences in the early literacy experiences of these children. She found that parents from middle class homes provided children with experiences that are congruent with those encountered in schools, thus leading to

success for those children upon school entry. She also found that children from working class families, though having had experiences with literacy, were ill equipped to handle the requirements necessary for success in school. This school failure was the result of differences between school and home in communication styles and literacy practices. Heath worked with teachers in these communities to help them become more aware and more accepting of the home literacy experiences of the low-income children, and also helped teachers understand ways to bring the experiences of those children into the classroom.

Other groundbreaking research into family literacy practices has been conducted from an ethnographic standpoint. Taylor (1983) studied the use of literacy in the lives of six European American middle class families, a study which spurred tremendous amounts of research on family literacy. She documented the interactions that occurred within the families, collected samples of the children's drawings and writings, made audio recordings of parent-child storybook reading interactions, and spent tremendous numbers of hours participating in the lives of these families. She found that literacy was part of daily life for these families, and that literacy was used in a variety of situations and for a variety of purposes.

In an expansion of this work, Taylor and Dorsey-Gaines (1988) explored literacy interactions in the lives of six low-income minority families. Each of the families involved in this study were classified as living in extreme poverty, and all felt that their young children were successfully learning how to read. The authors determined that literacy interactions occurred as a daily part of life for these low-income families as well. They categorized a number of different uses of reading and writing that they observed families engaging in during the course of this ethnographic study. These families used reading literacy in the following ways: instrumental

reading (e.g. to gain information in order to meet practical needs such as completing food stamp applications or locating a number in a telephone book), social-interactive reading (e.g. to gain information that is needed to build and maintain social relationships such as mailing or receiving letters or reading the newspaper), recreational reading (e.g. reading for pleasure during free time or to plan recreational events such as poetry, crossword puzzles, and magazines (e.g. Jet), confirmational reading (e.g. materials saved by family members to be used when necessary – such as copies of welfare applications, or on special occasions – such as letters of recommendation and school report cards), sociohistorical reading (e.g. literature that is personally significant, reading names of family members in the family Bible, and saving drawings and writings of their children), financial reading (e.g. reading supermarket advertisements), environmental reading (e.g. signs on storefronts and graffiti), and critical/educational reading to fulfill course requirements or to increase personal knowledge (e.g. textbooks for college courses and literature to help with their own political or social situation).

The authors also documented writing literacy interactions for the following purposes: reinforcement or substitute for oral message types (e.g. messages to family members or letters to teachers), social-interactive writing (e.g. letters to friends and family members, homework help, and cards for special occasions), financial writing (e.g. budgets, signatures on checks), expository writing (e.g. college papers, autobiographical work), and instrumental writing (e.g. schedules, applications for programs, and hospital forms). Other types of writing interactions occurred, including: autobiographical writing (e.g. journaling and recording information related to birth of a new baby), recreational writing (e.g. completing crossword puzzles or doodling),

creative writing (e.g. poetry), educational writing (to fulfill course requirements), and work-related writing (e.g. completing job applications or writing resumes).

These different interactions with literacy were present in each of the home environments studied by Taylor and Dorsey-Gaines (1988). All of the homes supported the children in their acquisition of literacy knowledge, and each of the parents served in some way as a role model for their children in engagement in literate behaviors. The information provided by the authors in this ethnographic study documented that literacy is valued and literate behaviors are engaged in by low-income minority families, a finding that directly challenges the explanations of proponents of a deficit approach for the difficulties in literacy acquisition by low-income minority children.

Other researchers have examined patterns of literacy practices in homes and have gotten similar results. For example, Elish-Piper (1997, 2000) used rich qualitative data to document the literacy practices of low-income families. She studied 13 low-income families in order to determine ways in which literacy was used in their lives. She found that families used literacy in ways that were necessary to their current social situation. For example, she found that one caregiver used literacy for survival purposes, completing an application for a new apartment after hers was burglarized. Other families used literacy to survive as well (e.g. using a telephone book, clipping coupons). Another mother used literacy to complete forms required by different institutions (Social Security disability, school, and welfare forms). Still others used literacy in different ways, including: for organizational record keeping, for correspondence with friends and family, and for religious and recreational purposes. Rivalland (2000) discussed family entertainment, family celebrations, hobbies and housework, social and community life, and

parental work as sources of literacy engagement. Through the use of qualitative interview methodology, Chaney (1994) revealed that parents used literacy in a variety of ways, such as: daily living (e.g. shopping lists, reading maps and street signs, filling out forms), entertainment (e.g. reading for pleasure, crossword puzzles, checking television or movie listings), school- or work-related (e.g. homework, observation or actual use of computer at home or at parent's workplace), religion (Bible study, reading Bible stories, sending cards), interpersonal communication (correspondence with relatives or friends, children receiving some sort of mail), getting information (e.g. reading newspaper, reading about hobbies or interests, reading about information in their current fields of work), and for the purpose of teaching the child (teaching the alphabet, how to care for books).

Leseman and deJong (1998) studied low-income inner-city children and their families to determine which aspects of the home literacy environment predicted children's language and literacy outcomes at age seven. The results of their longitudinal study revealed that, rather than one distinct variable, literacy outcomes were predicted by a combination of home literacy factors. Those factors include: (1) having the opportunity to engage in literate practices, and observing a parent engaged in literate behaviors; (2) cooperation between the parent and child, with each having a clear understanding of and willingness to participate in the role that each should play; (3) a positive social emotional relationship, in which the child is securely attached to the parent (resulting in a more positive interaction, which leads to increased motivation, which ultimately results in increased academic achievement); and (4) quality of the instruction provided by the caregiver (i.e., cognitive demands placed by the parent on the child during the bookreading interaction). The authors discussed their findings in terms of moving beyond family

interventions designed to change parental practices, to an approaches that consider the broad sociocultural context in which low-income and minority families are embedded.

Similarly, in an ethnographic study of the connectedness between school and home literacy practice, McCarthy (1997) found that middle-class European American children had practices which were more congruent with school literacies. Similar to the findings of others, McCarthy also found that low-income minority students participated in literacy events at home, but that those events were not congruent with the skills and competencies required for success in school. Payne, Whitehurst, and Angell (1994) examined low socioeconomic status parents and found significant differences in literacy related behaviors within the group they studied, with some participating in literacy behaviors more frequently and in different ways. Taken together, these studies provide evidence that many low-income families do engage in behaviors intended to support and facilitate the literacy and language development of their children.

Conclusion

The research described above demonstrates that low-income minority families support and encourage the literacy development of their young children. These parents are also interested in positive outcomes for their children, and actively engage in behaviors that they believe will likely affect those outcomes. Despite a prevailing deficit approach to examining differences in literacy acquisition between low-income and minority children when compared to their White middle-class counterparts, researchers have offered credible accounts of systems of beliefs and patterns of behavior in low-income families that seek to support literacy development.

Research has documented literacy interactions and competencies of low-income and minority children which may not be congruent with those required for success in school (Heath, 1983; Taylor, 1983; Taylor & Dorsey-Gaines, 1988). A link between participation in these multiple literacy practices and child outcomes is critical. There needs to be an investigation of the role that these multiple literacy practices play in children's performance on measures designed to evaluate literacy skills.

Garcia Coll and her colleagues (1996) have recommended that within-group research be conducted in order to more carefully examine processes unique to low-income and minority populations. The proposed study seeks to examine within-group differences in the use of multiple literacy practices, and how those differences affect children's literacy development. Additionally, this study seeks to examine how differences in the nature of the caregiver-child relationship affect children's literacy development. It is anticipated that this exploratory study will inform future research and programmatic initiatives designed to facilitate family literacy in low-income and minority populations.

Chapter III Method

Rationale

As was noted in previous chapters, there is qualitative documentation of participation in multiple literacy practices among low-income and minority families, including participation in literacy events by extended family members, and the use of non-traditional materials and strategies (e.g. using the Bible, clipping coupons, reading schedules, completing required forms). Additionally, there is a significant amount of quantitative data that examines the contribution of more mainstream literacy practices to children's literacy development. A potential benefit of the current study is to build a bridge between what has been documented quantitatively and what has been documented in a qualitative way.

The overarching goal of this study was to explore the contribution of multiple literacy practices to children's literacy development. A corollary goal was to explore and document the utility of the Home Literacy Environment Interview and the Literacy Prop Box as a means of assessing multiple literacy practices in low-income minority families.

This exploratory study was intended to fill a gap in the literature: examining the multiple literacy practices that occur in African American low-income populations. The following research questions and hypotheses were offered:

1. What are the multiple literacy practices that occur in low-income African American families?
2. What factors influence low-income African American children's language and emergent literacy?

Hypothesis 2a. Family engagement in multiple literacy practices will be associated with receptive and expressive language and emerging literacy skills and higher levels of interest in literacy in low-income African American children.

Hypothesis 2b. Multiple literacy practices and quality of the home environment will significantly contribute to higher levels of receptive and expressive language and emerging literacy and higher levels of interest in literacy, beyond the contribution of maternal education.

Hypothesis 2c. Children with a sibling, grandparent, or other extended family member who engages in literacy interactions with them will have higher levels of receptive and expressive language and emerging literacy skills and higher levels of interest in literacy than those who do not.

Participant Characteristics

Voluntary family participation in this study was enlisted through the teachers and family support workers at local Head Start centers. Another recruitment effort entailed the strategic placement of appealing signs throughout the sites. Eligible children were given a letter to take home describing the study and requesting their parents' participation. Participants in the study were from families who were living at or below the federal poverty line, as required for enrollment into these Head Start programs. These levels are indicated to be an annual income of \$15,670 for a family of three, \$18,850 for a family of four, and \$22,030 for a family of five (Federal Register, 2004).

Children who met requirements for special education placement were excluded from the study. The criteria for special education placement are rather stringent. Children who meet the criteria are typically significantly disabled. It is likely that these children are targeted for or are already receiving educational assistance as mandated by public law. The unique issues surrounding literacy development in children with various disabilities were beyond the scope of this project. Additionally, children whose parents had not identified as African American were excluded, as this study sought to examine within-group differences.

The participants for this exploratory study were drawn from Head Start centers in the Baltimore-Washington area. Table 1 highlights the characteristics of the participants in this examination. All participants self identified as African American. All of the caregiver participants were the biological mother of the children. Twenty of the child participants were male and 31 were female (39.2 and 60.8%, respectively). The average age in months of the child participants was 57.71 (SD 5.38).

Demographic data were collected from the mothers in the study (Table 1). Of the 51 participants, almost 20% of the participants were college graduates (4-year degree). Additionally, 35.3% had some college, an AA degree, or had completed some trade school training. About 33% had earned a high school diploma and about 11% had ended their schooling on or before the 11th grade year. Approximately half of the participants were employed full time. 17.6% were employed part time, and about 30 % were unemployed at the time of this study. Four percent of the participants reported an annual total household income (THI) of \$5,000 - \$7,000 and over 40% reported a THI of more than \$30,000. The other participants reported annual incomes between \$10,000 and \$29,000 (54.9%). Forty five percent of the mothers

reported receiving some type of public assistance, while 55 % of the mothers indicated that they did not receive any. Finally, about half of the participants reported that the child’s father or some other “father figure” lived in the home. Father figure included a live-in partner, a live-in uncle, a live-in grandfather, etc.

Table 1
Participant Characteristics

Characteristic	<u>n</u>	%
Gender of participants		
Male	20	39.2
Average age in months (<u>SD</u>)	57.15 (5.42)	
Female	31	60.8
Average age in months (<u>SD</u>)	57.74 (5.42)	
Mother’s educational level		
11 th grade or less	6	11.8
High school graduate	17	33.3
Partial college/AA degree/trade school graduate	18	35.3
College graduate	10	19.6
Mother’s employment status		
Full-time	26	51.0
Part-time	9	17.6
Unemployed	16	31.4

Table 1 (contd.)
Participant Characteristics

Characteristic	<u>n</u>	%
Total Household Income (Annual)		
\$5,000 – 9,000	2	4.0
\$10,000 – 19,000	15	29.4
\$20,000 – 29,000	13	25.5
\$30,000 or greater	21	41.2
Receiving Public Assistance		
Yes	23	45.1
No	28	54.9
Father/father figure lives in home		
Yes	26	51.0
No	25	49.0

Procedure

Recruitment. All eligible African American children in local Head Start classrooms received a letter and flyer requesting participation in a study on activities in the home with their child. Copies of the letter and flyer are included in the Appendix. Caregivers who responded were contacted by an initial telephone call to schedule a home visit. During this initial call, the study was described in detail and oral consent was obtained from the parent. A home visit was scheduled at that time. For families who did not have access to a telephone, contact was made with them during drop-off and pick-up times.

During the home visit, prior to initiating data collection, written informed consent was requested of the parent. A copy of the consent form is included in the Appendix. Once the caregiver consented to participation in the study, the graduate student investigator and the undergraduate research assistant proceeded with the protocol. The research team completed the home visit in approximately 1-1 ½ hours.

Training Procedures. One undergraduate research assistant in education with junior standing was trained for approximately 10 hours per week over a two-month period. Training was primarily conducted by the graduate student investigator. Additional training was conducted by the dissertation advisor.

The undergraduate research assistant was trained to administer the Peabody Picture Vocabulary Test-3 (PPVT-3), Expressive One-Word Picture Vocabulary Test-3 (EOWPVT-3), Interest in Literacy Scale-3 (ILS-3), and Pre-School Comprehensive Test of Phonological and Print Processing (Pre-CTOPPP), via five pilot home visits. Additionally, the undergraduate research assistant was trained to enter data into SPSS.

Data Collection. Child testing lasted approximately 45 minutes – 1 hour, with frequent breaks as necessary for the child. At the end of the testing and interview period, the caregiver was paid \$20.00 for participation in the study and the child received a developmentally appropriate book. Data collection proceeded as follows:

1. The undergraduate research assistant administered the ILS-3, Pre-CTOPPP, PPVT-3, and the EOWPVT-3 to the child participant while the graduate student investigator administered the Home Literacy Environment Interview – Revised, the Literacy Prop Box, and the demographic questionnaire to the caregiver.

2. The graduate student investigator completed the Home Observation for Measurement of the Environment, 3rd Edition (HOME) instrument after the formal interview had been completed.
3. After all measures were completed, the parent-child dyads were requested to play together during unstructured time with the materials from the Literacy Prop Box. A timer was set for five minutes. After five minutes, the caregiver was asked to read a book to the child, *Don't Wake Mama, Another 5 Little Monkeys Story*. These interactions were videotaped, and will be coded at a later date.
4. While the caregiver and child were being videotaped, the undergraduate research assistant reviewed each of the measures to be sure that all information had been properly collected and recorded.

Variables and Measures

Variables. Three sets of variables related to the development of literacy for low-income African American children were examined in this study: 1) language and literacy of the child; 2) parent characteristics, and; 3) environmental characteristics. Table 2 delineates the variables and corresponding measures that were used in this investigation.

Table 2
Measures

Characteristics	Construct	Measurement Tools
Child Characteristics		
	<u>Emerging Literacy Skills</u>	Pre-CTOPPP
	<u>Motivation To Engage In Literacy Practices</u>	ILS-3
	<u>Child Language</u>	PPVT-3 EOWPVT-3
Caregiver Characteristics		
	<u>Educational attainment and income</u>	Background questionnaire
	<u>Who engages child in literacy practices</u>	HLEI-R
Environmental Characteristics		
	<u>Home environment</u>	HOME
	<u>Home Literacy Environment</u>	HLEI-R Literacy Prop Box

Child Characteristics. The first set of variables concerned the characteristics of the child which are related to literacy development. Child characteristics were assessed using the following instruments:

Emerging Literacy of the Child. The major domain of interest for this study was the child's emerging literacy. The study examined children's preschool literacy skills, receptive and expressive language, and interest in participation in literacy tasks. These variables were measured through the use of the following instruments:

Preschool Comprehensive Test of Phonological and Print Processing (Pre-CTOPPP). (Lonigan, Burgess, & Anthony, in press). Phonological processing was examined as a unitary construct. Lonigan and colleagues (1998) have examined phonological awareness in Head Start and other preschool aged children as young as 3 years old and found it to be a single construct. The Pre-CTOPPP, designed for children ages 3-0 to 5-11, is used as a diagnostic tool. It assesses oral language, specifically vocabulary, print/letter knowledge, and phonological awareness/processing. The Pre-CTOPPP consists of the following subscales: Phoneme Elision, Non-Word Repetition, Blending, Rapid Object Naming, Print Awareness, Word Span, and Initial Sound Matching. The authors report internal consistency scores (Cronbach's alpha) of .59 – .89 for this measure. This measure has been used with at-risk children, specifically Head Start students. The Pre-CTOPPP is currently undergoing standardization with a national sample, but those data are not yet available. Currently, only locally developed norms are available, which are posted on the Pre-CTOPPP website through Florida State University (Lonigan, personal communication, March, 2004). After piloting the test protocol, the decision was made to use only the following subscales of the Pre-CTOPPP: print awareness, initial sound matching, and blending. This was done because it appeared that the children in the study became frustrated

with the length of testing time required to complete each of the subscales along with all of the other measures. The total possible score for the version of the Pre-CTOPPP used in this investigation is 79 (36, 14, and 21, respectively for each subscale).

Interest in Literacy Scale-3 (ILS-3). (Frijters, Barron, & Brunello, 2001). This scale is an adapted version of Harter and Pike's (1984) Pictorial Scale of Perceived Competence and Social Acceptance for Young Children – Preschool and Kindergarten. Frijters and colleagues used this adapted measure with young children (average age 5.18 years, with a range of 5.25 – 6.33 years old) to assess their affective responses to literacy and literacy-related activities. The scale consists of 19 items, 11 of which are directly related to a child's interest in literacy. The first two items in the scale are used for training the child, and the additional six are distracter items. Although the children in this study were younger than those in Frijters' sample average age (4.79 years), the decision was made to use this measure, as there were no others that had been developed for children this age.

Children were shown two pictures, arranged in a row, of children engaged in the same activity. One picture showed a child with a happy face and the other showed a child with a sad face. Otherwise, the pictures were identical. The researcher asked the child a question, and then a second question based on the child's response to the first question. For example: "This girl likes to look at books by herself (points to child with a happy face). This girl does not like to look at books by herself (points to child with sad face). Which girl is most like you?" Based on her answer, the researcher asked, "Do you really like to look at books alone, or just a little?" A big circle and a small circle under each picture will help the child to conceptualize this

comparison. The child should respond by pointing to the big circle for “a lot” or the small circle for “a little”. Each item was given a score between 1 and 4, based on the outcome of the child’s two binary decisions for each of the four items (4 = smiling face, large circle; 3 = smiling face, small circle; 2 = sad face, large circle; 1 = sad face, small circle), for each of 19 items. Girls were presented with pictures of girls and boys were presented with pictures of boys. The authors report alpha estimates of .81 for the interest items in the third revision of this measure. The authors specify that the training and distracter items should not be used in any of the scale means. A copy of the ILS-3 is included in the Appendix.

Two additional measures are reported on here: the Peabody Picture Vocabulary Test-3 and the Expressive One-Word Picture Vocabulary Test-3¹.

Peabody Picture Vocabulary Test-3 (PPVT-3). (Dunn & Dunn, 1997). This measure is an individually administered assessment that examines the receptive vocabulary of an individual. It consists of a series of black and white illustrations (four per page), one of which corresponds to a word presented by the examiner. These illustrations depict various objects, actions, and concepts. Testing time is normally 15 – 20 minutes. The PPVT-3 was administered according to the standard administration manual. This measure has been standardized based on a nationally representative sample, and raw scores may be converted to standard scores, percentile ranks, and/or age equivalents. The authors report internal reliability scores (Cronbach’s alpha) of .88 – .96 with this measure, and this measure has demonstrated validity via its correlation with other child language measures (e.g. EOWPVT-3).

Expressive One-Word Picture Vocabulary Test-3 (EOWPVT-3). (Academic Therapy Publications, 2000). This measure is an individually administered assessment that examines the expressive vocabulary of an individual. It consists of a series of color illustrations (one per page) that the individual is asked to name. These illustrations depict various objects, actions, and concepts. Testing time is normally 15 – 20 minutes. The EOWPVT-3 was administered according to the standard administration manual. This measure has been standardized based on a nationally representative sample, and raw scores may be converted to standard scores, percentile ranks, and/or age equivalents. The authors report internal consistency scores of .93 – .98 with this measure. Additionally, this measure has demonstrated validity via its correlation with other child language measures (e.g. PPVT-3).

Caregiver Characteristics. Demographic information was collected on the family based on caregiver responses to a background questionnaire. Data were collected regarding caregiver education and income level and family composition. A copy of the background questionnaire is located in the Appendix.

Environmental Characteristics. The next set of variables concerned the characteristics of the home environment of the child related to literacy development. The home environment of the child was assessed using the following instruments:

1. Although these measures were not part of the original dissertation proposal, they were required as part of a graduate student grant funded by the Administration for Children and Families. The results yielded data that were germane to this investigation, and are therefore presented as part of this discussion.

Home Observation for Measurement of the Environment, 3rd Edition (HOME). (Caldwell & Bradley, 2001). This measure assessed the quality of the environment in which children are living. This observational measure required that an objective judge rate the home environment using a dichotomous scale. The early childhood version of this measure was utilized. The total possible score was 51 points. Scores for each subscale are detailed in the Appendix. The measure's designers have presented evidence for the validity of this instrument with African American children (Bradley & Caldwell, 1981).

Home Literacy Environment Interview. (HLEI) (Chaney, 1994). This measure is intended to garner information about the amount and types of multiple literacy interactions which occur in the home environment. Questions include those designed to identify the types of reading materials used by adults and children in the home, the frequency of reading and writing that occurs in the home, the frequency of joint caregiver-child reading and writing interactions, the availability of reading and writing materials in the home, the use of the local library, the child's motivation to read as determined by the frequency of requests to be read to, the frequency of participation in non-traditional literacy interactions, and who in the household participates in literacy interactions with the children. Chaney's interview consisted of 27 questions, with 23 that could have received scores. Although Chaney reported no psychometric properties for this measure in her study, the author has indicated that it correlated with a number of indices of language skills (e.g. performance on the Preschool Language Scale, performance on the Peabody Picture Vocabulary Test) (Chaney, 1994; personal communication, March 2002). The interview was modified (i.e. questions were added regarding engagement in multiple literacy practices that

have been described in the qualitative literature) and was administered in conjunction with the literacy prop box (see the next section for a more detailed description). The total number of points that could have been earned was 147. The Home Literacy Environment Interview-Revised (HLEI-R), along with the detailed coding scheme for this measure is provided in the Appendix.

Literacy Prop Box. For this investigation, the graduate student investigator developed a literacy prop box using Neuman and Gallagher's (1994) model. This literacy prop box contained materials identified as those things that traditionally support emerging literacy (e.g. books, pencils, paper, markers). Additionally, the literacy prop box contained materials identified in themes from qualitative research which has described literacy practices in low-income and minority homes (e.g. Bible, newspaper advertisements, bus schedules, materials containing environmental print, etc.) (Delgado-Gaitan, 1991; Elish-Piper, 1997; Heath, 1983; Neuman & Gallagher, 1994; Purcell-Gates, 1994; Purcell-Gates, L'Allier, & Smith; 1996; Taylor & Dorsey Gaines, 1988). Additionally, the literacy prop box contained materials not likely to be used in families on a regular basis, regardless of race or socioeconomic status (e.g. financial page from newspaper, article from a research journal).

In order to aid in recall during the Home Literacy Environment Interview, the Literacy Prop Box was used. The box contained items that matched what was being asked about in each of the interview questions. For example, as the researcher asked a specific question, she held up that item from the literacy prop box and said, "Here's an example of what I am describing".

Chapter IV Results

The goal of this exploratory study was to examine the contribution of family literacy practices to literacy development of young children from low-income backgrounds. An additional goal was to explore and document the utility of the Home Literacy Environment Interview and the Literacy Prop Box as a means of assessing multiple literacy practices in low-income minority families.

Data were collected using a variety of sources. Language functioning, preschool literacy skills, and interest in reading were assessed using quantitative measures. Additionally, the overall quality of the home environment was examined through an interview and observation scale. Finally, a semi-structured interview was conducted with the mother to determine the frequency with which she and her child engaged in literacy practices.

Introductory Comments

Due to difficulty recruiting participants, the boundaries were expanded to include a second metropolitan area's Head Start students. Independent sample t-tests were conducted to determine whether there were any differences on child or environment outcomes by location (DC Metropolitan & Baltimore). No group differences were found ($p = .05$); therefore, all data were aggregated for these analyses.

Given the challenges that were faced regarding recruitment of participants, the initial sample size of 67 participants was reduced to 51 (76% of the originally proposed sample size). Sixty-seven participants would have provided a sufficient sample to detect a medium effect size

at the $\alpha = .05$ level, with power of .80. Reducing the sample size to 51 reduced the statistical power for this study, thereby increasing the possibility of making a Type II error. The observed power found with specific regressions on child outcomes was .47, .53, and .59 (see later section on home influences for regression results). Hence, the discussion of results to follow should be tempered with the knowledge that there is reduced power. All findings discussed below should be considered preliminary, pending future study of this phenomenon.

Descriptive/Exploratory Analyses

The psychometric properties found in this study for each of the measures used in this investigation are described below. A copy of each measure is included in the Appendix.

Information on the psychometric properties for each scale can be found in Table 3.

Table 3

Psychometric Properties of Measures

Measure	Alpha	Mean	Standard Deviation	Range	Minimum	Maximum
Pre-school Comprehensive Test of Phonological and Print Processing (Pre-CTOPPP)	.71	51.75	14.18	50	21	71
Interest in Literacy (ILS)	.92	65.33	10.9	76	0	76
ILS-Interest Items	.91	39.47	6.6	44	0	44

Table 3 (contd.)

Measure	Alpha	Mean	Standard Deviation	Range	Minimum	Maximum
Home Observation for Measurement of the Environment (HOME)*	.91	41.12	8.65	32	21	53
Home Literacy Environment Interview (HLEI)	.89	88.52	19.15	82.50	44	126.50
HLEI Traditional	.83	48.95	9.84	40	24	64
HLEI Non-traditional	.83	36.32	10.68	44	17	61
PPVT*		94.14	12.49	53	65	118
EOWPVT*		93.90	12.82	59	64	123

* Denotes standardized instruments

Home Observation for Measurement of the Environment

The psychometric properties of the HOME measure were examined for its use with this sample. Results indicated that the internal consistency (Cronbach's α) of the measure was .91. Each of the subscales revealed a significant correlation with the total HOME score. The total HOME score revealed a significant correlation with the other indicator of the home environment, the HLEI-R ($r = .60, p < .01$), demonstrating another indication of its usefulness with this sample. The total possible score for the HOME is 55. For this sample, the mean score was 41.12 (SD 4.8), with scores ranging from 21 to 53. Table 4 presents the correlation matrix depicting the interrelationships between the total HOME and its subscales.

Home Literacy Environment Interview-Revised

The revised Home Literacy Environment Interview (HLEI-R) was examined. Several data analytic strategies were conducted with the HLEI-R. First, an item analysis was conducted with caregivers' responses to questions on this measure. For each response, the frequency, range, mean, and standard deviation was examined and is summarized in table format (Appendix F). Several distracter items were included in the HLEI-R, but were not included as part of the HLEI-R score. The internal reliability (Cronbach's α) of the HLEI-R was computed, using the items that were scored. The internal reliability (Cronbach's α) for the total HLEI-R scale was .90. Additionally, internal reliability (Cronbach's α) was examined for the traditional and non-traditional portions of the HLEI-R. The internal reliability (Cronbach's α) scores for the traditional and non-traditional subscales were .84 and .82, respectively. The Traditional and Non-traditional subscales were significantly intercorrelated ($r = .76, p < .01$) and both were highly correlated with the Total HLEI scale ($r = .93$ and $r = .95$, respectively, $p < .01$ for both correlations).

The total possible score for the total HLEI-R was 147 points. The mean score was 90.86 (SD 19.55), with scores ranging from 44 to 126.50. The scale was divided into two sub-scales: traditional and non-traditional literacy practices. Items were determined to be traditional or non-traditional based on a review of the quantitative and qualitative literature. Appendix F highlights each item and its classification. The total possible score for the traditional portion of the measure was 75. The mean score was 49.06 (SD 9.94), with scores ranging from 24 to 64. A respondent could have earned a score of 72 for the non-traditional portion of the measure. The mean response was 36.32 (SD 10.68),

Table 4

Correlation Matrix – HOME & HOME Subscales

	Total HOME	Learning Environment	Language Stimulation	Physical Environment	Responsivity	Academic Stimulation	Modeling	Variety	Acceptance
Total Home	--								
Learning Environment	.87**	--							
Language Stimulation	.62**	.46**	--						
Physical Environment	.58**	.31*	.41**	--					
Responsivity	.70**	.56**	.39**	.35*	--				
Academic Stimulation	.44**	.45**	.23	-.02	.14	--			
Modeling	.58**	.37**	.34*	.28*	.23	.16	--		
Variety	.80**	.77**	.43**	.22	.54**	.44**	.46**	--	
Acceptance	.65**	.55**	.34*	.21	.27*	.34*	.42**	.45**	--

* = $p < .05$ ** = $p < .01$

with scores ranging from 17 to 61. As discussed previously, this measure is not standardized, and was revised for the purposes of this investigation. However, the total HLEI-R scale, as well as the traditional and non-traditional subscales are highly correlated with the HOME, a widely used indicator of the quality of the home environment ($r = .60$, $r = .61$, and $r = .51$, $p < .01$, respectively).

Pre-School Comprehensive Test of Phonological and Print Processing

The total possible score for the Pre-CTOPPP is 79. Scores for the participants in this investigation ranged from 21 to 71. The mean score was 51.75 (SD 14.18). The internal reliability (Cronbach's α) calculated for this sample is .71.

Peabody Picture Vocabulary Test-3

Standard scores are reported here for the PPVT-3. The mean score for this group of participants was 94.14 (SD 12.49), which falls in the average range for this measure. Participants' standard scores ranged from 65 to 118.

Expressive One-Word Picture Vocabulary Test-3

Standard scores are also reported here for the EOWPVT-3. The mean score for this group of participants was 93.90 (SD 12.82), which is in the average range. Standard scores ranged from 64 to 123 on this measure.

Interest in Literacy Scale-3

The ILS-3 scale was examined as well. The measure included training/distracter items as well as interest items. The average score for the interest items was 39.47 (SD 10.9). The alpha for the ILS interest items was .91. Although the internal reliability coefficient for this scale was within the range of those reported by the authors, analyses indicated that scores from this measure did not function as expected. For example, this measure was negatively correlated with mother's educational level ($r = -.28, p < .05$), and had no relationship with child language and literacy measures. While this scale had originally been intended for use with older children, it was used during this investigation because there were no other interest scales available for this age group. It may be that the ILS-3 was too cognitively demanding for the children involved, hence the resulting lack of association with other literacy related measures.

Associations Among Major Variables

Table 5 highlights associations among the variables described above. The educational level of the mother was significantly associated with children's receptive language ($r = .28, p < .05$) and the quality of the home environment as measured by the HOME ($r = .49, p < .01$) and the HLEI-R ($r = .29, p < .05$). The HOME and the HLEI-R were moderately correlated ($r = .60, p < .01$). Additionally, both indicators of children's language development (PPVT-3 and EOWPVT-3) were significantly correlated ($r = .69, p < .01$). The Pre-CTOPPP was also significantly associated with scores on the HLEI-R ($r = .32, p < .05$), and there was a trend regarding the association between the

Table 5

Correlation Matrix – Major Variables

	MomEd	PPVT	EOWPVT	Pre-CTOPPP	HOME	Interest in Literacy	Total HLEI	HLEI Traditional	HLEI Non-traditional
MomEd	--								
PPVT	.28*	--							
EOWPVT	.20	.69**	--						
Pre-CTOPPP	-.03	.58**	.56**	--					
HOME	.49**	.26 ⁺	.38**	.26 ⁺	--				
Interest in Literacy	-.28*	.06	-.07	.11	.08	--			
Total HLEI	.29*	.17	.30*	.32*	.60**	.01	--		
HLEI - Traditional	.32*	.31*	.32*	.35*	.61**	.03	.93**	--	
HLEI - Non-traditional	.24 ⁺	.08	.28*	.26 ⁺	.51***	-.02	.95**	.76**	--

* = p < .05

** = p < .01

*** = p < .001

+ = p < .10

Pre-CTOPPP and the HOME ($r = .26$, $p < .10$). The Pre-CTOPPP was also significantly associated with both the receptive and expressive language measures ($r = .58$ and $r = .56$, respectively, $p < .01$ for both).

Frequency of Engagement in Literacy Practices at Home

An initial examination of literacy practices that occurred in the home was undertaken. This was done in a number of ways, examining both traditional and non-traditional practices. Research Question 1 related to the types of literacy practices that were occurring in the homes of these low-income African American children. For this question, frequencies of engagement in multiple literacy practices for these families were calculated.

Traditional Literacy Practices

As expected, the majority of families reported engaging in some type of traditional literacy activity. Table 6 highlights these findings. For example, the overwhelming majority of the families reported that there was at least one adult reader in the home, and that the home had books or magazines for children. Additionally, the families were able to name at least one genre when asked what types of books for children they had (e.g. cartoon, nursery rhyme), with 84.3% listing more than three categories. Further, many families (74.5%) reported that they had 25 or more children's books or magazines in the home. Ninety-six percent of the families reported reading to their child at home, with most indicating that they read to the child at least once per day and for about 15 minutes during each episode. In 98% of the interviews, the mother

indicated that the child looks at books alone. About half of the mothers reported using the public library. Of those who did use the library, only 35.3 % reported that the child usually went along.

Table 6
Family Literacy Interactions From HLEI-R

Item	n	%
Number of readers in home		
0	1	2.0
1	2	3.9
2	9	17.6
3 or more	39	76.5
Read adult books	34	66.7
Use reference books	34	66.7
Use religious materials	39	76.5
Read magazines	48	94.1
Twice/week or more	28	58.3
Read newspaper	37	72.5
Twice/week or more	18	48.6
Number of books or magazines for kids		
1-14	8	15.7
15-25	3	5.9
25+	38	74.5
Genres		
Names 1-3 categories	6	11.8
Names more than 3 categories	43	84.3
Family members read books with child	45	88.2
Interact other than with books	40	78.4

Table 6 (contd.)
Family Literacy Interactions From HLEI-R

Item	<u>n</u>	%
Mom reads to child	49	96.1
How Often		
Daily	20	39.2
3 times/week	31	60.8
How Long		
Less than 15 minutes	9	17.6
About 15 minutes	26	51.0
Longer than 15 minutes	16	31.4
Child asks to be read to	46	90.2
Child looks at books alone	50	98.0
Child writes		
Daily	40	78.4
Twice per week	11	21.6
Family members go to library	26	51.0
Child goes along	18	35.3
Mom read books about teaching reading or writing	27	52.9
Child discusses school day	47	92.2
Mom understands	46	90.2
Child discusses favorite book	40	78.4
Mom understands	39	76.5
Child plays school	24	47.1
Child likes nursery rhymes	41	80.4
Has memorized one or more	39	76.5
Oral storytelling tradition in home	30	58.8

Note. N = 51.

Non-traditional Literacy Practices

Examination of families' non-traditional literacy practices was conducted based on several items added to the HLEI-R that have been described in the qualitative literature. One set of questions asked whether the families possessed non-traditional material as described in the qualitative literature, and if so whether the child had access to them. Most families reported that they did use some type of non-traditional materials. Table 7 highlights responses to several HLEI-R items that were related to non-traditional literacy practices. Almost all of the families reported that they used food containers such as cereal boxes (98%). Additionally, many reported that they used menus from carryout restaurants (88.2%), newspaper circulars (80.4%), and the Bible and/or church bulletins (68.6%).

Families were asked another series of questions about whether they engaged in a specific literacy practice, and if so whether it was normally done alone, in the child's presence, or while the child participated. These questions were categorized according to themes highlighted earlier in this paper, and which have been documented in the qualitative literature. They include the use of literacy for daily living, pleasure and entertainment, school or work, religion, interpersonal relationships (including reading and writing letters or notes), and getting information. Table 8 indicates that for daily living, that is reading while shopping, cooking, paying bills, making repairs, washing clothes, using maps, and/or filling out forms, the child either observed the mother engaging or actually participated along with the mother about 43% of the time. When using literacy for pleasure and entertainment (e.g. reading a book, magazine, or newspaper, playing a game, or working a crossword puzzle), the child either observed or participated about

52% of the time. When the mother is engaged in school or work related literacy activities (e.g. reading notes, filling out forms, etc.), the child observed or participated about 60% of the time. When using literacy for religious purposes, the child observed or participated about 45% of the time. Children observed or participated about 72% of the time when

Table 7
Use of non-traditional materials

	N	(%)
Have Bible	35	68.6
Have menus from carry out restaurants	45	88.2
Have telephone books	48	94.1
Have newspaper circulars/coupons	41	80.4
Have store receipts	36	70.6
Have posters	21	41.2
Have church bulletins	25	49.0
Have employment applications	10	19.6
Have food/household containers	50	98.0

Note. N = 51.

writing or reading notes, letters, or cards to other people (literacy in an interpersonal way).

Finally, when mothers used literacy to get information (e.g. read bus or subway schedule,

telephone book, to learn about a hobby, etc.), children either observed or participated about 24% of the time.

Table 8
Non-traditional literacy practices

Purpose (%)	N/A	Alone	Child Observes	Child Participates
Daily Living	29.14	27.44	29.41	13.99
Pleasure & Entertainment	31.88	16.33	15.02	37.27
School/Work Related	22.05	18.13	23.03	37.25
Religion	49.0	5.85	11.75	33.35
Interpersonal	18.15	10.30	16.68	54.90
Get Information	46.56	29.40	16.65	7.33

Note. N = 51.

Child Influences on Literacy Development

The following child factors were examined regarding their relation to literacy development: 1) gender; 2) age; 3) interest in literacy; and 4) language functioning.

Independent sample t-tests revealed that there were no gender differences regarding child outcomes. Regarding the standardized measures (i.e. PPVT-3 and EOWPVT 3), there were also no differences by age. Analyses did indicate, however, that the child's age in months was significantly associated with scores on the Pre-CTOPPP, with older children scoring higher ($r = .49, p < .01$).

In order to respond to Research Questions 2a, b, and c, children's interest in literacy was examined. The initial analysis, a Pearson Product Moment Correlation, revealed no significant relationships between children's interest in engaging in literacy practices (i.e. ILS-3) and scores on the HOME, HLEI-R, Pre-CTOPPP, PPVT-3, or EOWPVT-3. Additionally, no significant relationship was found between interest in literacy and whether extended family members engage in literacy interactions with children. Therefore, this measure was excluded from any further data analyses. As stated previously, this task may have proven to be too cognitively demanding for children in this age group.

A proxy for interest in literacy could be determined by examining parental response to the question of whether or not their children look at books alone. Ninety-eight percent of the respondents indicated that the child did so. Those parents were then asked how many times per week their children do so. Based on the forced-choice response (less than twice per week or two times per week or more), children were split into two groups to examine differences on the outcome measures. An independent samples t-test revealed the following trend: children who

look at books alone at least twice per week scored higher on the PPVT-3 than those children who did not. Additionally, families with children who looked at books alone at least twice per week received significantly higher scores on the HLEI-R and the HOME (Table 9).

Table 9
Group Differences by Frequency of Independent Book Reading

	< Twice Per Week		Twice Per Week or More		t (51)
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
EOWPVT	89.27	13.30	95.18	12.56	1.36
PPVT	88.55	10.09	95.68	12.75	1.71 ⁺
Pre-CTOPP	48.91	14.59	52.53	14.15	.75
HOME	32.82	10.30	43.40	6.62	4.13**
HLEI-R	68.05	13.13	94.15	16.59	4.81**

+ $p < .10$ ** $p < .01$

Home and Family Influences on Literacy Development

The major question in this study was to what extent children’s literacy development was influenced by the home environment. For this investigation, the home environment was examined using two measures: the Home Observation for Measurement of the Environment Scale (i.e. overall quality of the home environment) and the Home Literacy Environment Interview-Revised (i.e. home literacy practices).

The hypothesis emanating from Research Question 2a was that engagement at home in multiple literacy practices would be associated with emerging literacy skills and interest in low-

income African American children. As Table 4 demonstrates, correlational analyses indicated that higher scores on the HOME scale were positively associated with increased expressive language (PPVT-3), receptive language (EOWPVT-3), and preschool literacy scores (Pre-CTOPPP) ($r = .38, p < .01, r = .26, p < .10,$ and $r = .26, p < .10,$ respectively). Additionally, higher scores on the HLEI-R were significantly associated with increased expressive language functioning and preschool literacy scores ($r = .30, p < .05$ and $r = .32, p < .05,$ respectively). Analyses also revealed that an increased number of books in the home was significantly associated with increased performance on the PPVT-3, EOWPVT-3, Pre-CTOPPP, HOME, and HLEI-R (Table 10). This question was singled out from the HLEI-R because researchers have previously used number of books in the home as an indicator of the quality of the home literacy environment (e.g. Dickinson & Snow, 1987).

Table 10

Correlation Matrix – Books in the home and child home variables

	# Books in Home	PPVT	EOWPVT	Pre-CTOPPP	HOME	TOTAL HLEI-R
# Books in Home	--	.32*	.36*	.30*	.49**	.51**

* $p < .05$

** $p < .01$

It was predicted that children who lived in homes with extended family members who engaged in literacy practices with them would demonstrate higher interest in literacy and preschool literacy scores than those without extended family members who engage with them. An independent samples t-test conducted to address this question revealed no group differences

between those children *with* and those *without* extended family members who engage in literacy practices with them. To further address this question, the number of family members living in the household was examined in relation to child outcomes. Correlational analyses revealed that children with more extended family members who live with them received significantly lower scores on the EOWPVT-3 ($r = -.42, p < .01$) and the Pre-CTOPPP ($r = -.31, p < .01$). Additionally, there was a trend toward higher numbers of household members to be associated with lower scores on the HOME and HLEI-R ($r = -.25$ and $r = -.26, p < .10$, respectively).

Table 11
Group Differences Between High Traditional and Low Traditional Scores

	High Traditional		Low Traditional		t (51)
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
EOWPVT	97.35	13.23	90.32	11.57	2.41*
PPVT	98.08	12.68	90.04	11.10	2.02*
Pre-CTOPPP	57.27	12.40	46.00	13.83	3.08**
HOME	44.92	6.07	37.16	9.25	3.56***

* $p < .05$ ** $p < .01$ *** $p < .001$

A median split was conducted for families' scores on the portion of the HLEI-R focusing on literacy activities considered "traditional" for this investigation, with children grouped as either in high traditional or low traditional homes. As reflected in Table 11, t-tests revealed that

children whose families ranked as high traditional had significantly higher mean scores on all measures than children whose families ranked as low traditional.

A series of t-tests were conducted to determine if there were any group differences in language or literacy development based on the responses of the mothers to specific questions from the HLEI-R. A summary of relevant findings follows.

As Table 12 indicates, families who reported visiting the public library on a regular basis, *and* who regularly include their children in those visits had children who scored significantly higher on tests of preschool literacy skills as well as receptive and expressive language. Additionally, these families scored significantly higher on both the HOME and the HLEI-R.

Additional t-tests were conducted to determine whether there were any differences on the outcome measures for children based on their mothers' responses to other HLEI-R questions. As Table 12 reflects, an independent samples t-test revealed that families who engaged in oral storytelling had children who obtained significantly higher expressive language scores than children from families who did not engage in oral storytelling. Additional analyses revealed that these families scored significantly higher on the HOME and HLEI-R scales than families who did not engage in oral storytelling.

A median split was conducted to group families into high non-traditional and low non-traditional groups. Table 14 demonstrates that families who received high scores on the non-traditional portion of the HLEI-R had significantly higher scores on the HOME and there was a trend toward higher scores on the EOWPVT-3.

Table 12
Group Differences Between Children Who Visit the Public Library with Family Members

	Visits The Library		Does Not Visit The Library		
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>t</u> (51)
PPVT	100.56	11.20	90.64	11.88	2.91*
EOWPVT	98.67	13.43	91.30	11.89	2.02*
Pre-CTOPPP	57.50	12.92	48.61	14.02	2.22*
HOME	45.06	5.92	38.97	9.21	2.53*
HLEI-R	99.92	12.09	82.30	19.56	3.47***

* $p < .05$ *** $p < .01$

Table 13
Group Differences Between Oral Storytelling or No Oral Storytelling

	Does Not Tell Oral Stories		Tells Oral Stories		<u>t</u> (51)
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
EOWPVT	89.52	11.30	96.97	13.11	2.11*
PPVT	89.52	9.55	96.97	14.00	1.38
Pre-CTOPPP	49.57	13.68	53.27	14.55	.91
HOME	36.52	8.96	44.33	6.90	3.52***
HLEI-R	74.59	12.15	98.27	17.09	5.45***

* $p < .05$ *** $p < .001$

Table 14
Group Differences Between High Non-Traditional and Low Non-Traditional Scores

	Low Non-Traditional		High Non-Traditional		t (51)
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
EOWPVT	90.43	13.50	96.75	11.71	1.78 ⁺
PPVT	92.43	13.64	95.54	11.52	.88
Pre-CTOPPP	49.17	14.08	53.86	14.16	1.18
HOME	36.35	9.58	45.04	5.33	4.09***

*** $p < .001$ + $p < .10$

Regression analyses were conducted in order to explore the relationships between the described variables. Several multiple regression analyses were conducted with the home literacy environment (i.e. total HLEI-R) and mother's educational level entered as independent variables. For the first regression, the dependent variable was the child's receptive language (Table 15). The overall model approached significance, $F(2, 48) = 2.43$, $p < .10$. Analysis revealed that mother's education and the home literacy environment accounted for 9% of the variance in children's receptive language. Analysis revealed that the statistical power of this test was .47.

Table 15
Regression Analysis Summary for Parent and Family Factors Predicting Receptive Language

Variable	<u>B</u>	<u>SEB</u>	<u>β</u>
Mother's Education	2.21	1.32	.20
Total HLEI	.08	.09	.13

$\underline{R}^2 = .09$ ($N = 51$, $p < .10$).

In the second regression, child expressive language was the dependent variable (Table 16). The overall model approached significance, $F(2, 48) = 2.80$, $p < .10$. Analyses revealed that the educational level of the mother and the home literacy environment accounted for 11% of the variance in the child's expressive language skills. The observed power for this statistical test was .53.

Table 16
Regression Analysis Summary for Parent and Family Factors Predicting Expressive Language

Variable	<u>B</u>	<u>SEB</u>	<u>β</u>
Mother's Education	1.14	1.34	.12
Total HLEI	.18	.09	.27

$\underline{R}^2 = .11$ ($N = 51$, $p < .10$).

A third regression was conducted, with the child's preschool literacy skills entered as the dependent variable (Table 17). The overall model was significant, $F(2, 48) = 3.21$, $p < .05$. The results indicated that the mother's educational level and the home literacy environment

accounted for 12% of the variance in children’s expressive language. The observed power for this statistical test was .59.

Table 17
Regression Analysis Summary for Parent and Family Factors Predicting Literacy

Variable	<u>B</u>	<u>SEB</u>	<u>β</u>
Mother’s Education	-1.38	1.48	-.13
Total HLEI	.27	.11	.36

$R^2 = .12$ ($N = 51$, $p < .05$).

In order to explore the data to find the *best model* to explain differences in children’s early literacy skills, an additional regression was conducted (Table 18). For this regression, PPVT-3 scores were entered along with data on the mother’s educational level and the total HLEI-R score. The overall model was significant, $F(3, 47) = 12.33$, $p < .001$. Results indicated that mother’s education, home literacy environment, and child receptive language accounted for 44% of the variance in children’s preschool literacy skills.

Table 18
Regression Analysis Summary for Parent and Family Factors Plus Receptive Language Predicting Literacy

Variable	<u>B</u>	<u>SEB</u>	<u>β</u>
Mother’s Education	-2.87	1.22	-.28
Total HLEI	.21	.09	.28
PPVT	.68	.13	.59

$R^2 = .44$ ($N = 51$, $p < .001$).

In response to Research Question 2b, several hierarchical regression analyses were conducted to determine the contribution of multiple literacy practices, beyond maternal education, to children’s language and literacy development. Table 19 demonstrates that the parent and home factors accounted for a total of 8 % of the variance in children’s receptive language development, with the HLEI-R accounting for 1 % of the variance beyond the contribution of maternal education. Results indicate that the model entered at the first step was significant, $F(1, 49) = 4.11, p < .05$, while the model entered at the second step approached significance $F(2, 48) = 2.43, p < .10$.

Table 19
Hierarchical Regression Analysis Summary for Parent and Family Factors Predicting Receptive Language (N = 51)

Variable	B	SEB	β
Step 1			
Mother’s education level	2.55	1.26	.29*
Step 2			
Mother’s education level	2.21	1.32	.24
HLEI	.08	.09	.13 ⁺

Note. $R^2 = .08$ for Step 1; $\Delta R^2 = .01$ for Step 2 (+ $p < .10$).

* $p < .05$ + $p < .10$.

Additional analysis revealed that the home literacy environment accounted for seven percent of the variance in children’s expressive language skills, beyond the contribution of

maternal education (Table 20). Results indicate that the model entered at the first step was not significant, $F(1, 49) = 2.03, p > .10$, while the model entered at the second step approached significance $F(2, 48) = 2.80, p < .10$.

A third hierarchical regression analysis revealed that the home literacy environment accounted for 12% of the variation in children’s preschool literacy skills (Table 21). Results indicate that the model entered at the first step was not significant, $F(1, 49) = .04, p > .10$, while the model entered at the second step was significant $F(2, 48) = 3.21, p < .05$.

Table 20
Hierarchical Regression Analysis Summary for Parent and Family Factors Predicting Expressive Language (N = 51)

Variable	B	SEB	β
Step 1			
Mother’s education level	1.88	1.31	.20
Step 2			
Mother’s education level	1.14	1.34	.12
HLEI	.18	.09	.27 ⁺

Note. $R^2 = .04$ for Step 1; $\Delta R^2 = .07$ for Step 2 ($p < .10$).

+ $p < .10$.

Table 21
Hierarchical Regression Analysis Summary for Parent and Family Factors Predicting Literacy (N = 51)

Variable	B	SEB	β
Step 1			
Mother's education level	-.28	1.49	-.27
Step 2			
Mother's education level	-1.38	1.48	-.13
HLEI	.27	.11	.36**

Note. $R^2 = .00$ for Step 1; $\Delta R^2 = .12$ for Step 2 ($p < .05$).

** $p < .01$.

When a fourth hierarchical regression was conducted with mother's educational level entered at Step 1, PPVT-3 scores entered at Step 2, and HLEI-R scores entered at Step 3, results indicated that the home literacy environment accounted for 7 % of the variance in children's preschool literacy scores, beyond maternal education and receptive language (Table 22). Results indicate that the models entered at both Step 2 and Step 3 were significant, $F(2, 48) = 14.01$, $p < .01$, and $F(3, 47) = 12.33$, $p < .001$, respectively.

Table 22
Hierarchical Regression Analysis Summary for Parent and Family Factors Plus Language
Predicting Literacy (N = 51)

Variable	B	SEB	β
Step 1			
Mother's education level	-.28	1.49	-.03
Step 2			
Mother's education level	-2.11	1.24	-.20 ⁺
PPVT	.72	.14	.63***
Step 3			
Mother's education level	-2.87	1.22	-.28*
PPVT	.68	.13	.59***
HLEI	.21	.09	.28**

Note. $R^2 = .00$ for Step 1; $\Delta R^2 = .37$ for Step 2 ($p < .001$); $\Delta R^2 = .07$ for Step 3 ($p < .001$).

+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$

Chapter V Discussion

Introductory Comments

The purpose of this exploratory study was to examine the contribution of family literacy practices to the literacy development of children from low-income environments. While the findings from this study may not be generalizable to the larger population of African American families, they do offer some insight into the literacy practices of low-income African American mothers and their children.

Revisiting the theoretical framework that helped shape this study is important given the findings discussed here. In his sociocultural theory, Vygotsky (1978) described ways that more experienced individuals scaffold less experienced individual's learning opportunities. The demonstration of parents' home literacy practices was consistent with Vygotsky's theory.

Parents served as literacy role models, providing support for their child's language and literacy development. Additionally, parents often seemed to work within the child's zone of proximal development to encourage the child to extend his or her present understanding.

Bronfenbrenner's (1979) ecological theory states that individuals develop within a complicated set of systems. Each of these systems is connected both to the child and to the other systems, and together they impact the development of the individual. Again, this study found evidence of the impact of various systems on the literacy practices that occurred in the home. For example, the influence of Head Start was clear. Many of the mothers indicated that they read to their child on a regular basis, and that they were aware of the importance of such an act. This provides evidence of the influence of the mesosystem (i.e. the Head Start environment) on that of the

microsystem (i.e. the home environment). These preliminary results indicate the merit of exploring family literacy practices in a way that continues to consider the family cultural context and how it is influenced and supported by the immediate environment of those families.

Generally, the findings from this study are consistent with the literature on language and literacy development. The findings revealed that most families engaged in traditional literacy practices. Additionally, many claimed to possess non-traditional literacy materials, though not all families used those materials. The quality of the home environment influenced children language and literacy skills. However, language skills emerged to make the greatest contribution to children's early literacy development. A discussion of these results follows.

A very surprising finding from this study was the minimal influence that maternal education had on children's literacy development. While not a novel finding (Britto & Brooks-Gunn, 2001), this finding is counterintuitive and contrary to much of what is stated in the literature regarding children's language and literacy development. In a study on the home literacy practices of low-income African American students, Britto and Brooks-Gunn (2001) found that mothers with a high school diploma had children with *poorer* expressive language skills than children of mothers with less than a high school diploma. However, in the same study, children's receptive language was positively associated with maternal education, which is consistent with the findings in the current study. They did find, however, that a more supportive social emotional climate was related to child expressive language. The authors suggested that these findings may reflect the greater influence of the social emotional climate in the home for children's expressive language than maternal education.

Several possibilities exist to explain the lack of an association between maternal education and literacy development in the current study. This sample tended to be educated; almost all had at least a high school diploma. Although data on the mother's educational level were collected, no information was collected regarding the educational level of other members in the home. There is a literature which suggests examining total household income rather than individual income as an indication of poverty (e.g. Moffitt & Roff, 2000). Perhaps the same principle could be applied when examining the influence of education on children's outcomes, particularly given the large number of families with household incomes above the poverty line in this study.

An additional explanation for the lack of association between maternal education and child literacy development could be the children's participation in the Head Start program. It may be that, given the recent mandate of "Leave No Child Behind", a shift in Head Start curricula toward literacy could counteract the effect of maternal educational level on children's outcomes (Zill, Resnick, Kim, O'Donnell, Sorogon, McKey, Pai-Samart, Clark, O'Brien, & D'Elio, 2003).

Child Influences on Literacy Development

As expected, there were no gender differences on the child outcome measures. Gender differences on standardized measures of language development are not typically found, and have been examined specifically regarding African American low-income children (Washington & Craig, 1999). Also as expected, there were no differences by age on the standardized measures (PPVT-3 and EOWPVT-3). There were, however, differences by age on the Pre-CTOPPP, with

older children scoring higher on this measure. This is not an unexpected finding, given the expectation that 1) older children would have been in Head Start for a longer period of time, and would have experienced more instruction in the areas measured on the Pre-CTOPPP (i.e. print awareness, blending, and initial sound matching), and 2) the scores on this measure are cumulative; standardized scores have not yet been created.

Although interest in literacy was an important question in this investigation, the measure chosen did not seem to work with the young population assessed. Thus, another potential measure of the child's interest in literacy – parental report of frequency of independent book reading – was examined. As expected, in this study, most of the parents reported that their child looked at books independently. Independent book reading has been documented to affect later reading achievement (Scarborough, Dobrich, & Hager, 1991). There is a vast literature that suggests that increased exposure to books via reading independently or being read to, is associated with increased language skills (Bus, van IJzendoorn, & Pellegrini, 1995; DeBaryshe, 1993; Dickinson & Snow, 1987; Dickinson & Tabors, 1991; Wasik & Bond, 2001). Researchers have also noted that children who are more motivated read more; consequently, increased engagement in reading is associated with increased reading comprehension (Guthrie, Wigfield, Metsala, & Cox, 1999).

Home and Family Influences on Literacy Development

The primary goal of this investigation was to explore home and family factors that contribute to children's literacy development. The results reported here generally support the hypotheses specific to this study, and the findings in the literature that the home environment and

family factors influence the development of literacy skills in young at-risk children (Aulls & Sollars, 2003; Serpell, Sonnenschein, and Baker, 2003). These family and home influences, operationalized here as multiple literacy practices, include both traditional (e.g. Baker, Scher, & Mackler, 1997; DeBaryshe, 1993; Scarborough & Dobrich, 1994) and non-traditional literacy practices (e.g. Elish-Piper, 2000; Purcell-Gates, 1983; Saracho, 2002; Taylor, 1983; Taylor & Dorsey-Gaines, 1988; Tett, 2000).

Traditional Literacy Practices

When examining the frequency of literacy behaviors that were reported by the mothers, it was noted that the majority of parents reported engaging in traditional literacy practices of some sort. For example, most parents reported that they read to their child, with about half stating that when this exchange occurred, it lasted for about 15 minutes. Thus, it appears that the children's enrollment in the Head Start program may be positively influencing the parents' practices in the home. These findings are consistent with other studies of parents of Head Start children (Zill, et al., 2003).

Consistent with the literature, it was revealed that increased numbers of books in the home was positively associated with receptive and expressive language (DeBaryshe, 1993; Dickinson & Snow, 1987; Dickinson & Tabors, 1991). Additionally, increased numbers of books was also found to be associated with increased scores on the HOME and the HLEI-R. Again, this is not surprising, given the nature of those measures. They are both intended to garner information about the quality of the home environment, overall and specifically related to literacy.

Also consistent with the literature on traditional literacy practices (Christian, Morrison, & Bryant, 1998; Marvin & Mirenda, 1993; Payne, Whitehurst, & Angell, 1994), children whose parents who reported visiting the public library with their child had significantly higher scores on each of the child outcome measures (i.e. PPVT-3, EOWPVT-3, and Pre-CTOPPP). Children in this group would be expected to have increased language skills and increased preschool literacy skills based on their exposure to more formal uses of literacy.

Non-Traditional Literacy Practices

When examining non-traditional literacy practices, the picture that emerged was mixed. Many parents reported having and using non-traditional materials in the home, which is similar to evidence from the qualitative literature on literacy practices in the homes of minority parents (Auerbach, 1989, 1995; Elish-Piper, 1997, 2000; Rivalland, 2000; Taylor, 1983; Taylor & Dorsey-Gaines, 1988). For example, in this study most mothers reported that they possessed and used menus from carry-out restaurants, circulars or coupons from the newspaper, and the Bible. However, when asked about engagement with these materials, the responses were mixed. The categories of practices were examined in relation to the reported engagement by mothers (i.e. not at all, alone, child observes but does not participate, or child participates). In contrast to the qualitative literature, half or more of the parents reported either not engaging in a particular category of practices at all, or engaging alone for three categories, Daily Living, Religion, and Getting Information. Consistent with the literature, as a group, half or more of the parents reported either engaging in a particular category of practices while the child observed or while the child participated for Pleasure & Entertainment, School or Work Related, and Interpersonal.

This finding may be a function of the HLEI-R instrument (see limitations section for further discussion of this issue).

The HLEI-R also asked parents if they told oral stories to their children. This question was examined independently because there is a literature that describes the emphasis in the African American community on oral storytelling (e.g. Heath, 1983). Those parents who responded that they did engage in oral storytelling also reported spending a lot of time engaged in other literacy practices. The children in these families had significantly higher expressive language skills. There was also a trend toward these children having higher scores on receptive language and pre-literacy skills than children whose mothers did not report engaging in oral storytelling. Additionally, parents who reported engaging in oral storytelling scored significantly higher on both indicators of the home environment (HLEI-R and HOME). It may be that for these children, participation in oral storytelling with their mothers helps facilitate expressive language development. If this had been a longitudinal study, it would have been interesting to explore whether there were any performance differences in the elementary school years (e.g. story writing skills).

Contrary to the proposed hypothesis, it was found that children with extended family members in the home did not demonstrate increased preschool literacy skills nor increased language skills. In fact, it was surprising to note that increased numbers of people living in the home seemed to be problematic for the children in this study. Recent research has indicated that increased household density may be problematic for low-income African American mothers (Black, 2003; Britto & Brooks-Gunn, 2001), and this phenomenon should be investigated further. The question of whether or not other family members engaged in literacy behaviors with

the child revealed no differences between groups. Perhaps the question should have probed more deeply to discover specifically which extended family members (e.g. adults) helped the child with learning to read.

It was disappointing to note the lack of significant group differences between the high non-traditional and low non-traditional groups on the child outcome measures (i.e. PPVT-3, EOWPVT-3, and Pre-CTOPPP), although the differences were in the projected direction, with the high non-traditional group scoring higher on all three measures. These results could be a function of the HLEI-R or the reduced power in the study. However, it may be possible that engagement in traditional literacy practices (e.g. shared book reading) yields more influence in children's literacy development.

This study revealed several interesting findings in regard to which combination of factors best explained the variability in children's language and literacy development. First, mother's educational level and the home literacy environment significantly predicted children's preschool literacy development. However, the addition of receptive language scores helped to explain much more of the variance in preschool literacy scores. Although the quality of the home literacy environment significantly contributed to children's early literacy skills, it appears that receptive language accounted for most of the variance in children's pre-literacy skills. These findings are meaningful for several reasons. First, they indicate that children's early exposure to language may be one of the more important aspects of the early childhood home environment, due to its association to later literacy development (Baker, Scher, & Mackler, 1997). Second, they may also indicate that improving the overall quality of the home environment may help increase children's early literacy scores (Snow, 1991; Snow & Dickenson, 1991)

Finally, the quality of the home literacy environment had a relatively small influence on children's preschool literacy skills, and did not have the anticipated influence on children's receptive and expressive language. Three possibilities exist for these findings. The first is that the sample size did not provide adequate power to detect significant findings. This is reflected in the trends that were evident for the correlational analyses and regression models. A second and perhaps less desirable possibility is that the HLEI-R instrument did not effectively capture the combined traditional and non-traditional literacy practices that were occurring in these homes. The HLEI-R instrument needs to be examined further, as is discussed below in the section on research directions. Third, it is possible that educational intervention efforts may simply be more effective than efforts to improve the quality of the home environment (Dickinson & Smith, 1994; Lonigan & Whitehurst, 1998; Neuman & Gallagher, 1994; Wasik, 2001).

Limitations & Research Directions

There are several limitations in the present study that should be acknowledged, primarily, the size of the sample. While the original sample size was 67, only 51 participants were recruited for this study. Consequently, there was a reduction in power for this study, and some of the relationships between variables that were expected did not materialize. It is likely that specific non-significant findings are a direct result of the reduced power in this study, and that an increased sample size may have detected significant results. Future research efforts should focus on ways to better increase parental participation in projects such as this.

Second, the voluntary participants in this study may have been somehow different than non-participants. Because this study only included parents who volunteered to join this project, the author may have missed important processes at play in the homes of the families who chose not to participate. Additionally, families who chose to participate may practice literacy in a manner that is more in line with traditional school practices than those families who opted not to participate.

Third, because this sample was limited to those families who, based on their eligibility for Head Start, are living at or below the poverty line, generalizability to the larger population of African American learners is limited. Studies that include more economically diverse samples of African American children should be implemented.

A fourth limitation related to this study is the fact that these families were not followed over time. Ideally, one would have wanted to examine the literacy practices of these families while the child was enrolled in Head Start, and as the child transitioned into formal schooling. It might have been interesting to examine whether the mothers in the study used different literacy practices at home based on the child's entry into school. It may have also been informative to track the social contextual issues that the families grappled with over time, and how those affected the literacy practices that they engaged in.

There is a need for longitudinal examinations of family literacy practices in low-income minority families, possibly starting in the first few months of the child's life. This would require building strong relationships with these families in order to gain their trust and willingness to participate in long term research studies. A task of this sort would require researchers to consider and accommodate for the social and cultural backgrounds of the participants.

Additional considerations might include an examination of the classroom environment in order to gain an understanding of how differences in teaching styles, access to materials, and classroom climate contribute to children's literacy development.

A methodological limitation that must be acknowledged is the use of non-standardized measures with the participants in this study (i.e. Pre-CTOPPP, ILS-3, and HLEI-R). While the Pre-CTOPPP has been widely used with Head Start children, it is still undergoing standardization. Additionally, while the third version of the Interest in Literacy Survey has undergone several revisions, its usefulness with this population remains unclear. Finally, the Home Literacy Environment Interview-Revised was modified in an effort to capture the non-traditional literacy practices that had been described in the qualitative literature. While the Cronbach's alpha scores were within the acceptable range for social science research, it is unclear whether this measure is a good indicator of engagement in non-traditional literacy practices. More work should be done with this measure in order to examine its usefulness.

Future research should include the standardization of a measure which adequately captures engagement in *both* traditional and non-traditional literacy practices. This would allow researchers to make statements about family literacy practices in minority families which are generalizable beyond low-income African American families. Researchers have noted that these literacy practices are common in other minority groups (Auerbach, 1989, 1995; Elish-Piper, 2000; Neuman, 1996; Purcell-Gates, 1993; Taylor, 1983; Taylor & Dorsey-Gaines, 1988; Tett, 2000), thus it would be informative to include these other groups.

A final limitation is that this study did not examine the impact of the educational experience on the children involved in the study. Researchers have noted that children's

frequency of engaging in reading and writing episodes within the classroom environment may be influenced by the quality of the educational environment (Neuman & Roskos, 1993). It would have been informative to examine the similarities and differences in teacher behavior and educational environments across the classrooms of the families who were involved in this study. Regrettably, an examination of these factors was beyond the parameters of this exploratory investigation.

Future research in the area of family literacy should also continue to explore literacy practices in low-income families by using a social contextual perspective. That is, researchers should examine which home literacy practices are most salient to the families of interest, and should explore ways to use these practices to positively affect children's literacy development.

Implications

The results described here have implications for policy makers and practitioners. For policy makers, the lesson to be learned here may be that waiting until entry into preschool may simply be too late. If language development drives so much of children's preschool literacy development, then perhaps at-risk families need intervention much earlier. Examining risk factors and providing intervention services may be necessary within the first few months of life, but is certainly warranted within the first few years. A shift in policy from remediation to prevention may be worth examination. The Early Head Start initiative is attempting to address this issue (Zill, et al., 2003).

Practitioners are faced with possibly competing goals: providing parents with the training necessary to help their children meet success with school related tasks (i.e. traditional literacy practices) or building on the behaviors that parents intuitively use at home and in the community (i.e. non-traditional literacy practices). While these need not be competing goals, given ever stringent criteria for maintaining funding and providing data regarding accountability for preparing Head Start children for school (Zill, et al., 2003), practitioners may opt to focus only on practices that will facilitate success on indicators that examine traditional literacy practices. Ideally, practitioners would encourage parents to teach their children skills that would allow for school success, but they would also build upon the experiences that these parents bring to their child's Head Start experience, even if those happen to be non-traditional experiences.

Additionally, practitioners would encourage parents to be engaging in multiple literacy practices (i.e. both traditional and non-traditional) with their children. For example, Head Start teachers and family support workers could develop their parent training efforts (for both home visits and parent workshops) in a manner that focuses on home literacy practices. They could emphasize to parents that while it is important to *possess* both traditional and non-traditional materials, parents also need to encourage their children to *engage* with them as they participate in these multiple literacy practices. The goal is to capitalize on the materials and behaviors that are already present in the home while encouraging participation in behaviors that assure school success.

Conclusion

Given the continuing gap between literacy skills of low and high risk families, it is important to continue to explore the unique and context-specific literacy practices that occur in low-income minority families. These practices may not be in contrast to, but may instead be complimentary to the more traditional practices that educators have long emphasized (e.g. book reading, visits to the library, etc.). Because home and family influences are so important in the development of literacy skills, it is critical to devise strategies that capitalize on families' natural routines and processes (Britto & Brooks-Gunn, 2001; Neuman, 1996; Purcell-Gates, 1993; Taylor, 1983; Taylor & Dorsey-Gaines, 1988; Tett, 2000).

As this study has demonstrated, traditional and non-traditional literacy practices are complimentary processes, not conflicting ones. It is possible to focus research and intervention efforts on both types of literacy practices in order to affect positive outcomes for children's school performance. This study was a first step toward this end.

Appendices



UNIVERSITY OF MARYLAND

INSTITUTIONAL REVIEW BOARD

4101 Lee Road, 2nd Fl.
College Park, Maryland 20742-5011
301.405.5172 • FAX 301.405.5065 FAX

MEMORANDUM

Notice of Results of IRB Review of Departmental Protocol Revision Request

TO: Dr. Beverly Lee as Hardin
Ms. Jane-Kate Daniels
Department of Human Development

FROM: Dr. Phyllis Moser-Veiller, Co-Chairperson
Dr. Joan A. Lieber, Co-Chairperson
Institutional Review Board

DATE: Wednesday, January 29, 2003

HSR/IRB NUMBER & PROJECT TITLE:

02-0414009 - *Families Read! Maintaining Literacy Practices in Head Start
Families*

This is to notify you that the Institutional Review Board (IRB) has approved your request to revise the previously approved protocol of your project (indicated above), *by including additional resources*. Should you wish to make any other changes to the approved protocol, we ask that you submit a formal request for approval of any such modifications to your departmental human subjects review committee.

If you have any questions or concerns, please do not hesitate to contact us. Thank you!

INFORMED CONSENT FORM

Project Title: Families Read! Examining Literacy Practices in Head Start Families

Statement of Consent: I state that I am over 18 years of age, in good physical health, and wish to participate, along with my child, in a program of research being conducted by Dr. Brenda Jones Harden and Inese Kerr Daniels in the Department of Human Development at the University of Maryland, College Park 20742.

Purpose: The purpose of this research is to assess the literacy development of young children.

Procedures: I will be responding to some interview questions that ask about different types of literacy behaviors that I engage in with my child. Additionally, my child will be assessed for his/her level of literacy development. My child and I will be videotaped during an interactive play session.

Confidentiality: All information collected in the study is confidential, and the identities and children's names will not be identified at any time. Records will be kept in a locked cabinet. All study personnel sign a confidentiality agreement. While information collected in this study is confidential, investigators are required by law to report evidence of child abuse or neglect.

Risks: This study is of low risk to potential participants.

Benefits: One benefit of the study is that the investigators hope to integrate the findings into the Head Start service delivery system around family literacy. Additionally, caregivers will be paid \$20.00 for participation and children will receive a developmentally appropriate book and toy.

I understand that I am free to ask questions or to withdraw from participation at any time without penalty.

Printed Name of Child _____

Printed Name of Parent/Caregiver _____

Signature of Parent/Caregiver _____

Date _____

Principal Investigator: Dr. Brenda Jones Harden
Department of Human Development
University of Maryland at College Park
College Park, Maryland 20742
301-405-2580

Student Project Director: Inese Kerr Daniels
Department of Human Development
University of Maryland at College Park
College Park, Maryland 20742
301-405-7264





UNIVERSITY OF MARYLAND

College Park, Maryland 20742-2112
TEL: 410.326.7100 FAX: 410.326.7101

INSTITUTIONAL REVIEW BOARD

Reference: IRB HSR Identification Number 03-0244 (renewal of 02040009)

June 17, 2004

MEMORANDUM

Notice of Results of Final Review by IRB on HSR Application

TO: Dr. Brenda Jones Harden
Ma. Jancae Kerr Daniels
Department of Human Development

FROM: Dr. Phyllis Moser-Weillon, Co-Chairperson
Dr. Joan A. Lieber, Co-Chairperson
Institutional Review Board

PROJECT TITLE:

03-0244 - Families Read! Examining Literacy Practices in Head Start Families (renewal of 02040009)

The Institutional Review Board (IRB) concurs with the departmental Human Subjects Review Committee's (HSRC's) preliminary review of the application concerning the above referenced project. The IRB has approved the application and the research involving human subjects described therein. We ask that any future communications with our office regarding this research reference the IRB HSR identification number indicated above. Please note that future renewal requests should be submitted on the IRB's Departmental Application form.

We ask that you not make any changes to the approved protocol without first notifying and obtaining the approval of the IRB. Also, please report any deviations from the approved protocol to the Chairperson of your departmental HSRC. If you have any questions or concerns, please do not hesitate to contact either of us at irb@doans.umd.edu. Thank you.

ADDITIONAL INFORMATION REGARDING IRB/HSRC APPROVALS

EXPIRATION OF IRB APPROVAL-Approval of non-exempt projects expires one year after the official date of IRB approval; approval of exempt projects expires three years after that date. If you expect to be collecting or analyzing data after the expiration of IRB approval, please contact the HSRC Chairperson in your department about submitting a renewed application.

STUDENT RESEARCHERS-Unless otherwise requested, the IRB will send copies of approved paperwork to the supervising faculty researcher (or advisor) of a project. We ask that such persons pass on their paperwork or a copy to any student researchers working on that project. That paperwork may be needed by students in order to apply for graduation. PLEASE BE ADVISED THAT THE IRB MAY NOT RE-ARBITRATE PREVIOUS COPIES OF THAT PAPERWORK, particularly if several years have passed since the date of the original approval.

1/04

Enclosures (where appropriate), will include also: (a) copy of informed consent forms included in application and any copies of the application not needed by the IRB; copies of this memorandum and any consent forms to be sent to the Chairperson of the Human Subjects Review Committee.

INFORMED CONSENT FORM

Project Title: Families Read! Examining Literacy Practices in Head Start Families

Statement of Consent: I state that I am over 18 years of age, in good physical health, and wish to participate, along with my child, in a program of research being conducted by Dr. Brenda Jones Harden and Jaese Kerr Daniels in the Department of Human Development at the University of Maryland, College Park 20742.

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Procedures: I will be responding to some interview questions that ask about different types of literacy books and how I engage in with my child. Additionally, my child will be assessed for his/her level of literacy development. My child and I will be videotaped during an interactive play session.

Confidentiality: All information collected in the study is confidential, and the families and children's names will not be identified at any time. Records will be kept in a locked cabinet. All study personnel sign a confidentiality agreement. While information collected in this study is confidential, investigators are required by law to report evidence of child abuse or neglect.

Risks: This study is of low risk to potential participants.

Benefit: One benefit of the study is that the investigators hope to integrate the findings into the Head Start service delivery system around family literacy. Additionally, caregivers will be paid \$20.00 for participation and children will receive a developmentally appropriate book and toy.

I understand that I am free to ask questions or to withdraw from participation at any time without penalty.

Printed Name of Child: _____

Printed Name of Parent/Caregiver: _____

Signature of Parent/Caregiver: _____

Date: _____

Principal Investigator: Dr. Brenda Jones Harden
Department of Human Development
University of Maryland at College Park
College Park, Maryland 20742
301-405-2580

Student Project Director: Jaese Kerr Daniels
Department of Human Development
University of Maryland at College Park
College Park, Maryland 20742
301-405-7244



May, 2003

Dear Parent:

My name is Janese Daniels. I am a graduate student from the University of Maryland. I am studying ways that families at this Head Start center use reading and writing at home. I am writing to ask if you would consider participating in this study. I would come to visit you and your child at home to watch you read a book and play with some materials. If you agree, you will be paid \$20.00 and your child will receive a book to keep.

The results from this study will help the teachers at Head Start understand things that families do at home to help their child learn to read and write. If you would like to participate, please complete the tear-off below, or call me at 301-405-7244. Thank you, and have a good day.
Sincerely,

Janese Daniels

_____ Yes, I would like to participate in the family literacy study.

Child's Name _____

Parent's Name _____

Telephone Number _____

Teacher's Name _____

_____ No, I would not like to participate in the family literacy study.

We want to know about the fun things you do at home with your child!



Parents who participate will be paid \$20 for their time and will also receive a videotape of them playing with their child!

Children who participate will receive a free book!



If you are interested,
Call Janese Daniels
at 301-405-7244

EARLY CHILDHOOD HOME INVENTORY
 Bettye M. Caldwell and Robert H. Bradley
 Summary Sheet

Family name _____ Date _____ Visitor _____

Address _____ Phone _____

Child's name _____ Birthdate _____ Age _____ Sex _____

Parent present? _____ If other than parent, relationship to child _____

Family composition _____
(Specify living in household, including sex and age of children)

Family ethnicity _____ Language spoken _____ Maternal education _____ Paternal education _____

Is mother employed? _____ Type of work when employed? _____

Is father employed? _____ Type of work when employed? _____

Current child care arrangements _____

Summarize past year's arrangements _____

SUMMARY

Subscale	Score	Lowest Fourth	Midle's Half	Upper Fourth
I. LEARNING MATERIALS		0-3	3-9	10-11
II. LANGUAGE STIMULATION		0-5	7-6	7
III. PHYSICAL ENVIRONMENT		0-3	4-6	7
IV. RESPONSIVITY		0-3	4-5	6-7
V. ACADEMIC STIMULATION		0-2	3-4	5
VI. MODELING		0-1	2-3	4-5
VII. VARIETY		0-4	5-7	8-9
VIII. ACCEPTANCE		0-2	3	4
TOTAL SCORE		0-29	30-45	46-55

For rapid profiling of a family, place an X in the box that corresponds to the raw score

Copyright 2001.

Early Childhood HOME Record Form

Place a plus (+) or minus (-) in the box alongside each item if the behavior is observed during the visit, or if the parent reports that the conditions or events are characteristic of the home environment. Enter the initials and the total on the Summary Sheet.

I. LEARNING MATERIALS		24. Rooms are not overcrowded with furniture.	
1. Child has toys which teach colors, sizes, and shapes.		25. House is reasonably clean and minimally cluttered.	
2. Child has 2 or more puzzles.		IV. RESPONSIVITY	
3. Child has a record, tape, or CD player and at least 2 children's records, tapes, or CDs.		26. Parent talks child class 10-15 minutes per day.	
4. Child has toys or games permitting free expression.		27. Parent converses with child at least twice during visit.	
5. Child has toys or games requiring refined movements.		28. Parent answers child's questions or requests verbally.	
6. Child has toys or games which help teach numbers.		29. Parent usually responds verbally to child's requests.	
7. Child has at least 10 children's books.		30. Parent praises child's qualities twice during visit.	
8. At least 10 books are visible in the apartment or room.		31. Parent discusses, discusses, or cuddles child during visit.	
9. Family buys and reads a daily newspaper.		32. Parent helps child demonstrate some achievement during visit.	
10. Family subscribes to at least one magazine.		V. ACADEMIC STIMULATION	
11. Child is encouraged to learn shapes.		33. Child is encouraged to learn colors.	
II. LANGUAGE STIMULATION		34. Child is encouraged to learn polite speech.	
12. Child has toys that help teach names of animals.		35. Child is encouraged to learn spatial relationships.	
13. Child is encouraged to learn the alphabet.		36. Child is encouraged to learn numbers.	
14. Parent teaches child simple verbal reactions (please, thank you, I'm sorry).		37. Child is encouraged to use at least a few words.	
15. Parent encourages child to talk and takes time to listen.		VI. MODELING	
16. Child is permitted choice in breakfast or lunch menu.		38. Some delay of food gratification is expected.	
17. Parent uses correct grammar and pronunciation.		39. TV is used judiciously.	
18. Parent's voice conveys positive feelings about child.		40. Child can express negative feelings without harsh reprisal.	
III. PHYSICAL ENVIRONMENT		41. Child can hit parent without harsh reprisal.	
19. Building appears safe and free of hazards.		42. Parent introduces visitor to child.	
20. Outside play environment appears safe.		VII. VARIETY	
21. Interior of apartment is not dark or perceptually uncomfortable.		43. Child has had some musical instrument.	
22. Neighborhood is aesthetically pleasing.		44. Child is taken on outing by a family member at least every other week.	
23. House has 100 square feet of living space per person.		45. Child has been on trip more than 50 miles during last year.	

46. Child has been taken to a museum during past year.	VIII. ACCEPTANCE						
47. Parent encourages child to put away toys without help.					52. No more than one instance of physical punishment occurred during the past week.		
48. Child eats at least one meal on most days with mother and father.					53. Parent does not scold or yell at or berate child more than once.		
49. Parent lets child choose certain favorite food products or brands at grocery store.					54. Parent does not use physical restraint during visit.		
50. Parent uses complex sentence structure and vocabulary.					55. Parent neither slaps nor spanks child during visit.		
51. Child's art work is displayed some place in house.							
TOTALS							
I _____	II _____	III _____	IV _____	V _____	VI _____	VII _____	TOTAL _____

Pre-CLOPP

Child's Name: _____ Subject #: _____

[Center Name] _____ Examiner: _____

Race: _____ Sex: _____

Date of test: _____ year/month/day
Date of Birth: _____ / _____ / _____
Chronological Age: _____ (15 days / 1 month)

<u>Date Given</u>	<u>Subject</u>	<u>Score</u>
_____	Elision	_____
_____	NonWord Repetition	_____
_____	Blending	_____
_____	RIN	_____
_____	Onset Awareness	_____
_____	Word Span	_____
_____	Initial Sound Matching	_____

ELISION

Materials:	Pictures
Setting:	Classroom
Scoring:	Circle the child's response

DIRECTIONS

PRACTICE ITEMS: Open the picture booklet to the example page for Elision. Say, "We're going to play a word game. This is a game where we take away parts of words to make new words. You will point to a picture showing the new word."

11. Look at these pictures (point to the pictures as you say them to the child): Table, Box, Brush, Tooth. My word is toothbrush. Say toothbrush. If you take away brush from the word toothbrush, what word do you have? Point to it.

If correct say: That's right, toothbrush without brush is tooth. Let's try the next one.

If incorrect say: Not quite. The answer is tooth because toothbrush without brush is just tooth. Let's try it again. Say toothbrush. If you take away brush from toothbrush, what word do you have? If child's response is incorrect or wrong, then say correct response and do not repeat the item.

12. Look at these pictures (point to the pictures as you say them to the child): Ball, Mop, Man, Bat. My word is batman. Say batman. Now point to batman without bat.

If correct say: That's right, batman without bat is man. Let's try the next one.

If incorrect say: Almost. The answer is man because batman without bat is just man. Let's try it again. Say batman. Now point to batman without bat. If child's response is incorrect or wrong, say correct response and do not repeat the item.

TEST ITEMS: Point to each picture as you say the name. Provide feedback on item 1 only.

If correct say: That's right, see without ee is s. Let's try the next one.

If incorrect say: Almost. The answer is saw because seesaw without see is just saw. Let's try another one.

Word Elision Multiple-Choice

For each item say, "Look at these pictures (point to the pictures as you say them to the child).

My word is _____.	Say _____.	Now point to _____ without _____.			
1. seesaw without <u>aw</u>	Claw	Box	Bea	Saw	
2. snowflake without <u>flake</u>	Die	Shoe	Key	Flaw	
3. sunflower without <u>flower</u>	Fig	Ball	Sun	Claw	

Syllable Deletion Activities for children to complete

Syllable Deletion Multiple-Choice

Okay, on these next ones, we're going to take a *smaller* part of the word away to make a new word.

For each item say: Look at these pictures (point to the pictures) we say _____ (point to the blank). My word is _____ Say _____ Now point to _____ without _____.

- | | | | | |
|------------------------------|----|----|-----|-----|
| 1. Candy without <u>de</u> | Co | Ca | Cap | Can |
| 2. Kitten without <u>ll</u> | Ke | Ka | Kit | Kat |
| 3. Dresser without <u>er</u> | Dr | De | Dep | Dir |

Sub-Syllable Deletion Multiple-Choice

Say: Okay, this time you have to point to the picture of the word that is left when we take *just a little bit* of the word away.

For each item say: Look at these pictures (point to the pictures) we say _____ (point to the blank) (say 'child'). My word is _____ Say _____ Now point to _____ without _____.

- | | | | | |
|---------------------------|-----|-----|------|-----|
| 7. Shoe without <u>h</u> | Sho | Soy | Bee | Pin |
| 8. Tame with <u>o</u> out | Ke | Te | Bee | Ve |
| 9. Turn without <u>u</u> | Te | no | Book | Use |

FREE RESPONSE PRACTICE ITEMS:

P2a Say: Now we are going to do some more without pictures. Listen carefully to what I say and then say the word you hear. My word is doorbell. Say doorbell. If you take away bell from the word doorbell, what word do you have?

If correct say: That's right, doorbell without bell is door. Let's try the next one.

If incorrect say: Not quite. The answer is 'door' because doorbell without bell is door. Let's try it again. Say doorbell. If you take away bell from the word doorbell, what word do you have? child's response is incorrect or somewhat correct, say correct the response but do not repeat the item.

P2b Say: Let's try another. My word is mailman. Say mailman. Now say mailman without man.

If correct say: That's right, mailman without mail is man.

If incorrect say: Not quite. The answer is 'man' because when you say mailman without mail you get man. Let's try it again. Say mailman. Now say mailman without man. If child's response is incorrect or somewhat correct, say correct the response but do not repeat the item.

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Ex. number _____ Exponent _____ Date _____

TEXT ITEMS: Provide feedback on items 10-17 only.

If a student says: That's right, _____ without _____ is _____. Let's try the next one.
if a student says: Almost. The answer is _____ because _____ without _____ is just _____. Let's try another one.

Word Elision Free-Response

Now we are going to do some without pictures. Listen carefully to what I say and then say the word that's left when we take a part away.

For each item say: Say _____ Now say _____ without _____

- 10. Sentence without *the* _____
- 11. Playground without *ground* _____
- 12. Driven car without *car* _____

Try pointing back to the word's beginning.

Syllable Elision Free-Response

Remember, listen carefully to what I say and then say the word that's left when we take a smaller part away.

For each item say: Say _____ Now say _____ without _____

- 13. Almost without *al* _____
- 14. Keep car without *car* _____
- 15. Fix car without *car* _____

Sub-Syllable Elision Free-Response

Listen carefully to what I say and then say the word that is left when we take just a little bit of the word away.

For each item say: Say _____ Now say _____ without _____

- 16. Heat without *ea* _____
- 17. Fair without *ai* _____
- 18. Said without *ai* _____

Nonword Repetition

Child's Name: _____

Date: _____

Materials: None
 Ceiling: 4 incorrect responses in a row
 Scoring: 1 for correct response, 0 for incorrect response
 Note: Do not repeat an item unless there is a disruption or distraction.

DIRECTIONS: Pronounce all **g's** as **hard g** (as in **g-oo**)

Do you know I can say some **made-up words**? I bet you can too. I'm going to say a **made-up word** and then I want you to say it just like I did. Even if it is hard to say, give it your best try. Listen to this one.

PRACTICE ITEMS:

- A. Say **hāp** (hāp) _____
- B. Say **uēg** (uēg) _____
- C. Say **hāp-uehā** (hāp uehā) _____

Pronunciation Key		
ā = cat	ē = top	ī = i
ū = p	ō = go	ī = like
ē = ger	oi = say	y = ynow
ū = aw	ō = oo	

TEST ITEMS:

For items 1-5, say _____

- 1. **hāb** (hāb) _____
- 2. **tēg** (tēg) _____
- 3. **hāp** (hāp) _____
- 4. **uoh** (uoh) _____
- 5. **uawg** _____

For items 6-10, stress first syllable.

- 6. **hāw'-deib** (hāw' deyb) _____
- 7. **noy'-dōē** (noy' dōē) _____
- 8. **hāp'-chōē** (hāp' chōē) _____ (note as in choke)
- 9. **taw'-chāb** (taw' chāb) _____
- 10. **nū'-gēf** (nū' gēf) _____

Pronunciation Key		
ā = cat	ō = top	ī = if
ē = play	ū = go	ī = life
ē = get	m = boy	ō = (f)ore
ō = me	ū = you	

11. nau'-shu-chiā (naw' shu' chā) _____
12. hu'-chū-gīf (hew' chū' gīf) _____
13. noi'-gaw-fāf (noy' gaw' fāf) _____
14. bū'-gū-fūg (bū' gū' fūg) _____
15. tā'-du-fūng (tay' du' fūng) _____

For items 16-20, write second syllable in:

16. tau'-gū'-fū-chiā (tau' gū' fū' chā) _____
17. vūl'-ge'-faw-dīf (vūl' ge' faw' dīf) _____
18. nū'-fāg'-nū'-gawh (nū' fāg' nū' gawh) _____
19. bū'-dōi'-shu-chiā (bū' dōy' shu' chā) _____
20. tūl'-hīf' gūl'-hūh (tūl' hīf' gūl' hūh) _____

Total Correct _____

Example _____ Example _____ Date _____

Syllable Blending (without pictures) - 2-3 syllables - 2-3 minutes

Syllable Blending Multiple-Choice

Say: Look at these pictures (point to the pictures as you name them for the child). This time I will say a word in *small* parts, one part at a time. Listen carefully and then point to the word that these sounds make. What word do these make ___ - ___? (Say the sounds to be blended with a dot in between parts but not syllables.) For subsequent items point and name the 4 pictures then say: What word do these sounds make ___ - ___?

- | | | | | | | |
|-----------|-----|--------|--------|--------|---------|--------|
| 4. Hat | ket | Pencil | Bus | air | Target | Eraser |
| 5. Circle | ele | Circle | Eraser | Target | Basket | |
| 6. Cook | an | Puppy | Garage | Coffee | Cracker | |

Sub-Syllable Blending Multiple-Choice

Say: Okay let's look at these pictures (point to the pictures as you name them for the child). This time I will say a word in *even smaller* parts, one part at a time. Listen carefully and then point to the word that these sounds make. What word do these make ___ - ___? (Say the sounds to be blended with a dot in between parts between sounds.) For subsequent items point and name the 4 pictures then say: What word do these sounds make ___ - ___?

- | | | | | | |
|-------|----|-----|-----|------|------|
| 7. B | ea | Dog | Cat | Ball | Book |
| 8. Ca | ck | Rat | Cat | Ball | Ball |
| 9. C | oo | Dog | Dog | Cat | Cat |

FREE RESPONSE PRACTICE ITEMS:

P2.a. Say: Now we are going to do some without pictures. This time, listen carefully to what I say and then say the word you hear. What word do these make? Pan - Cake (4 sec).

If correct, say: That's right, when you say pan - eke together, you get pancake. Let's try the next one.

If incorrect, say: Not quite. The answer is 'pancake' because when you say pan - eke together you get pancake. Let's try it again. What word do these make? Pan - Cake. If child's response is incorrect on second attempt, say the correct response but do not repeat the item.

P2.b. Say: Let's do another. What word do these make? Sand - Box (7 sec.)

If correct, say: That's right, when you say sand - box together, you get Sandbox.

If incorrect, say: Not quite. The answer is 'sandbox' because when you say sand - box together you get sandbox. Let's try it again. What word do these make? Sand - Box. If child's response is incorrect on second attempt, say the correct response but do not repeat the item.

Examiner: _____ Date: _____

TEST ITEMS: Use the feedback on items 10-12 only.

Teacher says, "That's right, when you say together you get . Let's try the next one."

If Almost. The answer is because when you say together you get . Let's try another one.

Word Blending Free Response

Say, Listen carefully to what I say and then say the word you hear. What word do these make? (Use a *Two-Step Response* for items 10-12.) Write each response in the space provided. Say, "What word do these make ?"

- 10. P + a = ab _____
- 11. M + i = plain _____
- 12. B + a = men _____

Use the same *Two-Step Response* for items 13-15.

Syllable Blending Free Response

Say, Remember, listen carefully to what I say and then say the word you hear. What word do these sounds make? (Use a *Two-Step Response* for items 16-18.) Write each response in the space provided. Say, "What word do these sounds make ?"

- 13. /t/ + /er/ _____
- 14. /k/ + /t/ _____
- 15. /sp/ + /d/ _____

Sub-Syllable Blending Free Response

Say, Listen carefully to what I say and then say the word you hear. What word do these sounds make? (Use a *Two-Step Response* for items 19-21.) Write each response in the space provided. Say, "What word do these sounds make ?"

- 16. /f/ + /v/ _____
- 17. /s/ + /k/ _____
 /sk/
- 18. /c/ + /p/ _____
- 19. /t/ + /at/ _____
- 20. /i/ + /k/ _____
- 21. /t/ + /st/ _____

Subject Number: _____

Child's Name: _____

Test Date: _____

Examiner: _____

Method used: Stop Clock
B.G.N. Form A
T.G.N. Form B

**Pre-CTOPP
Rapid Object Naming
(NonRhyming)**

Directions

Explain to the child that they will have to name all of the pictures on the page as fast as they can. A sort of like a race with words. Tell the child to go as fast as possible without making any mistakes or skipping any words.

Present the object-identity card with only the first row being visible. Identify each individual picture in the first row and ask the child to repeat them when you are through. If any are named incorrectly, correct the child and ask them to repeat the word. Then move the circle up to the entire identification procedure. If there were no errors, proceed to the rapid naming task.

When administering the rapid object naming task make sure the child does not skip pictures and names each item one by one. If the child is not ready, identify a picture without them by saying "What's this?" If the child incorrectly names the picture, guess by saying "This is a (similar) object. Say for real (use picture)." When the child reaches the last item, stop timing, no matter the time in seconds only. Then have the child repeat the task on Form B.

Form A: _____ seconds

Form B: _____ seconds

Concurrence

Noting errors or problems with the task. For instance, if the child does not say the words for certain items.

Example: _____ Example: _____ Example: _____

Letter-Sound Identification

- | | | | | |
|------------------------------------|---|---|----------|----------|
| 19. Which one makes the /b/ sound? | M | A | B | D |
| 20. Which one makes the /t/ sound? | W | Z | S | T |
| 21. Which one makes the /r/ sound? | Y | F | R | K |
| 22. Which one makes the /l/ sound? | W | F | L | O |

Letter-Name Identification Free Response

Write the name of the letter (score 1 for correct, 0 for incorrect)

- | | | | |
|-------------|-------------|-------------|-------------|
| 23. O _____ | 24. S _____ | 25. Z _____ | 26. Y _____ |
| 27. I _____ | 28. N _____ | 29. A _____ | 30. K _____ |
| 31. P _____ | 32. U _____ | | |

Letter-Sound Identification Free Response

Write again if a student does it is letter makes? (score 1 for correct, 0 for incorrect)

- | | | | |
|-------------|-------------|-------------|-------------|
| 33. H _____ | 34. V _____ | 35. P _____ | 36. S _____ |
|-------------|-------------|-------------|-------------|

Examiner: _____

Examiner: _____

Date: _____

WORD GAMES

Materials:	None
Setting:	2 or more responses in a row (e.g., 1 - 5, 4 - 6, 7 - 9)
Scoring:	1 for each response, 0 for incorrect response

Directions: Say the words in a row of 3 words a second. Read the words from the response card and stop at the end of the response. If the student repeats the words, say you are satisfied to repeat the words. If the child makes an error, simply put another card on the practice item. Stop after the third error (three trials in a row). Score each item as 1 or 0.

Say: "On this game, I will say some words one after the other, and I want you to repeat them just like I say them. Listen carefully, because I can't repeat the words. I try my couple for practice."

1. PRACTICE ITEMS

a. Ready? Say the word *man*. (1 trial) *man* (1)

If correct, say "That's right!" the word was *man*.

If incorrect, say "That's not quite right, word I wanted you to say was *man*."

b. Ready? number one. (2 trials) Say the words *door - car*.

If correct, say "That's right!" you said them just like I did. The words were *door - car*.

If incorrect, say "That's not quite right. I want you say them just the same way I did. I said *door - car*."

2. TEST ITEMS

Say: "Ok, now let's do some more. Just listen carefully and do your best." (1) presenting the test items use the words: "Ready? Say _____." (2) before each item.

_____ 1. *cat*

_____ 2. *bar*

_____ 3. *cup*

_____ 4. *boy - mouse*

_____ 5. *tree - cup*

_____ 6. *hand - and*

Examinee: _____ Exam no.: _____ Date: _____

- _____ 7. face = an = ai
- _____ 8. hair = geil = gene
- _____ 9. man = low = ng
- _____ 10. name = bad = bid = ai
- _____ 11. fire = dad = fat = milk
- _____ 12. house = buk = use = dia
- _____ 13. eke = del = elin = gony = fgn
- _____ 14. horse = wial = plon = heid = msa
- _____ 15. egg = crsg = ch = brack = men
- _____ 16. fish = rath = cow = fer = chor = tis
- _____ 17. one = rill = fag = bag = heit = ong
- _____ 18. and = bar = id = bet = clown = fan
19. door = base = hand = park = bell = chess = math
20. run = bar = wheel = get = an = zoo = truck
21. card = me = the = truck = page = drink = bar = fence

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INITIAL SOUND MATCHING

Materials: Pictures
 Setting: Visual items
 Scoring: Circle the child's response

DIRECTIONS:

HOW TO USE ITEMS: Open student's book to practice items for Initial Sound Matching and say, "We are going to play a game with words. I will show you pictures to help you remember the words."

Item 1: Say, "Look at this picture. This is rainbow. Now look at these two pictures. This is raincoat and this is hairbrush. The word rainbow starts with rain. Which of these pictures starts with rain like rainbow: raincoat or hairbrush? Point to the pictures as you say them aloud."

Correct response: That's right, rainbow and raincoat start with the same sound, rain. Let's try the next one.

Incorrect response: Not quite. The answer is raincoat because rainbow and raincoat both start with the same sound, rain. Let's try it again. Which of these pictures starts with rain like rainbow: raincoat or hairbrush? If child's response is incorrect, see second item but say correct the first time and do not repeat the item.

Item 2: Say, "Look at this picture. This is stop sign. Now look at these three pictures. This is doorknob, this is stoplight, and this is toothbrush. The word stop sign starts with stop. Which of these pictures starts with stop like stop sign: doorknob, stoplight, or toothbrush? Point to the pictures as you say them aloud."

Correct response: That's right, stop sign and stoplight start with the same sound, stop.

Incorrect response: Almost. The answer is stoplight because stop sign and stoplight both start with the same sound, stop. Let's try it again. Which of these pictures starts with stop like stop sign: doorknob, stoplight or toothbrush? If child's response is incorrect, see second item but do not repeat the item.

ITEM 3: EIMS: Here are some more. Point to each picture as you say the names. Provide feedback on item 1 and 2.

Correct response: That's right, _____ and _____ start with the same sound. (e.g., "sand", "see").

Incorrect response: Almost. The answer is sandbox because sandbox and sandwich both start with the same sound, sand. Let's do another.

Say:

1. This is sandbox. Which word starts with the same sound as sandbox?

Lunchbox, Sandwich, or Mailbox?

2. This is seashell. Which word starts with the same sound as seashell?

Senshell, Bathroom, or Cupcake?

Examiner:

Family:

Date:

Practice Items

P2a. Say: **These are a little different. I look at this picture. This is kite. Now look at these 2 pictures. This is boat and this is cup. The word kite starts with the /k/ sound. Which of these pictures starts with the /k/ sound like kite: boat or cup?**

If correct say: **That's right, kite and cup start with the same sound, /k/. Let's try the next one.**

If incorrect say: **Not quite. The answer is cup because kite and cup (koo-pan) both start with the same sound, /k/. Let's try the next one. If child's response is incorrect on second attempt, say correct, then move on but do not expect the item.**

P2b. Say: **I look at this picture. This is mop. Now look at these three pictures. This is book, this is man, and this is cap. The word mop starts with the /m/ sound. Which of these pictures starts with the /m/ sound like mop: book, man, or cap?**

If correct say: **That's right, mop and man start with the same sound, /m/.**

If incorrect say: **Almost. The answer is man because mop and man (man) both start with the same sound, /m/. If child's response is incorrect on second attempt, say correct, then move on but do not expect the item.**

DISCUSS: **Okay here's some more. Point to each picture as you say the name. Don't expect feedback on items 3 and 4 only.**

If correct say: **That's right, _____ and _____ start with the same sounds, /____/.**

If incorrect say: **Almost. The answer is _____ because _____ and _____ (compensating) start with the same sound, /____/.**

3. This is stove. Which word starts with the same sound as stove? Train, Frog, or Shick?
4. This is snail. Which word starts with the same sound as snail? Squeeze, Crab, or Train?
5. This is truck. Which word starts with the same sound as Truck? Frog, Plate, or Trig?
6. This is blade. Which word starts with the same sound as Blade? Truck, Block or Star?
7. This is car. Which word starts with the same sound as Car? Put, Man, or Cave?
8. This is bat. Which word starts with the same sound as Bat? Book, Foot, or Man?
9. This is sack. Which word starts with the same sound as Sack? Rake, Car, or Sun?
10. This is duck. Which word starts with the same sound as Duck? Cup, Dish, or Cake?
11. This is soap. Which word starts with the same sound as Soap? Sun, Road, or Hop?
12. This is fish. Which word starts with the same sound as Fish? Sail, Cake, or Foot?
13. This is mat. Which word starts with the same sound as Mat? Pin, Nail, or Hat?
14. This is dog. Which word starts with the same sound as Dog? Bed, Deer, or Get?

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Subject # _____

Center: _____

Date of Interview ____/____/200__

Home Literacy Environment Interview

adapted from Chaney (1994)

Total Possible – 147

Interviewer Notes: As you interview the caregiver, use the items from the Literacy Prop Box to demonstrate the item that you are asking about. These directions are specifically related to questions 4, 5, 6, 7, 8, and 16.

Script: “Our research project is exploring different ways that children learn to read and write. We are interested in knowing about your child’s interests and experiences with reading and writing. Since your child is just four years old and is too little to read alone, we will be asking you about how your family members use reading and writing, and how your child might be involved in some of these things. There are no right or wrong answers to the questions. Some families participate in some of these activities and some do not. No one other than the project staff will see your answers, and your name will never be used.”

- 1. “Of the people who live with you, who reads? This includes at work or at home. About how many minutes per day?”

Reader – 1 pt. for each person named, to 3 points _____ (Name reader below.)

- 2. “Do you read in English?” Y (1) _____ or N (0) _____ If no, ask, “Do you read in another language?” Y _____
N _____(not scored) If yes, say, “What language?” _____ (not scored)

Say: We would like to know what kinds of materials your family reads:

- 3. “Do you read books for adults?” Y (1) _____ or N (0) _____

If yes, say, “What kinds of books?” (not scored) _____

4. **USE LPB HERE – CHILDREN’S DICTIONARY** “Do you use reference books, such as a dictionary or encyclopedia?” Y (1) _____ **or** No (0) _____
5. **USE LPB HERE – CHILDREN’S BIBLE/COPY OF THE KORAN** “Do you use religious materials like the Bible or the Koran?” Y (1) _____ **or** No (0) _____
6. **USE LPB HERE – PEOPLE/JET** “Do you read any magazines, like Jet or People?” Y (1) _____ (proceed) **or** N (0)_____ (stop)
- If yes, ask for examples (not scored) : _____
- If yes, ask, “How often do you read _____?” (score 1, if at least 2x/week) _____
7. **USE LPB HERE - NEWSPAPER** “Do you read any newspapers?” Y (1) _____ (proceed) **or** N (0)_____ (stop)
- If yes, ask for examples (not scored): _____
- If yes, ask, “How often are they read?” (score 1, if at least 2x/week) _____
8. **USE LPB HERE – NICK JR. /SESAME STREET/5 Monkeys** a. Ask, “Does your family have books or magazines for kids?”
- Y (1) _____ N (0) _____ If no, score 0 for (b) If yes, say, “About how many?” Check response below.
- (b) _____ No books or magazines (0)
- _____ 1 – 14 books/mags (1)
- _____ 15 – 25 books/mags (2)
- _____ 25+ books/mags (3)
9. “What kinds of books for kids do you have?” Score (1) if 1-3 categories named or (2) if more than 3 categories named. Give respondent time to respond, and then ask about any categories not yet named.
- ABC _____ picture _____ story _____ number _____

religious_____ nursery rhyme_____ cartoon_____

read-along books with records or audiotapes_____ other _____

10. "Of the people in your home, does anyone read books with the child?"

Yes (1) _____ or No (0) _____

If yes, ask, "Who?" (not scored) _____

11. "Of the people in your home, does anyone interact with the child with writing or reading materials **other than** books?" Yes (1) _____ No (0) _____

If yes, ask, "Who?" (not scored) _____

12. a. Ask, "Do you read to your child?" Yes (1) _____ No (0) _____ (If no, score 0 for (b) and go to # 13)

b. If yes, ask: "How often do you read to him/her?" Place \surd next to response.

_____ More than once per day (5)

_____ Once per day (4)

_____ At least three times a week (3)

_____ At least once a week (2)

_____ About once a month (1)

c. If child is read to, ask, "For how long a time?"

_____ More than one hour (5)

_____ About one hour (4)

_____ About one-half hour (3)

_____ About 15 minutes (2)

_____ Less than 15 minutes (1)

13. a. Ask, "Do other members of the family read with your child?" Yes (1) _____ No (0) _____

b. If yes, ask, "What do they like to read with him/her?" (record response below – not scored)

14. "Does the child ever ask anyone to read with him/her?" Y (1) _____ N (0) _____ If yes, ask, "Who?". (not scored)

15. a. "Does your child ever look at books alone?" Y (1) _____ N (0) _____ If no, score 0 for (b). If yes, ask, "How often? _____"

b. _____ Once each day or at least twice each week (1)

_____ Less than two times per week (0)

16. **USE LPB HERE** “Do you have any of the following types of materials here? If so, which ones can the child use?” NOTE: Responses regarding ownership of items 1, 2, and 3 will have been answered previously. If the caregiver has indicated that she owns/has those items, do not ask again. Please a check in the OWN/HAVE category, and ask only about whether the child has access. (Place √ next to each) (Score .5 for each check)

TYPE	OWN/HAVE	CHILD CAN USE
adult books/magazines	a	1
newspapers	b	2
children’s books/magazines	c	3
menus from carry-out restaurants	d	4
telephone books	e	5
the Bible/Koran	f	6
newspaper circulars and/or coupons	g	7
Store receipts	h	8
posters	i	9
church bulletins	j	10
forms for school	k	11
forms from doctor’s office	l	12
employment application	m	13
street signs/posters/advertisements	n	14
journal article	o	15
financial papers	p	16
empty containers (food, household items, etc.)	q	17

17. a. “Does your child write, using pencils, pens, markers, or crayons?” Y (1) _____ N (0) _____

If no, score 0 for (b). If yes, ask, “How often?”

_____ daily (2)

_____ at least twice/week (1)

_____ once a week, once a month, or not at all (0)

18. Where does your family keep writing materials? Record response below. (Score 1 if the child has any number of checks in the box below.) _____

Can your child use any of these items? (Place \checkmark next to each.)

Paper	
Pencils	
Pens	
Crayons	
Markers	

19. a. "Do any family members use the public library?" Y (1) _____ N (0) _____ If no, score 0 for (b).

b. If yes, ask, "Does the child go along?" Usually (1) _____ Rarely (0) _____

20. “Tell me how you use these things in your home. Do you usually do this alone, does the child see you doing this, or does the child usually do this with you?” If the caregiver indicates that she does not engage in the activity at all, check N/A. (Code for: adult does alone – A, child observes adult doing – OBS, and/or done with child directly – w/child).

	N/A (0)	ALONE (1)	CHILD OBSERVES (2)	DONE WITH CHILD (3)
Daily Living				
20.a.1 reading during shopping				
20.a.2 reading during cooking				
20.a.3 reading while paying bills				
20.a.4 reading while using maps				
20.a.5 reading while washing clothes				
20.a.6 reading directions to fix something				
20.a.7 filling out forms (e.g. WIC, forms at doctor’s office, job application, etc.)				
Pleasure and Entertainment				
20.b.1 reading a book				
20.b.2 reading a magazine				
20.b.3 reading a newspaper				
20.b.4 checking the TV Guide/movie listings				
20.b.5 working a crossword puzzle				
20.b.6 playing a game				
School or Work Related				
20.c.1 reading notes from school				
20.c.2 filling out school forms				
20.c.3 using a computer				
20.c.4 doing work at home involving reading				
Religion				
20.d.1 Bible/Koran reading or study				
20.d.2 reading church/mosque bulletins				

	N/A (0)	ALONE (1)	CHILD OBSERVES (2)	DONE WITH CHILD (3)
Interpersonal				
20.e.1 writing letters/cards to other people				
20.e.2 reading letters/cards from others				
20.e.3 use stickers				
20.e.4 writing notes to family members in the house				
Get Information				
20.f.1 read the bus schedule				
20.f.2 keep up with what's going on				
20.f.3 read a telephone book				
20.f.4 learn about a hobby				
20.f.5 read journal article				
20.f.6 read financial pages for information on stocks/bonds				

21. "Do you ever read books about teaching your child how to read?" Y (1) _____ N (0) _____

22. "Do you ever read books about teaching your child how to write?" Y (1) _____ N (0) _____

If Yes to either 21 or 22, ask, "Can you tell me about any of those books?" (not scored) _____

23. a. "Does your child talk about what happened at Head Start?" Y (1) _____ N (0) _____

If no, score 0 for (b).

b. If yes, ask, "Can your child tell enough so that you can understand what really happened?"

Y (1) _____ N (0) _____

If yes, ask, "Can you give me an example of something she/he told you?" (not scored)

24. a. "Can you tell me about a time that your child talked about a book or story that had been read at home or school?" Y (1) _____ N (0) _____

b. If yes, ask, "Were you able to understand the story?" Yes (1) _____ No (0) _____

25. "Does your child ever 'play school'?" Y(1) _____ N (0) _____

If yes, ask "Who participates? Can you describe how she/he plays?" (Not scored)

26. a. "Does your child like nursery rhymes?" Y (1) _____ N (0) _____ (Give example if necessary. e.g. Humpty Dumpty, Miss Mary Matt) (not scored) If no, score 0 for (b).

b. If yes, ask, "Has your child memorized any nursery rhymes?" Y(1) _____ N (0) _____

27. "Sometimes children "play around" with language. For example, they make up silly words or they make funny sounds or they make up rhymes. Does your child like to play around with language?" Y (1) _____

N (0) _____ if yes, ask, "What does she/he like to do?" (not scored)

Place \checkmark in box.

rhymes	
made-up words	
other	

28. "Does anyone tell stories out loud to your child – not reading from a book?" Y(1) _____ N (0) _____ If yes, ask, "Who?" _____ (not scored). Then ask, "What kinds of stories does _____ tell?"

29. "How much time per day does your child spend watching television?"

_____ 0 - none

_____ 1 - less than an hour

_____ 2 - between 1 and 3 hours

_____ 3 - between 4 and 7 hours

_____ 4 - more than 7 hours

30. "Is there anything else that you do at home or in your community that we have not mentioned that might help your child learn to read or write?" (not scored)

31. "On a scale from 0 to 4, with 0 being probably not any good, and 4 being excellent, how good do you think you will be at helping your child learn to read and write?" **Interviewer:, Now read the number and the underlined portion of each statement.**

_____ 4 - **I will be excellent** at helping my child learn to read and write.

_____ 3 - **I will be very good** at helping my child learn to read and write.

_____ 2 - **I will be kind of good** at helping my child learn to read and write.

_____ 1 - **I will not be so good** at helping my child learn to read and write.

_____ 0 - **I will probably not be any good** at helping my child learn to read and write.

Item Analysis for Home Literacy Environment Interview – Revised

Item Number	Range	Mean	Standard Deviation
1	3	2.69	.65
2	0	1.00	0
3	1	.67	.48
4	1	.67	.48
5	1	.76	.43
6	1	.94	.24
6a	1	.55	.50
7	1	.73	.45
7a	1	.35	.48
8	1	.96	.20
8b	3	2.51	.90
9	2	1.80	.49
10	1	.88	.33
11	1	.78	.42
12a	1	.96	.20
12b	5	3.00	1.13
12c	4	2.22	.97
13	1	.61	.49
14	1	.90	.30
15a	1	.98	.14
15b	1	.78	.42
16a	.5	.42	.18
16b	.5	.31	.24
16c	.5	.48	.09
16d	.5	.44	.16
16e	.5	.47	.12
16f	.5	.34	.23
16g	.5	.40	.20
16h	.5	.35	.23

Item Analysis for Home Literacy Environment Interview – Revised

Item	Range	Mean	Standard Deviation
16i	.5	.21	.25
16j	.5	.25	.25
16k	.5	.34	.23
16l	.5	.16	.23
16m	.5	..096	.20

16n	.5	.15	.23
16o	.5	.03	.14
16p	.5	.04	.15
16q	.5	.49	.07
16.1	.5	.33	.24
16.2	.5	.27	.25
16.3	.5	.47	.12
16.4	.5	.37	.22
16.5	.5	.28	.25
16.6	.5	.28	.25
16.7	.5	.38	.21
16.8	.5	.26	.25
16.9	.5	.14	.23
16.10	.5	.23	.25
16.11	.5	.13	.23
16.12	.5	.03	.14
16.13	.5	.03	.14
16.14	.5	.12	.21
16.15	.5	.09	.07
16.16	.5	.09	.07
16.17	.5	.47	.12
17a	.5	1.00	.00
17b	.5	1.78	.46
18	0	1.00	.00

Item Analysis for Home Literacy Environment Interview – Revised

Item	Range	Mean	Standard Deviation
19a	2	.51	.50
19b	0	.35	.48
20.a.1	3	1.71	1.01
20.a.2	3	1.69	.95
20.a.3	3	1.24	.76
20.a.4	3	.73	1.15
20.a.5	3	.96	.92
20.a.6	3	1.55	1.08
20.a.7	3	1.12	.95
20.b.1	3	2.00	1.22
20.b.2	3	2.24	.84
20.b.3	3	1.48	1.21
20.b.4	3	.76	1.09
20.b.5	3	.65	.96
20.b.6	3	2.37	1.15
20.c.1	3	2.39	.85
20.c.2	3	1.73	.87
20.c.3	3	2.06	1.29
20.c.4	3	.80	1.00
20.d.1	3	1.35	1.41
20.d.2	3	1.24	1.34
20.e.1	3	2.06	1.03
20.e.2	3	2.59	.85
20.e.3	3	2.22	1.25
20.e.4	3	1.47	1.25
20.f.1	3	.37	.80
20.f.2	3	1.16	1.03

Item Analysis for Home Literacy Environment Interview – Revised

Item	Range	Mean	Standard Deviation
20.f.3	3	1.22	.83
20.f.4	3	.65	.89
20.f.5	3	.12	.33
20.f.6	1	.20	.45
21	2	.47	.50
22	1	.53	.50
23a	1	.92	.27
23b	1	.90	.30
24a	1	.78	.42
24b	1	.76	.43
25	1	.47	.50
26a	1	.80	.40
26b	1	.76	.43
27	1	.53	.50
28	1	.59	.50
29	2	2.08	.52
31	2	3.12	.62

Frequency of Responses for Specific Items on HLEI-R

Question # 1

Option	Frequency	Percent
0	1	2.0
1	2	3.9
2	9	17.6
3	39	76.5

Question # 3

Option	Frequency	Percent
0	17	33.3
1	34	66.7

Question # 4

Option	Frequency	Percent
0	17	33.3
1	34	66.7

Question # 5

Option	Frequency	Percent
0	12	23.5
1	39	76.5

Question # 6

Option	Frequency	Percent
0	3	5.9
1	48	94.1

Frequency of Responses for Specific Items on HLEI-R

Question # 6a

Option	Frequency	Percent
0	23	45.1
1	28	54.9

Question # 7

Option	Frequency	Percent
0	14	27.5
1	37	72.5

Question # 7a

Option	Frequency	Percent
0	33	64.7
1	18	35.3

Question # 8a

Option	Frequency	Percent
0	2	3.9
1	49	96.1

Question # 8b

Option	Frequency	Percent
0	2	3.9
1	8	15.7
2	3	5.9
3	38	74.5

Frequency of Responses for Specific Items on HLEI-R

Question # 9

Option	Frequency	Percent
0	2	3.9
1	6	11.8
2	43	84.3

Question # 10

Option	Frequency	Percent
0	6	11.8
1	45	88.2

Question # 11

Option	Frequency	Percent
0	11	21.6
1	40	78.4

Question # 12a

Option	Frequency	Percent
0	2	3.9
1	49	96.1

Frequency of Responses for Specific Items on HLEI-R

Question # 12b

Option	Frequency	Percent
0	2	3.9
1	2	3.9
2	12	23.5
3	15	29.4
4	18	35.3
5	2	3.9

Question # 12c

Option	Frequency	Percent
0	2	3.9
1	7	13.7
2	26	51.0
3	10	19.6
4	6	11.8

Question # 13

Option	Frequency	Percent
0	20	39.2
1	31	60.8

Question # 14

Option	Frequency	Percent
0	5	9.8
1	46	90.2

Frequency of Responses for Specific Items on HLEI-R

Question # 15a

Option	Frequency	Percent
0	1	2.0
1	50	98.0

Question # 15b

Option	Frequency	Percent
0	11	21.6
1	40	78.4

Question # 16a

Option	Frequency	Percent
.0	8	15.7
.5	43	84.3

Question # 16b

Option	Frequency	Percent
.0	19	37.3
.5	32	62.7

Question # 16c

Option	Frequency	Percent
.0	2	3.9
.5	49	96.1

Frequency of Responses for Specific Items on HLEI-R

Question # 16d

Option	Frequency	Percent
.0	6	11.8
.5	45	88.2

Question # 16e

Option	Frequency	Percent
.0	3	5.9
.5	48	94.1

Question # 16f

Option	Frequency	Percent
.0	16	31.4
.5	35	68.6

Question # 16g

Option	Frequency	Percent
.0	10	19.6
.5	41	80.4

Question # 16h

Option	Frequency	Percent
.0	15	29.4
.5	36	70.6

Frequency of Responses for Specific Items on HLEIR

Question # 16i

Option	Frequency	Percent
.0	30	58.8
.5	21	41.2

Question # 16j

Option	Frequency	Percent
.0	26	51.0
.5	25	49.0

Question # 16k

Option	Frequency	Percent
.0	16	31.4
.5	35	68.6

Question # 16l

Option	Frequency	Percent
.0	35	68.6
.5	16	31.4

Question # 16m

Option	Frequency	Percent
.0	41	80.4
.5	10	19.6

Frequency of Responses for Specific Items on HLEI-R

Question # 16n

Option	Frequency	Percent
.0	36	70.6
.5	15	29.4

Question # 16o

Option	Frequency	Percent
.0	47	92.2
.5	4	7.8

Question # 16p

Option	Frequency	Percent
.0	46	90.2
.5	5	9.8

Question # 16q

Option	Frequency	Percent
.0	1	2.0
.5	50	98.0

Question # 16.1

Option	Frequency	Percent
.0	17	33.3
.5	34	66.7

Frequency of Responses for Specific Items on HLEI-R

Question # 16.2

Option	Frequency	Percent
.0	24	47.1
.5	27	52.9

Question # 16.3

Option	Frequency	Percent
.0	3	5.9
.5	48	94.1

Question # 16.4

Option	Frequency	Percent
.0	13	25.5
.5	38	74.5

Question # 16.5

Option	Frequency	Percent
.0	23	45.1
.5	28	54.9

Question # 16.6

Option	Frequency	Percent
.0	23	45.1
.5	28	54.9

Frequency of Responses for Specific Items on HLEI-R

Question # 16.7

Option	Frequency	Percent
.0	12	23.5
.5	39	76.5

Question # 16.8

Option	Frequency	Percent
.0	25	49.0
.5	26	51.0

Question # 16.9

Option	Frequency	Percent
.0	37	72.5
.5	14	27.5

Question # 16.10

Option	Frequency	Percent
.0	27	52.9
.5	24	47.1

Question # 16.11

Option	Frequency	Percent
.0	37	72.5
.5	14	27.5

Frequency of Responses for Specific Items on HLEI-R

Question # 16.12

Option	Frequency	Percent
.0	47	92.2
.5	4	7.8

Question # 16.13

Option	Frequency	Percent
.0	47	92.2
.5	4	7.8

Question # 16.14

Option	Frequency	Percent
.0	39	76.5
.5	12	7.8

Question # 16.15

Option	Frequency	Percent
.0	50	98.0
.5	1	2.0

Question # 16.16

Option	Frequency	Percent
.0	50	98.0
.5	1	2.0

Frequency of Responses for Specific Items on HLEI-R

Question # 16.17

Option	Frequency	Percent
.0	3	5.9
.5	48	94.1

Question # 17b

Option	Frequency	Percent
0	1	2.0
1	9	17.6
2	41	80.4

Question # 19a

Option	Frequency	Percent
0	25	49.0
1	26	51.0

Question # 20a1

Option	Frequency	Percent
0	8	15.7
1	11	35.3
2	20	39.2
3	12	23.5

Frequency of Responses for Specific Items on HLEI-R

Question # 20a2

Option	Frequency	Percent
0	8	15.7
1	9	17.6
2	25	49.0
3	9	17.6

Question # 20a3

Option	Frequency	Percent
0	7	13.7
1	28	54.9
2	13	25.5
3	3	5.9

Question # 20a4

Option	Frequency	Percent
0	34	66.7
1	5	9.8
2	4	39.7.8
3	8	15.7

Question # 20a5

Option	Frequency	Percent
0	18	35.3
1	21	41.2
2	8	15.7
3	4	7.8

Frequency of Responses for Specific Items on HLEI-R

Question # 20a6

Option	Frequency	Percent
0	13	25.5
1	7	13.7
2	21	41.2
3	10	19.6

Question # 20a7

Option	Frequency	Percent
0	16	31.4
1	17	33.3
2	14	27.5
3	4	7.8

Question # 20b1

Option	Frequency	Percent
0	11	21.6
1	4	7.8
2	10	19.6
3	26	51.0

Question # 20b2

Option	Frequency	Percent
0	1	2.0
1	10	19.6
2	18	31.4
3	24	47.1

Frequency of Responses for Specific Items on HLEI-R

Question # 20b3

Option	Frequency	Percent
0	15	29.4
1	12	23.5
2	9	17.6
3	15	29.4

Question # 20b4

Option	Frequency	Percent
0	31	60.8
1	7	13.7
2	7	13.7
3	6	11.8

Question # 20b5

Option	Frequency	Percent
0	30	58.8
1	14	27.5
2	2	3.9
3	5	74.5

Question # 20b6

Option	Frequency	Percent
0	8	15.7
1	3	5.9
2	2	3.9
3	38	74.5

Frequency of Responses for Specific Items on HLEI-R

Question # 20c1

Option	Frequency	Percent
0	1	2.0
1	9	17.6
2	10	19.6
3	31	60.8

Question # 20c2

Option	Frequency	Percent
0	5	9.8
1	13	25.5
2	24	47.1
3	9	17.6

Question # 20c3

Option	Frequency	Percent
0	12	23.5
1	4	7.8
2	4	7.8
3	31	60.8

Question # 20c4

Option	Frequency	Percent
0	27	52.9
1	11	21.6
2	9	17.6
3	4	7.8

Frequency of Responses for Specific Items on HLEI-R

Question # 20d1

Option	Frequency	Percent
0	25	49.0
1	2	3.9
2	5	9.8
3	19	37.3

Question # 20d2

Option	Frequency	Percent
0	25	49.0
1	4	7.8
2	7	13.7
3	15	29.4

Question # 20e1

Option	Frequency	Percent
0	5	9.8
1	10	19.6
2	13	25.5
3	23	45.1

Question # 20e2

Option	Frequency	Percent
0	3	5.9
1	3	5.9
2	6	11.8
3	39	76.5

Frequency of Responses for Specific Items on HLEI-R

Question # 20e3

Option	Frequency	Percent
0	11	21.6
1	2	3.9
2	3	5.9
3	35	68.6

Question # 20e4

Option	Frequency	Percent
0	18	35.3
1	6	11.8
2	12	23.5
3	15	29.4

Question # 20f1

Option	Frequency	Percent
0	40	78.4
1	5	9.8
2	4	7.8
3	2	3.9

Question # 20f2

Option	Frequency	Percent
0	16	31.4
1	18	35.3
2	10	19.6
3	7	13.7

Frequency of Responses for Specific Items on HLEI-R

Question # 20f3

Option	Frequency	Percent
0	11	21.6
1	20	39.2
2	18	25.3
3	2	3.9

Question # 20f4

Option	Frequency	Percent
0	28	54.9
1	17	33.3
2	2	3.9
3	4	7.8

Question # 20f5

Option	Frequency	Percent
0	45	88.2
1	6	11.8
2	0	0
3	0	0

Question # 20f6

Option	Frequency	Percent
0	42	82.4
1	8	15.7
2	1	2.0
3	12	23.5

Frequency of Responses for Specific Items on HLEI-R

Question # 21

Option	Frequency	Percent
0	27	52.9
1	24	47.1

Question # 22

Option	Frequency	Percent
0	24	52.9
1	27	47.1

Question # 23a

Option	Frequency	Percent
0	5	9.8
1	46	90.2

Question # 23b

Option	Frequency	Percent
0	5	9.8
1	46	90.2

Question # 24a

Option	Frequency	Percent
0	11	21.6
1	40	78.4

Frequency of Responses for Specific Items on HLEI-R

Question # 24b

Option	Frequency	Percent
0	12	23.5
1	39	78.5

Question # 25

Option	Frequency	Percent
0	27	52.9
1	24	47.1

Question # 26a

Option	Frequency	Percent
0	10	19.8
1	41	80.4

Question # 26b

Option	Frequency	Percent
0	12	23.5
1	39	76.5

Question # 27

Option	Frequency	Percent
0	24	47.1
1	27	52.9

Frequency of Responses for Specific Items on HLEI-R

Question # 28

Option	Frequency	Percent
0	21	41.2
1	30	58.8

Question # 31

Option	Frequency	Percent
0	0	0
1	0	0
2	7	13.7
3	31	60.8
4	13	25.5

Interest in Literacy Scale-3

Point to the left most picture and say: This little boy likes to eat candy and cake.

Point to the right most picture and say: This little boy does not like to eat candy and cake.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to eat candy and cake (point to the big circle) or do you like to eat candy and cake just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to eat candy and cake (point to the big circle) or do you kind of not like to eat candy and cake (point to the little circle).

Point to the left most picture and say: This little boy does not like to go to the doctor.

Point to the right most picture and say: This little boy likes to go to the doctor.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to go to the doctor (point to the big circle) or do you like to go to the doctor just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to go to the doctor (point to the big circle) or do you kind of not like to go to the doctor (point to the little circle).

Point to the left most picture and say: This little boy likes to get books as presents.

Point to the right most picture and say: This little boy does not like to get books as presents.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to get books as presents (point to the big circle) or do you like to get books as presents just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like get books as presents (point to the big circle) or do you kind of not like to get books as presents (point to the little circle).

Point to the left most picture and say: This little boy likes to say the letters of the alphabet.

Point to the right most picture and say: This little boy does not like to say the letters of the alphabet.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to say the letters of the alphabet (point to the big circle) or do you like to say the letters of the alphabet just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to say the letters of the alphabet (point to the big circle) or do you kind of not like to say the letters of the alphabet (point to the little circle).

Point to the left most picture and say: This little boy does not like look at books with a friend.

Point to the right most picture and say: This little boy likes to look at books with a friend.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to look at books with a friend (point to the big circle) or do you like to look at books with a friend just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to looks at books with a friend (point to the big circle) or do you kind of not like to look at books with a friend (point to the little circle).

Point to the left most picture and say: This little boy likes to be bad.

Point to the right most picture and say: This little boy does not like to be bad.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to bad (point to the big circle) or do you like be bad just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to be bad (point to the big circle) or do you kind of not like to be bad (point to the little circle).

Point to the left most picture and say: This little boy likes to learn letters on Sesame Street.

Point to the right most picture and say: This little boy does not like to learn letters on Sesame Street.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to learn letters on Sesame Street (point to the big circle) or do you like to learn letters on Sesame Street just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to learn letters on Sesame Street (point to the big circle) or do you kind of not like to learn letters on Sesame Street (point to the little circle).

Point to the left most picture and say: This little boy likes to have birthday parties.

Point to the right most picture and say: This little boy does not like to have birthday parties.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to have birthday parties (point to the big circle) or do you like to have birthday parties just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to have birthday parties (point to the big circle) or do you kind of not like to have birthday parties (point to the little circle).

Point to the left most picture and say: This little boy likes to look at picture books.

Point to the right most picture and say: This little boy does not like to look at picture books.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to look at picture books (point to the big circle) or do you like to look at picture books just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to look at picture books (point to the big circle) or do you kind of not like to look at picture books (point to the little circle).

Point to the left most picture and say: This little boy does not like to play games with friends.

Point to the right most picture and say: This little boy likes to play games with friends.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to play games with friends (point to the big circle) or do you like to play games with friends just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to play with friends (point to the big circle) or do you kind of not like to play with friends (point to the little circle).

Point to the left most picture and say: This little boy does not like to write the letters of the alphabet.

Point to the right most picture and say: This little boy likes to write the letters of the alphabet.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to write the letters of the alphabet (point to the big circle) or do you like to write the letters of the alphabet just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to write the letters of the alphabet (point to the big circle) or do you kind of not like to write the letters of the alphabet (point to the little circle).

Point to the left most picture and say: This little boy does not like to eat vegetables.

Point to the right most picture and say: This little boy likes to eat vegetables.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to eat vegetables (point to the big circle) or do you like to eat vegetables just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to eat vegetables (point to the big circle) or do you kind of not like to eat vegetables (point to the little circle).

Point to the left most picture and say: This little boy likes to write his name.

Point to the right most picture and say: This little boy does not like to write his name.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to write your name (point to the big circle) or do you like to write your name just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to write your name (point to the big circle) or do you kind of not like to write your name (point to the little circle).

Point to the left most picture and say: This little boy does not like to visit the bookstore.

Point to the right most picture and say: This little boy likes to visit the bookstore.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to visit the bookstore (point to the big circle) or do you like to visit the bookstore just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to visit the bookstore (point to the big circle) or do you kind of not like to visit the bookstore (point to the little circle).

Point to the left most picture and say: This little boy likes to learn letters with mom.

Point to the right most picture and say: This little boy does not like to learn letters with mom.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to learn letters with mom (point to the big circle) or do you like to learn letters with mom just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to learn letters with mom (point to the big circle) or do you kind of not like to learn letters with mom (point to the little circle).

Point to the left most picture and say: This little boy does not like to go to the dentist.

Point to the right most picture and say: This little boy does likes to go to the dentist.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to go to the dentist (point to the big circle) or do you like to go to the dentist just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to go to the dentist (point to the big circle) or do you kind of not like to go to the dentist (point to the little circle).

Point to the left most picture and say: This little boy does not like to read.

Point to the right most picture and say: This little boy does likes to read.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to read (point to the big circle) or do you like to read just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to read (point to the big circle) or do you kind of not like to read (point to the little circle).

Point to the left most picture and say: This little boy likes to watch TV.

Point to the right most picture and say: This little boy does not like to watch TV.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to watch TV (point to the big circle) or do you like to watch TV just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to watch TV (point to the big circle) or do you kind of not like to watch TV (point to the little circle).

Point to the left most picture and say: This little boy does not like to go to the library with mom.

Point to the right most picture and say: This little boy likes to go to the library with mom.

Ask: Which boy is the most like you?

If the child picks the happy face then say: Do you really like to go to the library with mom (point to the big circle) or do you like to go to the library with mom just a little (point to the little circle).

If the child picks the sad face then say: Do you really not like to go to the library with mom (point to the big circle) or do you kind of not like to go the library with mom (point to the little circle).

ILS Record Sheet

4 = smiling face, large circle
3 = smiling face, small circle
2 = sad face, small circle
1 = sad face, large circle

(1) _____ 4	(2) _____ 4	(3) _____ 4	(4) _____ 4	(5) _____ 4
_____ 3	_____ 3	_____ 3	_____ 3	_____ 3
_____ 2	_____ 2	_____ 2	_____ 2	_____ 2
_____ 1	_____ 1	_____ 1	_____ 1	_____ 1
(6) _____ 4	(7) _____ 4	(8) _____ 4	(9) _____ 4	(10) _____ 4
_____ 3	_____ 3	_____ 3	_____ 3	_____ 3
_____ 2	_____ 2	_____ 2	_____ 2	_____ 2
_____ 1	_____ 1	_____ 1	_____ 1	_____ 1
(11) _____ 4	(12) _____ 4	(13) _____ 4	(14) _____ 4	(15) _____ 4
_____ 3	_____ 3	_____ 3	_____ 3	_____ 3
_____ 2	_____ 2	_____ 2	_____ 2	_____ 2
_____ 1	_____ 1	_____ 1	_____ 1	_____ 1
(16) _____ 4	(17) _____ 4	(18) _____ 4	(19) _____ 4	
_____ 3	_____ 3	_____ 3	_____ 3	
_____ 2	_____ 2	_____ 2	_____ 2	
_____ 1	_____ 1	_____ 1	_____ 1	

Background Questionnaire

Subject #: _____

Center: _____

TARGET CHILD

1. Date of Assessment: (mm/dd/yyyy) ___/___/___

2. Date of Birth: (mm/dd/yyyy) ___/___/___

3. Gender
1---Female
2---Male

4. Race
1---African American/Black
2---White
3---Hispanic
4---Other (specify) _____

CAREGIVERS

Mother

5. Education

- 1---6th grade or less
- 2---7th – 9th grade
- 3---10th or 11th grade
- 4--- high school graduate
- 5--- Associate’s degree/trade school graduate
- 6--- partial college (1-3 years)
- 7--- college graduate
- 8--- Master’s, PhD, MD, JD, or other professional degree
- 99---refuse (do not read)

6. Date of Birth (mm/dd/yyyy): _____

7. Employment Status: SAY “Are you employed?” If yes...

- 1---Employed full time (at least 35 hours/week)
- 2---Employed half-time (15 – 30 hours/week)
- 3---Employed part-time (5 – 15 hours/week)
- 4---Work from home

- 5--- Not employed
- 99---refuse (do not read)

If employed, describe type of employment:

8. Father – Ask if father/father figure lives in the home. Y – (1) _____ N – (0) _____ If no, score “0” for items 8 – 11. If yes, ask the mother the following questions.

9. Education: SAY, “What grade has he completed?”

- 1---6th grade or less
- 2---7th – 9th grade
- 3---10th or 11th grade
- 4--- high school graduate
- 5--- Associate’s degree/trade school graduate
- 6--- partial college (1-3 years)
- 7--- college graduate
- 8--- Master’s, PhD, MD, JD, or other professional degree
- 99---refuse (do not read)

10. Date of Birth (mm/dd/yyyy): _____

11. Employment Status: SAY “Is he employed?” If yes...

- 1---Employed full time (at least 35 hours/week)
- 2---Employed half-time (15 – 30 hours/week)
- 3---Employed part-time (5 – 15 hours/week)
- 4---Work from home
- 5--- Not employed
- 99---refuse (do not read)

If employed, describe type of employment:

Family

12. Total Household Income Level (All household, before taxes)

1---\$30,000 and over

2---\$20,000 - \$29,000

3---\$10,000-\$19,000

4---under \$5,000

88---don't know (do not read)

99---refuse (do not read)

13. SAY: "Does your family receive any type of public assistance?" ____ Yes (1)
____ No (0)

14. Individuals Lining in Household

First Name	Age	Relationship (use code below)
a.		
b.		
c.		
d.		
e.		
f.		
g.		

1-mother

2-father/father figure

3-grandparent

4-sibling

5--other relative (e.g. cousins, aunts, uncles, etc.)



Name _____ Sex M F

Home Address _____ Phone _____

City _____ State _____ Zip _____

School _____ Grade _____

Language of the home Standard English Other _____

Teacher _____ Examiner _____

Reason for testing _____

Other information on test ticket _____

Make the following standard scores for appropriate use: Do not change with the change in address. Number of tests (see manual for more information)

Standard scores are based on the following:
 - Standard deviation of 100 points
 - Mean score of 500 points
 - Standard error of 10 points
 - Mean score of 500 points
 - Standard error of 10 points

	0-19%	20-39%	40-59%	60-79%	80-99%	100%
Standard Score	40	50	60	70	80	90
Percentile Rank	1	10	25	50	75	99
Grade Equivalent	1.0	1.5	2.0	3.0	4.0	5.0
Age Equivalent	6:0	7:0	8:0	9:0	10:0	11:0
Grade Point Average	1.0	1.5	2.0	3.0	4.0	5.0

Date & Age Data

Date of testing _____

Date of birth _____

Chronological age _____

RECORD OF SCORES

Raw score _____

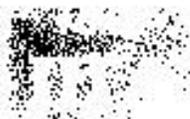
Standard score _____

Grade Equivalent _____

Age Equivalent _____

Age Equivalent
 (Name of child) _____

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 Joseph M. ...
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Study Part 2 of the manual before testing.

All instructions for introducing the material and using the Training Items are located on the examinee's side of the Training Rules. Use Training Items A and B with children 2 to 7 years old, and C and D with children 8 and older.

After you have administered the sample sets Training Items, begin testing using the sets of Test Items.

Complete Set Rule. Once you begin a set of test items, always administer all 12 items in that set, if called, and always start with the first item in the set.

Start Item. Begin testing with the Start Item, which is the first item in the appropriate set of test items designated for the test users age. These sets are listed at the top of the item sets and in the box below.

Basic Set Rule. The Basic Set Rule is one of four errors in a set. Limit the total number of errors, if necessary, to one inequality by sets within a rule and not more than two by sets within a Ceiling Set's objective.

Ceiling Set Rule. The Ceiling Set Rule is eight (8) or more errors in a set.

Record Response and Errors for Each Item. Use numbers 1 through 12 to label the examinee's response to each item in the Response column. Indicate a rule by drawing an oblique line through the E in the Errors column as follows:

1. bus (4) 5 E

Record the Number of Errors Per Set. At the end of each item set, record the number of errors in the box provided.

Find the Total Errors Over the Critical Range. Transfer the number of errors per set to the box above and add up the total errors, according to the lowest Basic Set through the highest Ceiling Set.

Set	Errors
1	5
2	3
3	2
4	2
5	4
6	1
7	2
8	3
9	4
10	2
11	2
12	3

Set 1	Set 2	Set 12
Set 9	Set 8	Set 14
Set 3	Set 5	Set 13
Set 4	Set 10	Set 16
Set 5	Set 11	Set 17
Set 6	Set 12	

Record the number of the Ceiling item, which is the set item in the Ceiling Set. Subtract from it the total number of errors made by the examinee from the Basic Set through the Ceiling Set. This is the Raw Score.

Ceiling Item	___
Raw Score	___
Transfer the Raw Score to page 3.	

Basic Set Rule: 1 or no errors in a set,
Ceiling Set Rule: 8 or more errors in a set.

Item	Set	No. of Errors	Response
1. bus	..... (4)	___	E
2. drinking	..... (3)	___	E
3. hand	..... (1)	___	E
4. climbing	..... (1)	___	E
5. key	..... (4)	___	E
6. reading	..... (1)	___	E
7. closed	..... (2)	___	E
8. jumping	..... (3)	___	E
9. lamp	..... (4)	___	E
10. helicopter	..... (2)	___	E
11. smelling	..... (2)	___	E
12. fly	..... (3)	___	E

No. of Errors

Item	Set	No. of Errors	Response
13. digging	..... (2)	___	E
14. cow	..... (1)	___	E
15. drum	..... (3)	___	E
16. leather	..... (1)	___	E
17. painting	..... (3)	___	E
18. cage	..... (2)	___	E
19. knee	..... (1)	___	E
20. wrapping	..... (4)	___	E
21. fence	..... (3)	___	E
22. elbow	..... (4)	___	E
23. garbage	..... (2)	___	E
24. exercising	..... (4)	___	E

No. of Errors

Basal Set Rule: 1 or no errors in a set

Wt. Set	No. Reps	Max. Errors
25. empty	(1)	___ E
26. shoulder	(3)	___ E
27. square	(4)	___ E
28. measuring	(4)	___ E
29. porcupine	(1)	___ E
30. arrow	(2)	___ E
31. peeling	(3)	___ E
32. fountain	(2)	___ E
33. accident	(2)	___ E
34. penguin	(1)	___ E
35. decorated	(4)	___ E
36. nest	(3)	___ E

No. of Errors

Coiling Set Rule: 8 or more errors in a set

Wt. Set	No. Reps	Max. Errors
37. castle	(2)	___ E
38. sawing	(4)	___ E
39. cactus	(3)	___ E
40. jarm	(1)	___ E
41. going	(2)	___ E
42. harp	(1)	___ E
43. astronaut	(3)	___ E
44. raccoon	(4)	___ E
45. juggling	(4)	___ E
46. envelope	(2)	___ E
47. tearing	(3)	___ E
48. claw	(1)	___ E

No. of Errors

Wt. Set	No. Reps	Max. Errors
49. parachute	(3)	___ E
50. delivering	(1)	___ E
51. rectangle	(1)	___ E
52. diving	(2)	___ E
53. camper	(4)	___ E
54. target	(2)	___ E
55. writing	(1)	___ E
56. furry	(4)	___ E
57. drilling	(2)	___ E
58. hook	(3)	___ E
59. group	(3)	___ E
60. dripping	(4)	___ E

No. of Errors

Wt. Set	No. Reps	Max. Errors
61. vehicle	(4)	___ E
62. oval	(1)	___ E
63. luggage	(2)	___ E
64. awarding	(3)	___ E
65. hydrant	(4)	___ E
66. swamp	(3)	___ E
67. calculator	(2)	___ E
68. signal	(1)	___ E
69. squash	(4)	___ E
70. globe	(2)	___ E
71. vegetable	(3)	___ E
72. frame	(1)	___ E

No. of Errors

Wt. Set	No. Reps	Max. Errors
73. gigantic	(2)	___ E
74. nostril	(4)	___ E
75. vase	(3)	___ E
76. knight	(1)	___ E
77. towing	(1)	___ E
78. horrified	(3)	___ E
79. trunk	(2)	___ E
80. selecting	(1)	___ E
81. island	(2)	___ E
82. camcorder	(4)	___ E
83. heart	(3)	___ E
84. wrench	(4)	___ E

No. of Errors

Wt. Set	No. Reps	Max. Errors
85. flamingo	(2)	___ E
86. tambourine	(4)	___ E
87. palm	(1)	___ E
88. surprised	(4)	___ E
89. canoe	(3)	___ E
90. interviewing	(1)	___ E
81. clarinet	(4)	___ E
92. exhausted	(2)	___ E
93. pitcher	(2)	___ E
94. reptile	(2)	___ E
95. polluting	(3)	___ E
96. vine	(1)	___ E

No. of Errors



RECORD FORM

Name: _____ Gender: _____ Grade: _____

School: _____ Examination: _____

Reason for Testing: _____

Date of Test: _____ year _____ month _____ day

Date of Birth: _____ year _____ month _____ day

Chronological Age: _____ year _____ month _____ day

Confidence Interval Values		
Age	Confidence Level	
	90%	95%
2	+7	+8
3-11	+5	+6
12-18	+4	+5

CAUTION: Do not consider only one of these measures.

TEST RESULTS							
Raw Score	Standard Score	Confidence Interval %	Percentile Rank	Age Equivalent			

Standard Score	Expressive Vocabulary	Receptive Vocabulary	Percentile Rank
12			2
20			5
25			9
30			14
35			20
40			27
45			35
50			44
55			54
60			65
65			77
70			90
75			100
80			100
85			100
90			100
95			100
100			100
105			100
110			100
115			100
120			100
125			100
130			100
135			100
140			100
145			100
150			100

Comparison of Expressive and Receptive Vocabulary	
Expressive (EOWPVT) Standard Score	
Receptive (ROWPVT) Standard Score	
Difference	
Statistical Significance*	
Percent of Sample with this Difference*	

*Statistical significance

Comments: _____

Summary of Instructions for Test Administration

Refer to the test manual for complete instructions.

General Instructions: Start with any picture of an object, picture, pictures, and read your test aloud the words that name each picture or group of pictures.

Administration: Administer the test by reading aloud the stimulus, beginning with the response that corresponds to the exact "peak" chronological age. A basal is not administered on the first night. If a child is unable to work accurately and might become frustrated, correct responses are made. Then work forward until six correct responses are made. Correct responses are made.

Scoring: Write down the response to each item on a data sheet. Mark the right item number for each correct response. Responses that include the root word are scored as correct. The presence or absence of an initial or final ending, which indicates number of items that are hearing on the accuracy of a response.

Basal: Established by a child's correct responses to a series of responses.

Ceiling: Established by a child's incorrect responses to a series of responses.

Recording Responses: Record in the space after each word a response as it is written right away. It is not possible to erase from making a response to a picture or picture.

Principles: Use a constant rate for each item. This includes the choice of the illustration of which the child will be asked to respond. The number of items for a group (What's Next?) is appropriate. To item number which is different from a group is not added, for group is listed with the item. If a prompt is not listed with the item, the prompt "What's Next?" should be used.

Cues: For responses indicating that the examinee is attempting to be appropriate feature of the illustration, such as the cue "be" directs the examinee's attention. If the cue is not used for a subject, then an appropriate cue is used. Refer to the manual for a list of cues and examples to support a response.

Item Starting Points

Age	Item	Age	Item
2;0-2;11	1	3;0-3;11	10
2;6-3;1	14	3;6-3;11	20
3;6-4;11	20	4;0-4;11	30
4;6-5;11	30	4;6-4;11	40
5;6-6;1	40	5;0-5;11	50
6;6-7;1	50		

Obtaining a Raw Score

Ceiling item # _____

Stimulus # _____

Raw score _____

Transcribe raw scores to page _____

The point at which a child's score is recorded with each item is less than the number of items on the test.

EXAMPLES

A. dog _____

B. cat _____

C. * What's the animal _____

carrying _____

D. * What are the animals _____

using _____

2;0-2;11 Starting Point

1. boat _____

2. hat _____

3. apple _____

4. * What are the animals _____

5. * What are the animals _____

6. * What are the animals _____

7. * What are the animals _____

8. * What are the animals _____

9. * What are the animals _____

10. * What are the animals _____

11. * What are the animals _____

12. * What are the animals _____

13. * What are the animals _____

14. * What are the animals _____

15. * What are the animals _____

16. * What are the animals _____

17. * What are the animals _____

18. * What are the animals _____

19. * What are the animals _____

20. * What are the animals _____

21. * What are the animals _____

22. * What are the animals _____

23. * What are the animals _____

24. * What are the animals _____

25. * What are the animals _____

26. * What are the animals _____

27. * What are the animals _____

28. * What are the animals _____

29. * What are the animals _____

30. * What are the animals _____

31. * What are the animals _____

Item numbers are established by the test manual. The lowest ending number is the test basal.



DEPARTMENT OF HEALTH & HUMAN SERVICES

September 5, 2007

Administration for Children and Families
 Administration on Children, Youth and Families
 330 C Street, S.W.
 Washington, D.C. 20447

Menique Anderson, Contract Manager, OLSA
 University of Maryland – College Park
 College of Education
 3112 Lee Building
 College Park, MD 20742-5177

Re: Grant Number 99YD013862

Dear Contract Manager Anderson:

I am pleased to inform you that your application for a cooperative agreement entitled "Families Read! Exploring Literacy Practices in Head Start Families", with Janese Kerr Daniels, as the Principal Investigator, has been approved for funding under Fiscal Year 2005.

The cooperative agreement award is made pursuant to the legislative authorization under the Head Start Act. The number referenced above has been assigned to your cooperative agreement and should be used on all related correspondence. The enclosed Financial Assistance Award (FAA) specifies the amount and duration of the cooperative agreement. Also enclosed are copies of the instructions and regulations pertinent to the administration of your cooperative agreement.

The staff assisting with this project are:

Maria Lopez, Ph.D.
 Child Outcomes Research and Evaluation
 Office of Planning, Research and Evaluation (ACYF)
 330 C Street, SW, Room 2312
 Washington, D.C. 20447
 202/260-8212 mlopez@acf.hhs.gov

Ben Sharp
 Grants Management Specialist
 330 C Street, SW, Room 2314
 Washington, DC 20447
 202/260-6607 bsharp@acf.hhs.gov

Program progress reports and the financial status report are due 30 days after the end of the second and fourth quarters (six month intervals) throughout the total approved project period. The enclosed "Reporting Requirements" detail the reporting schedule and format.

If we can be of any assistance, please feel free to contact us. We are looking forward to working with you on this important project.

Sincerely,

Howard Rubin
 Howard Rubin
 Director, Office of Planning, Research
 and Evaluation

Enclosure

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