Impact of Home Literacy Environments on Students from Low Socioeconomic Status Backgrounds

Diana Van Vechten
St. John Fisher College

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Abstract
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Impact of Home Literacy Environments
on Students from Low Socioeconomic Status Backgrounds

By

Diana Van Vechten

Submitted in partial fulfillment of the requirements for the degree
M.S. Literacy Education

Supervised by

Dr. Joellen Maples

School of Arts and Sciences
St. John Fisher College

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Abstract

Literacy is socially constructed and is not developed in isolation. This study explores the impact of environmental factors on students from low socioeconomic backgrounds by asking the question: How does a low socioeconomic student’s home literacy environment affect his or her literacy experiences and interests in reading? Data was gathered in a Western, New York school through the use of questionnaires, observations, and literacy assessments. Results of the study revealed that students from low socioeconomic status (SES) homes are behind in their reading levels and are limited in their literacy interests and class participation. With explicit instruction and intensive intervention, schools and parents can work together to improve the quality of low SES children’s Home Literacy Environments (HLE).
Impact of Home Literacy Environments on Students from Low Socioeconomic Status Backgrounds

Many people may think of school as the initial place where children experience literacy. However, an implicit instruction of literacy skills begins years before children set foot in a classroom. Home is, for many children, where the foundations of language and literacy skills are fostered. Exposure to texts, inter-generational joint-literacy activities, and preparation for the skills necessary to be successful in formal schooling are the hallmarks of effective home literacy environments. Yet for many students, home environments in low socioeconomic families may be lacking in texts and parental involvement. This study explored the impact of home literacy environments on students from low socioeconomic backgrounds. It has been well established that a child’s early literacy can impact his or her academic success and literacy development. Through the research presented in this study, relationships between family incomes, parental educational levels, and student literacy skills were drawn by focusing in particular on students’ home literacy environments and their literacy performances at school (i.e. literacy scores and participation in classes). The valuable information gathered resulted in an effort to produce literacy rich students and to remedy those who have fallen behind due to weak HLEs. The topic and subsequent study also offer teachers insight into the backgrounds of low socioeconomic students and strategies that may be effective for helping these students achieve success in literacy.

Often, low socioeconomic students who live in rural communities are spatially removed from a literacy-rich center (i.e. town with book store, public library, public read alouds or poetry readings, etc.). Teachers need to be aware of the limitations such students encounter due to the locations of their homes. Low SES children should not be further disadvantaged at school for what they were not provided in their homes.
Through study of this topic, teachers are provided with insights into the literacy acquisition of poor students. Teachers should not approach these, (or any), students from a deficit model, assuming that if they are limited in their exposure to diverse cultures and texts, or technology students will have no desire in learning about such things. Instead, teachers can plan to incorporate diverse texts and activities to promote curiosity about cultures and interest in literacy. Meier (2003) suggests simple, meaningful, and relevant steps to aiding in students’ literacy development: choose books that students can relate to, explicitly teach students appropriate and expected book reading behaviors, and lastly, make books come alive for readers (pp. 246-249). Although Meier’s (2003) research focuses primarily on multicultural and multilingual students, the previously noted strategies would benefit all students including those from low socioeconomic backgrounds or rural communities as these students do not necessary align with the dominant group in American culture. While poor students may share race or ethnicity in common with the Euro-American dominant group, the disparity in incomes creates divisions based on wealth.

There may be generations of anti-education apathy at home causing a student to feel reluctant to attend school or read independently at home. If this topic is not addressed and action research is not conducted, a cycle of dropping out, poor literacy scores, and decreased self-confidence in students will continue at an alarming rate. The data collected for this action research was done through both qualitative and quantitative methods. According to Mills (2011) this combination approach is the “mixed-methods research design” and it was selected for this study because the three types of data collections (teacher field observation, student work samples, and parent questionnaires) have elements of both qualitative and quantitative information (p. 4).
Letting students know that they bring important background knowledge with them to school, their culture is valued, and education is important (through the use of meaningful texts and activities) could have the potential to stop or slow cycles of poor attendance or dropout rates that are typical within families of low socioeconomic backgrounds. Ultimately, society would benefit from having a higher graduation rate and from producing citizens (through public education) who are literate, culturally sensitive, and motivated to be successful. Improving the quality of what educators teach and having a deeper understanding of who we are teaching will lead to an overall increase in productivity and success at school which will translate to life beyond graduation for students. Low socioeconomic students may be disadvantaged because of their lack of wealth however, schools can use resources, texts, and instructional strategies among other methods to catch these students up to their middle-class peers.

Given that literacy is socially constructed and is not developed in isolation, this study explores the impact of environmental factors on students from low socioeconomic backgrounds. How does a low socioeconomic student’s home literacy environment affect his or her literacy experiences and interests in reading? For many low SES students, the HLEs in which they were raised lack the resources and activities necessary to build a strong literacy and language foundation. Data was gathered in a Western, New York school through the use of questionnaires, observations, and literacy assessments. Results of the study revealed that students from low SES homes are behind in their reading levels and are limited in their literacy interests and class participation. With explicit instruction and intensive intervention, schools and parents can work together to improve the quality of low SES children’s HLEs.

**Theoretical Framework**
In order to understand the importance of a child’s home literacy environment on his or her literacy scores and interests in reading, one must look at when and how literacy is developed. Literacy is an acquired, socially constructed, and socially directed instrument, through which people think, communicate, survey society, and interact. Children who are not supported in literacy and language development from an early age may fall behind their peers prior to entering school. Early literacy development will foster the necessary skills to be successful in formal schooling and to align students’ behaviors with the expectations of schools. The definition of literacy which drives this study is based in the sociocultural theory which is engrained in the roles of society, cultural differences, and literacy.

According to Larson and Marsh (2005), the sociocultural theory “defines the child as an active member of a constantly changing community of learners in which knowledge constructs and is constructed by larger cultural systems” (p. 100). The works of several prominent researchers and linguists such as Gee (2001), Heath (1982), Mays (2008), Goodman (2001), and Meier (2003) supports the sociocultural belief that a child’s environment has a significant impact on their written and oral language development. The impact of children’s environments on their literacy development is especially noticeable when children enter school.

While every child brings some linguistic abilities and knowledge of literacy to school with them, the work of Heath (1982) delineated the complexity and variety children’s culture can have on their literacy acquisition. Heath (1982) explored the cultural variation and ensuing implications for students by looking at how a child’s culture and SES can influence the child’s relationship, (or lack thereof), with books, consequently impacting their future success in school. Similar to Heath (1982), this study seeks to uncover the influence of a child’s home literacy environment on their literacy experience (i.e. literacy performances and interests in reading).
Literacy is a powerful tool and teachers have the opportunity to level the playing field for students coming from inequitable backgrounds by exposing them to the necessary texts and language to be successful in school and beyond (i.e. the global economy or world of work). Gee (2001) describes the impact that belonging to a dominant group can have, as the dominance of the mainstream discourse “can lead to the acquisition of social goods (money, power, and status) in a society” (p. 19). Teachers must be aware of the inequity in our society and ensure not to belittle students whose culture or resources differ from the dominant group’s.

In general, teachers care about education and can see the value in succeeding in school both academically and socially. Yet teachers should be advised to not assume that all students come from home environments that feel similarly about public education. This idea is supported by Kucer (2009) who cautions teachers to be aware before passing judgment or assumptions about a child’s linguistic (or literacy) experiences as “in these situations, children are not being assessed so much for what they learned in school, but what they learned at home and brought to the classroom setting” (p. 227). The topic explored in this study is important because it requires teachers to examine their own biases and expectations for students and their home literacy environments. The purpose of this study is not to pass judgment on low socioeconomic families in rural communities but, rather, to inform teachers of the potential backgrounds and information that may be relevant to meeting the needs of their student populations. Students’ literacy performance and home literacy environments will be assessed in order to better understand the effect children’s environments can have on their academic success. Teacher’s approach to the communal impact of homes and neighborhoods on literacy development is a departure from previous reading instruction. Unlike early approaches to literacy, (i.e. the basal readers and round-robin methods of the 1950s), literacy is no longer viewed as simply reading in seclusion
from external factors. Currently, issues of race, power, socioeconomic status, and environmental influences are interwoven into a modern understanding of literacy.

Becoming literate is a multifaceted, lifelong process that includes immersion in a language, exposure to texts, environmental influences, cognitive ability, and many other factors. Research has proven the oral and written language children acquire at a young age creates the foundation for all future literacy acquisition. Gee (2001) and Otto (2008) both support the theory that home is, for many, where the foundation of a child’s literacy acquisition is developed through the observation of and interaction with one’s environment. For many children from lower socioeconomic status backgrounds, home is not a sufficient environment for deep literacy development.

Research Question

The early development of a child’s literacy happens long before the formal school setting. Children’s social and literacy environments play a significant role in the acquisition of language skills—the foundation for all future literacy growth. All too often teachers assume that students are entering schools with the same literacy knowledge foundation. The research in this study examined how the many factors from a low SES child’s literacy environment (i.e. family beliefs towards education, access to literacy resources, family education levels, etc.) can impact his or her literacy development and performance. With the understanding that literacy development is socially constructed and influenced by environmental factors, the research question for this study is the following: How does a low socioeconomic student’s home literacy environment affect his or her literacy experiences and interests in reading?

Literature Review
Through research of scholarly studies, three themes have emerged in regards to the impact of a low socioeconomic (SES) student’s home literacy environment on his or her literacy scores and academic interests: (a) the characteristics of home literacy environments (HLEs) and what may be lacking in low SES families’ HLEs, (b) the educational levels and beliefs of adults (primarily mothers) in low SES homes, and (c) possible interventions for poor achieving low SES students. It has been well documented by many researchers and linguists that children acquire language and literacy skills prior to entering formal schooling. Much of a child’s long-term academic success or failure can be traced back to their early literacy experiences at home. The themes presented in this research focus on children coming from low SES homes. These children often enter school lagging behind higher SES students because they are products of week home literacy environments. After examining home literacy environments, what should be done in them (and what may be lacking for low SES students), themes two and three discuss why low SES home literacy environments are insufficient in preparing children for formal schooling and what may be done to improve the language and literacy skills of such students.

**Characteristics of Home Literacy Environments**

The first theme which emerged through the research for this study focuses on the characteristics of home literacy environments (HLEs). A child’s HLE is a multifaceted entity which looks different depending on a family’s socioeconomic status, educational levels, and beliefs about education and literacy. This environment is not limited to the physical characteristics and contents of a home. Instead, HLEs are spaces and atmospheres where learning, exploration, and reading are fostered and encouraged. While the contents of an HLE are essential to children’s literacy development and print exposure, they are not the sole source of a child’s literacy development as Kirby (2008) notes “having many books in the home does not
contribute to literacy acquisition; it is what is done with the books that matters” (p. 115). Often what is done with the resources depends on parental beliefs and education levels. Brannon (2012) supports Kirby’s (2008) findings by linking the higher education levels of mothers with more stimulating HLEs. It is important to understand how crucial HLEs are in developing the literacy and language skills of children. Beyond being a place with various books and texts, the HLE must be a place where children read, observe parents reading, participate in joint book-reading activities, develop an understanding of book-reading behaviors (which will later make their transition to school expectations smoother), and construct their language skills—the foundation for early literacy.

According to Kirby, the HLE is important for three reasons:

First, by exposing children to books, and adults’ reading, they may establish a—culture of reading, in which the skills of reading are seen as valuable and desirable. Second, home environment—through both literacy and oral activities—may contribute to the various pre-literacy skills, for instance phonological processing (sensitivity to, and ability to manipulate, the sounds of and within words), with which children enter school. Third, the home environment may provide the child with elementary literacy skills such as letter knowledge, word recognition, or word decoding. (p. 112-113).

Kirby described the HLE helping to nurture a culture of reading. Children’s long-term personal motivation to read and academic interests are connected to this early exposure. Loera (2011) confirms Kirby’s findings (2008) regarding the importance of literacy skills as being seen in a desirable and valued way “parents’ identification of pleasure as a reason for reading was positively associated with their children’s motivation for reading” (p. 137). Parents are in the
unique and powerful position of impacting their children’s literacy success simply by being observed reading.

Kirby’s second and third reasons HLEs are important shift the parental role from being observed by children to actively engaging with children. Through language and literacy activities, children’s early literacy skills will develop, laying the foundation for all future literacy advancements. The development of early language skills referred to by Kirby is also noted by Bingham (2007) who argues “the home literacy environment was an important predictor of children’s receptive language skills and children’s emergent reading behaviors” (p. 42). It is well understood through the work of Kirby (2008) and other researchers that HLEs are essential to children’s literacy and academic growth and success.

In Mol’s (2011) meta-analysis of 99 leisure reading studies, her research supported the importance of early literacy “establishing a book reading routine before the age of 2 is thought to provide children with a variety of rich linguistic input that stimulates their language development and lays the basis for continued, frequent print exposure” (p. 268). It is never too early for parents to begin reading to their children and creating teachable literacy moments. Raban and Nolan (2005) agree with Mol (2011) stating, even babies can benefit from “the act of sitting on a parent’s lap and listening to the rhythm and intonation of the language may not only strengthen the socio-emotional bond between parent and child, but also address important linguistic precursors such as language rhythms and prosody” (pp. 290-291). Establishing a culture of reading through the HLE will help to build a foundation for language skills will lead to a strong base for literacy development. Kirby (2008), like Raban and Nolan (2005), further emphasized how the development of early literacy can benefit children. If students are frequently exposed to texts and experience joint book-reading with a parent they will have an easier transition to school
behavioral expectations (i.e. how to sit during read alouds, how to turn pages, where to look when being read to) as well as a solid foundation for comprehension of texts read “book reading is believed to familiarize children with story structures, schemes, and literacy conventions which are prerequisites for understanding texts” (Kirby, 2008, p. 114-115). These are necessary skills students will need to be successful in formal education settings.

In order to assess the effectiveness of children’s HLEs, one must take into account the multifaceted nature of literacy acquisition, the studies presented in this research used a variety of methods to assess children’s HLEs. The most common methods used were parent questionnaires, interviews, home observations, and student assessments. Some researchers used existing questionnaires regarding HLEs while others, such as Umek (2005), created a survey to target specific factors of HLEs. Umek describes a pitfall that can arise when using parental questionnaires regarding their child’s literacy development, parents will respond in ways “often biased toward expectations and socially desired responses” (p. 272). Therefore, using multiple methods for data collection is important to avoid skewed responses of the HLE and child’s literacy performance. Kirby’s (2008) description of the HLE is similar to the ones described by Storch (2001) and Umek (2005) who both added variables such as trips to the library and print motivation in their definitions of the HLE.

The HLE five factors Umek (2005) examined were the “stimulation to use language, explanation (F1), reading books to the child, visiting the library and puppet theater (F2), joint activities and conversation (F3), interactive reading (F4) and the zone-of-proximal-development stimulation (F5)” (p. 271). Literacy is socially constructed and impacted by many variables both in and outside a child’s home. Umek’s (2005) work was supported by Storch (2001) who further emphasized the importance of HLEs in establishing strong literacy skills early in children’s lives.
as these skills can impact their “lifelong career and economic prospects” (p. 54). However, there are varying degrees to which HLEs effectively promote literacy for a number of reasons including lack of resources (both in and around the home), parental beliefs, and parental involvement.

After examining the HLEs of 93 students, van Steensel (2006) established three home literacy profiles “rich, child-directed and poor” (p. 367). Children from rich profile families in van Steensel’s study scored the highest on the indexes examined and were either regularly exposed to or “participated in a wide variety of literacy activities” (p. 374). Before entering formal schooling, children are dependent on literacy and language stimulation from family members. Like van Steensel (2006), Ortiz (2000) describes some shared activities that may include joint reading of books, signs, menus, trips to the library, making lists, writing letters, using technology (i.e. computer, tablet, cellular phone) between parents and children. Without such opportunities for literacy growth, children will enter school behind similar peers who have had shared literacy experiences in their homes and communities. The second profile in van Steensel’s (2006) study, the child-directed group, was comprised of families where there were frequent parent-child activities however, with less “individual literacy activities” than the previous cluster (p. 374). These students may lack interest or motivation to read independently. The final profile was labeled as being a poor HLE. Overall, these were families that engaged in few literacy experiences both as families and independently. Analogous to van Steensel’s profiles, Aulls (2003) examined the availability of print in the home and community and the impact on students entering first grade on a continuum ranging from rich-rich families (HLEs with the most texts and activities) to the moderate-moderate group (HLEs with little texts and literacy interactions).
Aulls’ (2003) work revealed a connection between literacy skills and HLEs. In “moderate-moderate homes, 10% of the parents reported buying newspapers daily, and 20% reported buying magazines regularly. In contrast, in rich-rich homes, 55% of the parents reported buying newspapers daily and 64% reported buying magazines regularly” (Aulls, p. 170). The print awareness and decoding skills of the first graders assessed in Aulls’ study were less proficient among children from moderate-moderate homes where text exposure was lacking. Similarly, library membership was also a source of disparity among rich-rich (100% membership for parents and 86% of children) and moderate-moderate (20% of parents and 10% of children) homes (Aulls). A possible answer for why there is such a difference in the engagement in literacy activities and exposure to text lies in the SES backgrounds of HLEs. van Steensel (2006) noted a correlation in his research between SES and the three HLE profiles “with respect to SES, it can be observed that, as the level of education increases, the share of profile 1 (rich) families grows and the share of profile 3 (poor) families drops” (p. 375). Without intervention, low socioeconomic families with little education will produce lackluster HLEs and underachieving children. However, in his research Kirby (2008) cautions the reader to not generalize a presumed link between all low-SES families and children’s reading success as this would be an inadequate analyses as to why low-SES students tend to perform worse on early literacy skills than more affluent peers.

Nevertheless, repeated research supports a connection between poor HLEs and weak literacy skills. Typically, low-SES homes fit the profile of poor HLEs. van Steensel (2006) noted such trends between SES and the literacy profile “children from high SES families had, in general, the most stimulating HLEs” (p. 367). Much of the research presented in this study examined parental income and education (some took into account occupation) when determining
SES. A link between SES and literacy success is also supported by Aikens (2008) who writes “low-SES households have less exposure to books at home…these children are less likely to be read to by parents” (p. 236). Not only may low-SES homes put children at a disadvantage in regards to literacy, but also, low-SES communities can affect students’ literacy success.

Ortiz (2000) notes that children’s HLEs extend beyond their homes to their communities. Literacy rich communities feature bookstores, public libraries, museums, art galleries, opportunities for read alouds or poetry readings, as well as public transportation. Yet, as Durham (2006) observes, low SES communities and neighborhoods, (especially in rural areas), are often economically depressed and lack cognitively stimulating resources such as bookstores, “libraries, museums, historical exhibits, concert halls, or universities” (p. 629). Durham goes on to state that without this valuable background knowledge, children from rural, low SES families are lacking the subtle fundamentals for school readiness unlike their more affluent peers (or affluent urban counterparts) who “come to school with the cultural capital that matched school expectations” (p. 630). Without repeated exposure to meaningful literacy activities, students lack basic understandings of read aloud behaviors. Aikens (2008) also examined the impact community and SES can have on a child’s reading success. The academic challenges poor children face are exacerbated by “poor and distressed schools and economically depressed neighborhood(s)” (Aikens, p. 236). Not only are poor children at a disadvantage because of their HLEs, they are further unprepared for formal education due to economically and culturally depressed communities.

Without adequate HLEs, low SES students will enter the early, crucial year behind more affluent peers. Much like Durham (2006) and Aikens (2008), van Steensel (2006) stresses the importance of early literacy development “most children become acquainted with the nature and
functions of written language long before their first day in school, through observing and participating in literacy activities in their homes” (p. 367). Developing early literacy skills is especially crucial for students from low SES families as typically children from low SES tend to enter school behind middle-class and rich peers. Similar to van Steensel (2006), Payne (1994) studied the role of the HLE in language development for poor children “children from low-income backgrounds are particularly likely to have low level of skill in the forms of language that are important in formal schooling, and such children are at risk for later reading difficulties” (p. 428). Vocabulary and phonological processing skills acquired in HLEs lay the foundation for future literacy growth and later success in school.

The HLE is the first stop on a lifelong journey of becoming literate. It is in the HLE where children develop their language skills that are necessary for any future literacy advancements. Without this crucial phase, children are at risk for entering elementary school below grade level. Once behind, low SES students struggle to catch up to their more affluent peers. While interventions may remedy some of the disparities, fostering efficient, supportive, and engaging HLEs is a more proactive approach. Unfortunately, for low SES students from economically depressed communities, multiple obstacles stand between them and a life of literacy success.

Education and Beliefs of Adults in Low SES Homes

The second theme which emerged from a review of the literature for this study attempts to examine possible reasons why low-income students are at a heightened risk for performing worse in literacy and language development than more affluent peers. This theme focuses on the role of parents in the progress of their children. The first and arguably most important factor for a child’s literacy development is the role of the parent. All children acquire a foundation for
literacy and language in their homes through interactions with or observations of parents and relatives.

The degree to which these skills develop depends considerably on the HLE in which they are raised. Parental educational levels and beliefs about education can impact the HLEs they create and the subsequent success of their children. Norwalk (2012) reaffirms the significance of parental involvement in developing the early skills necessary for reading “engagement in literacy activities between children and their parents was a significant predictor of early literacy skills” (p. 172). Yet, for low SES children, their parent’s education level is typically a powerful indicator of what their own literacy and academic achievement may look like. Often these parents’ own education and interest in literacy is lacking. While much of the research regarding HLEs and parental involvement focuses on mothers, the role of fathers should not be underestimated. Similar to Norwalk (2012), Karther (2002) noted a “positive relationship between the amounts of literacy fathers engage in for their personal use and their children’s reading test scores” (p. 184). It is important and powerful for children to see their parents or guardians reading and writing regularly. Akin to Karther and Norwalk’s (2012) findings, in his study of maternal literacy beliefs, Bingham (2007) writes “as children’s first teachers, parents play an important role in building children’s early literacy skills before they enter formal schooling” (p. 24). Parents’ beliefs direct both the quality and frequency of literacy activities with children.

There is a strong correlation between parental beliefs, parental education, and SES. In the first theme the importance of the HLE on a child’s literacy success and interest in reading was established. Much like Bingham, the association among parents’ beliefs, education, and SES was also noted by Weigel (2006) who collected data from 79 mothers and their children during a
yearlong study of the impact of maternal literacy beliefs on the HLE. Weigel’s study described two parental profiles: facilitative and conventional. Facilitative mothers “believed that taking an active role in teaching children at home would provide opportunities for their children to gain vocabulary, knowledge, and morals” (Weigel, p. 191). These beliefs directly impact the quantity and quality of joint literacy experiences in the HLE. The conventional mothers profile differed as these were women who “expressed the belief that schools, more than parents, are responsible for teaching children and tended to report many challenges when reading with children” (Weigel, p. 191). Again, the HLE parents produce reflect their beliefs about education and often their personal experiences with education. The homes of the facilitative mothers align with van Steensel’s (2006) rich HLE profile and Aulls (2003) literacy rich-home profile as they participated in frequent engaging activities for literacy development unlike homes of conventional mothers who were found to be deficient in this area. Such activities may include joint book-reading, joint writing activities, and detailed explanations to children’s questions. Furthermore, Weigel (2006) discovered children of conventional mothers were lacking in “print knowledge and interest in reading” (p. 191). This finding directly supports reoccurring patterns between low SES and weak early literacy skills in children.

Children from low-income backgrounds are delayed in their literacy and language skills in comparison to their more affluent peers in formal schooling. Hoff’s (2003) research of SES, early vocabulary development, and maternal speech supports this notion. Her study of 63 mothers and their two-year-old children revealed that higher-SES mothers show more of the characteristics of maternal speech that are positively associated with language development than lower SES mothers” (p. 1369). Given that language is the foundation upon which literacy skills are developed, without exposure to stimulating HLEs (especially via maternal speech), children
from low SES backgrounds will suffer academically both immediately, and throughout their long-term formal schooling. Kelly’s (2008) analysis of students’ academic performance builds upon the impact a low SES mother can have on her child’s literacy as described by Hoff (2003).

Children from low SES backgrounds who are not engaged and encouraged to interact during read alouds with parents will grow up to become passive learners in their formal schooling (Kelly, 2008). The degree to which a mother (or other primary caregiver) verbally interacts with her child can be a powerful indicator of the child’s future literacy growth. Hoff (2003) and Bingham (2007) produced studies which explored the correlation between mothers’ and children’s language. Simple literacy activities during joint book-reading such as labeling pictures, asking questions, and listening responsively can be linked to a child’s future language and literacy development. While reading to children is valuable, the interactive read aloud during which children are encouraged to ask questions and respond to open-ended questions are even more effective in preparing the child for school readiness, increasing comprehension skills, and establishing a strong literacy foundation.

Umek’s (2005) research of maternal education levels parallels Bingham’s (2007) findings. Examining maternal education levels and beliefs offer valuable insights into the literacy performance of their children. Four of the five HLE factors within Umek’s (2005) study were linked positively to the mother’s educational level “stimulation to use language, explanation, reading books to the child, visiting the library and puppet theater, joint activities and conversation, and the Zone-of-proximal-development stimulation” (p. 271). That is to say children in Umek’s study scored higher on language development skills if their mothers themselves had higher levels of education. Conversely, lower maternal education levels and negative attitudes towards school impact their children’s literacy performances. Hoff (2003)
supports Umek’s (2005) emphasis on maternal education. In Hoff’s (2003) study of a mother’s speech and the development of the child’s vocabulary she argues “outside of extreme poverty, maternal education appears to be the component of socioeconomic status most strongly related to parenting measures” (p. 1369). Mothers with higher levels of education tend to foster HLEs that are more stimulating and engaging for literacy development. Payne (1994) noted similar findings in his study of the effects of HLEs on low SES students “caregiver IQ and education also are likely to be related to the nature of the interactions in which the caregiver engages the child during literacy-related events such as shared book reading” (p. 435). Parents with higher education most likely value education themselves and can see the importance of having it in their lives. As a result of their beliefs, they will engage children in literacy and language activities to increase their child’s future academic success. However, time for meaningful literacy activities between parents and children is limited in most low SES homes.

In general, disadvantaged homes tend to be areas of high stress with little time for leisure activities. Mothers of low SES homes featured in Weigel’s (2006) study saw literacy development as hard work. These types of parents tended to engage in rote literacy activities such as using flashcards while the other group of mothers (who were higher SES) viewed reading as entertaining. Children who come from the latter type of families are more likely to view “reading as a source of entertainment and were more likely to have children who reported that reading was enjoyable, saw value in reading, and felt competent in their reading activities” (Weigel, p. 193). Not surprisingly, these homes have higher incomes and more educated parents. The idea of reading being a source of entertainment and leisure is a luxury many low income parents may not be able to afford. Low SES mothers may work multiple jobs and struggle to support stable homes causing reading activities to fall low on the priority list. Payne (1994)
expands upon Weigel’s (2006) dichotomous types of literacy adding that due to the lack of meaningful literacy experiences in low SES families “the stresses of poverty leave mothers with little time or energy for language interactions with children that are not directed towards immediate goals” (p. 429). Studies examining the link between length of maternal answers, SES, and education also produced valuable findings as determinants for children’s language development.

Low SES mothers tend to answer children in short responses, requiring less words. Such short responses are similar to characteristics of conventional mothers described by Weigel (2006). Extensive discussion of texts read and lengthy answers from children are not encouraged by low SES mothers who themselves tend to speak using less words. Due to such terse explanations, low SES children are exposed to less vocabulary. Hoff’s (2003) research found that the length of a mother’s average sentence and the richness of her vocabulary were indicative of her effectiveness on increasing her child’s vocabulary “the more different words children hear, the more different words they may learn. Longer utterances may provide more information about word meaning because discussion of word meaning….requires longer utterances than does merely providing labels” (p. 1374). Mothers who explicate their responses are exposing their children to more vocabulary words, thus, helping to expand the language skills of their children. Durham (2006) supports Hoff’s (2003) analysis of language development adding that low-income parents typically provide “weaker language stimulation” (p. 631). A possible explanation for language stimulation between parents and children in low SES families may be due to time constraints or lack of understanding how powerful more quality utterances can be. It was also noted by Hoff (2003) that longer utterances by mothers to their children will “provide richer and potentially more varied syntactic frames surrounding words” (p. 1374). Exposure to
detailed and varied vocabulary will especially benefit a child’s early language and literacy development. The syntactic system, which, according to Kucer (2009) is one of the structures of language, is naturally acquired by the child in his or her environment. As the child becomes aware of relationships and patterns, then they can create frameworks among people and things creating deeper understanding of language and literacy at an early age (Kucer, 2009). Still, the frequency and quality that children are engaged in literacy practices will depend on the HLEs their parents provide.

When examining the research about HLEs, it is evident that there is a fundamental difference between parents’ beliefs about education and literacy. The beliefs of the caretakers and mothers can be traced to their own personal experiences. Conventional mothers approach literacy instruction as a “deliberate promotion of a set of skills” rather than as a source of entertainment or leisure (Weigel, 2006, p. 193). Such skills may include rote memorization of vocabulary or lower level comprehension questions. Weigel noted that these women “reported less positive educational experiences compared to the Facilitative group” (p. 206-207). It is evident through the work of Weigel and others that the educational experiences of parents lead to similar experiences and goals for children within their HLE. Similar to Durham’s (2006) findings, regarding low SES mother’s, Weigel (2006) correlated the impact a mother’s education can have on her beliefs and facilitation of joint literacy activities. A positive relationship was noted between strong parental beliefs and stronger literacy skills in their children.

Low SES children lack necessary language and literacy skills to achieve sustained success in formal schooling. This lack of success will lead to unfavorable beliefs towards school and literacy. As Brannon’s (2012) research illustrates, the educational level of parents is a strong predictor of children’s success in schools “increased parental education results in parents better
prepared to support their children’s studying, accessing, and understanding educational information presented in school” (Brannon, 2012, p. 9). When low performing, low SES students become parents themselves, they will not create stimulating HLEs, and an anti-school sentiment cycle will continue. Brannon’s work reinforces Durham’s (2006) who states “research suggests that parents create an environment for their child that reflects their own pre-adult experience” (p. 656). If parents were raised in a home with a weak literacy environment, they are likely to produce a similar HLE for their children. Law (2008) also stresses the need for children to observe reading in their homes as a motivating factor for reading “home literacy had a significant positive correlation with students’ extrinsic motivation” (p. 45). If children see their parents reading often they are more likely to read frequently themselves. As a possible remedy for the dismal cycle of poor readers raising poor readers, Loera (2011), like Law (2008), noted that increased parental involvement will cause children to be more motivated readers. Although motivation can be influenced by many factors, watching parents read or being read to establishes a literacy routine and expectation for literacy in the home. The urgent need to increase family reading time is supported by Aulls’ (2003) whose research indicated only “fifty percent of the parents in the moderate-moderate homes considered reading one of their pastimes, compared to 86% of the parents in the rich-rich homes” (p. 172). If parents do not value education, do not read, and do not see the value in reading or education, their children will grow up holding similar beliefs. Even Ferguson’s (2011) findings positively linking grandparents’ educational attainment and grandchildren’s cognitive skills verify Loera (2011) and Aulls (2003) research. Family members can create a culture of reading by supporting the value and role of education in daily life. Students of low SES who are lacking in literacy skills will be disadvantaged in formal school without parent involvement “young children with college-
educated grandparents possess stronger literacy and mathematics skills at the start of formal schooling” (p. 216). Both parents and caretakers should be encouraged to engage in meaningful literacy activities with their children.

Parental education levels and beliefs directly impact their literacy instruction and activities with their children. Children benefit from observing their parents read. Children also benefit from joint book-reading activities which will support them both in their language and literacy development and prepare them for expectations of schools. Even the way parents speak to their children can enhance or hinder their literacy and language development. Hindrance of children’s literacy development is further impacted when parents are less educated and are of lower SES.

**Interventions for Low SES Students and Implications for Parents and Teachers**

The final theme in this study examines areas where low SES students struggle and possible interventions available for teachers and parents to remedy the delays that were noted in the previous themes. Although attendance and anti-school sentiments at home are obstacles for low SES students, significant gains can be made through collaboration of school and home to help students achieve literacy success. Teachers and parents must be willing to collaborate and use available resources to engage and excite struggling readers.

After examining the HLEs and parental educations of low SES children, it is important to look at specific information regarding their literacy performance. According to Weitzman (2004), approximately “two thirds of children in the United States read below their grade level. This failure to develop sufficient reading skills disproportionately affects children from socially and economically disadvantaged families” (p. 1248). This statistic is staggering for teachers who are charged with supporting delayed students. Massetti’s (2009) research verifies Weitzman’s
(2004). Children from low-income families have home literacy environments that lack stimulating information and activities. Therefore low SES students are entering school “with low levels of skills necessary for becoming good readers, and continue to trail behind peers from middle- and upper- income backgrounds throughout schooling” (Massetti, 2009, p. 554).

Helping low SES students make advances in language and literacy is crucial to preventing a lifetime of delayed skills. As noted in the previous theme, parents tend to produce HLEs similar to ones they were raised in. By intervening at an early age, low SES children may be able to break out of the low achieving cycle and someday create their own stimulating HLEs. This theme will examine specific literacy scores and present potential interventions which may help to level the playing field for low SES students.

Norwalk’s (2012) research indicated similar findings to both Weitzman (2004) and Massetti (2009) regarding reading delays in children. Low SES homes produce weak HLEs, thus not preparing adequate early literacy skills in young children. During the six-month study of low SES four-year-olds in the Head Start program, three profiles emerged in Norwalk’s (2012) study. The first profile displayed the weakest literacy skills, profile two had the strongest literacy skills, while profile three’s children tested as having mixed literacy skills. Norwalk’s research supports early intervention from preschool through elementary school as an effective method to support struggling readers from low SES homes. Without intervention, a domino effect occurs when students enter school behind their peers and are not supported or engaged. Kelly (2008) studied the levels of engagement in middle school English classes and among other findings discovered “students who begin class with weaker reading and writing skills are less likely to be engaged, setting the stage for a cycle of reduced achievement growth” (p. 434). Disinterest towards texts
seen as irrelevant coupled with lack of support from home fuels feelings of disengagement, or, an anti-school attitude in low socioeconomic students (Kelly).

In his study of the attendance, socioeconomic disadvantages, and early cognitive development, Ready (2010) noted that once lower socioeconomic students fall behind their peers, they are frequently unable to benefit from—or be exposed to higher achieving peers. Instead, he explained that “lower SES children more often encounter low-achieving peers” (pp. 273-274). Meaning underachieving, and often low SES students, often are tracked and grouped with similar peers. Norwalk (2012) also cautions against grouping low SES, struggling readers together “homogeneous grouping ignores the unique strengths of each child and assume that the same type and intensity of instruction will be equally effective for all children from low income backgrounds” (p. 172). Low SES students and underachieving students benefit from exposure to those who differ from them. Higher achieving students or higher SES students are more likely to value school and could act as positive role models for unmotivated students. Though these students are coming to school already behind their peers, characteristics of a typical classroom for children of low socioeconomic backgrounds include “larger class sizes and remedial coursework that involves rote teaching and low-level academic content” (Ready, 2010, p. 273). Later in their formal education, low SES children from weak HLEs will continue to perform behind their higher income peers. Ready’s work is supported by Norwalk (2012) who discusses the sense of urgency to help students of poverty improve reading “students who are not meeting grade level expectations in reading at the end of first grade are much less likely to achieve at or above grade level throughout elementary school” (p. 24). It is crucial to address early literacy disparities and provide intervention for these struggling readers.
Without early intervention struggling readers will suffer academically throughout their formal schooling. Similar to Weigel’s (2006) groupings of facilitative and conventional mothers based on SES factors, Kelly distinguished two types of students’ engagement in school: procedural participation and substantive participation. The students were observed and assessed regarding the quality and quantity of their responses. Procedural students had low levels of engagement which Kelly (2008) quantified by the types of lower level questions and answers offered by these students. These types of questions and answers by students were basic and did not demonstrate critical thinking. Conversely, substantive participation “is illustrated by asking or answering either authentic questions, or questions that involve high level thinking, or posing a question with authentic uptake” (Kelly, 2008, p. 439). Perhaps due to lack of exposure to texts in the home or not experiencing authentic joint book-reading activities between children and parents, low SES students do not come to formal education with skills that meet schools’ expectations.

Aulls’ (2003) study of intergenerational joint-book reading supports the unfamiliarity of low SES students and read aloud expectations. Appropriate read aloud behaviors expected in formal schooling include following along with the story, asking questions, answering questions, engaged body language, knowledge of how to hold and read a book. His findings of parents revealed “in rich-rich homes, 73% reported that their child ‘frequently’ helps turn pages or points to words or pictures” which differed significantly from the moderate-moderate families where “only 20% reported that the child ‘frequently’ turns pages or points to words or pictures” (p. 172). In high SES families children are active learners and participants in their HLEs versus the passive learners of lower SES families. The trend of minimal engagement by low SES students continues through elementary school and corroborates Kelly’s (2008) examination of middle
school English procedural participation students. These underachieving students lack the motivation to engage in higher level thinking and examination of literacy as reading may not be seen as valuable in their HLEs. High SES students “both ask and answer questions about 30% more than low SES students” which supports the theory that low SES students who come from lacking HLEs lag behind their more affluent peers (Kelly, p. 439). Teachers must try to engage low SES students and not rely on higher SES students for all the answers or comments during discussions.

To combat this ripple effect, Norwalk (2012) emphasizes the value of early interventions in preschool through elementary for struggling readers. In order to achieve long-term success, low SES students must be explicitly taught higher thinking skills and reading behaviors. However, for children from low SES families with poor HLEs, “intensive and prolonged support” is necessary to catch them up to their grade level peers (Norwalk, p. 172). The support must be frequent and, ideally, implemented both at home and at school. Without such interventions, Aikens (2008) noted in regards to SES that the “gap in reading between the poorest and most affluent children grew as children progressed through school” (p. 249). It is crucial to intervene early in formal education to reduce the gap between low SES students and their higher achieving peers.

Like Norwalk (2012), Aikens’ (2008) discusses the significant advances low SES students can make if they are present in school during their first year. Meaning students are in school, reading and willing to learn. Unfortunately, as Ready (2010) presents in his research, in addition to lacking parental support many students from low-income families have irregular attendance. Many factors impact students’ attendance and causing the number of absences to be even larger for low SES students. According to Ready, low SES students “are 25% more likely
to miss three or more days of school per month...children born to teenage unmarried mothers, a demographic group strongly associated with childhood poverty, are more likely to be chronically absent from early elementary school’’ (p. 272). This statistic is disturbing when one considers how essential early academic years are for literacy development. One such reason behind poor attendance of low SES students includes frequent student mobility, health problems which are further aggravated by “parental behaviors, including elevated use of tobacco, and by environmental factors associated with poverty including substandard housing and increased exposure to pollutants and lead” (p. 273). When the components of absenteeism (anti-school attitudes, lack of parental support, illness, or transient lifestyle) are present in the lives of children from lower socioeconomic status, the result can be catastrophic for one’s literacy and academic success. In addition to the growing achievement gap noted by Aikens (2008), Ready (2010) found poor students fall further behind during summer. Regular attendance during the school year is necessary to remedy, (even to a small extent), weak literacy skills. Unlike their wealthier counterparts, Ready cites “a large body of research concluding that socioeconomically disadvantaged children gain fewer academic skills during the summer when school is not in session” (p. 273). This regression from school literacy when compounded with the lack of language and text stimulation at home further disadvantages low SES students from poor HLEs.

Rather than being reactive—necessitating interventions, schools should be proactive with low SES parents in order to help students achieve critical early literacy and language skills. Such explicit teachings for parents are described by Raban and Nolan (2005). While parents from low SES homes may desire to be involved with their children’s literacy development, some simply may not know when or how to interact. In Raban and Nolan’s study, low-income parents were asked a series of questions regarding reading and their familiarity with local libraries (i.e.
frequency of visits to library, frequency of joint book-reading activities, types of literacy materials in home, etc.). The responses to a particular survey question “Is there enough information in your area about when to start reading to your child?” were overwhelming negative (Raban & Nolan, 2005, p. 293). Over half of the parents surveyed indicated they did not have sufficient access to specific and clear information intergenerational literacy activities. If children’s homes are lacking valuable sources for texts and literacy experiences then such HLEs should be created, especially in low SES homes as these children have many obstacles preventing them from entering school at the same level as more affluent children. Law (2008) supports the views of Raban and Nolan (2005) and states that it is crucial to have this direct dialogue with parents in order to help them “build a home environment that nurtures children’s reading motivation and literacy development by identifying necessary and sufficient components” (p. 40). Parents from disadvantaged backgrounds need explicit instruction regarding when and how to engage in literacy practices with their children. However, schools should not make generalizations about low SES families or view them from a deficit model.

Many low SES parents may want to be involved in their child’s education and literacy growth but may not have the resources (including time, strategies, and materials) to do so. Raban and Nolan (2005) instruct teachers to welcome and encourage parental involvement at school. Regardless of the time or frequency, any involvement of parents in their child’s school should be valued. Teachers must keep in mind that many low SES families do not have access to technology. Similar to Raban and Nolan, Durham (2006) notes the distal issues low SES families in rural communities many experience. Therefore, when working with parents to improve literacy activities within HLEs, teachers should be cognizant that resources may be limited, especially in rural communities. Others may have a fundamental difference in beliefs
and feel it is not their role to teach reading. These are often parents who themselves have had a negative experience at school and will require extra time and relationship building to create a partnership between school and home.

An example of a successful intervention and partnership on behalf of children’s literacy development is described in Brannon’s (2012) research. It was previously noted in the study that mother’s language has a significant impact on the early language and literacy development of children. Less educated, low SES mothers tend to speak in shorter sentences using less descriptive vocabulary—thus inhibiting significant language growth in comparison to more educated mothers (usually of higher SES) who explicate their thoughts and responses to their children’s questions. These higher SES mothers encourage similar language exploration and discussion with their children during joint book-reading. Brannon built upon Hoff’s (2003) research of maternal language by working with mothers of lower education levels and assessing the impact of dialogic reading training on the group.

The results of the pre- and post-tests revealed gains in both the quantity and quality of questions posed to their children during joint reading activities as well as the quality of the children’s responses (Brannon, 2012). Dialogic reading, much like joint book-reading is designed to engage children and increase vocabulary. Likewise, Bingham (2007) noted that children’s language scores can be significantly improved by the use of supportive language by mothers when engaging in joint-book reading.

Dialogic reading is an explicit intervention intended to “shift the parent/child literacy interaction from being adult-led to child-led. Dialogic reading techniques focus on encouraging parents to ask open-ended questions and expand on their children’s comments and ideas regarding the book being shared” (Brannon, 2012, p. 10). In doing so, students will become
more engaged during read alouds and better prepared for school’s expectations. The skills children display during the dialogic training also promote Weigel’s (2006) description of substantive participants in formal school. With interventions and trainings for parents, students from low SES backgrounds have the potential to become active learners. Teachers already model these reading strategies during read alouds designed to promote metacognitive thinking. The dialogic training presented in Brannon’s (2012) study requires simple, yet powerful techniques such as asking questions, waiting, responding, pointing to and labeling pictures, among others. To higher SES parents or educators these descriptions may seem self-evident, however, many parents need this type of explicit instruction. The children’s scores from Brannon’s post-tests (after mothers received dialogic training) indicated significant growth “it shows that although these children were significantly behind in their expressive vocabulary skills at the time of the pre-test, there were able to catch up with their classmates with the help of dialogic reading training” (p. 17). Low SES parents who are unsure of how to engage children during read alouds may benefit from such types of trainings as in conjunction with literacy practices at schools, under achieving students could make significant gains.

Another effective intervention is the use of literacy programs (such as Head Start or Reach out and Read) that can provide resources and education to disadvantaged parents. Similar to Brannon’s (2012) findings, Weitzman (2004) linked explicit literacy interventions to increased literacy skills in young children. Weitzman studied the HLEs of 100 children of low-income families and discovered that such programs are designed to explicitly teach parents and enhance resources in the HLE can improve children’s language and literacy skills.

Within the classroom setting, teachers can also motivate struggling readers. When attempting to engage students, Peterson (2011) reminds teachers to select “practices that make
classroom activities relevant to children’s lives” (p. 45). This teaching practice is especially important for low SES students as they often do not see how education can help them. If texts and activities are intentionally selected to pique students’ interests, they are more likely to become interested in reading. Related to Peterson, Law (2008) corroborates the need to excite students “when readers are motivated to read, the amount of time they spend on reading is increased, and consequently their reading comprehension improves” (p. 37). The greater the frequency of reading, the greater the gains in comprehension and other important literacy based skills such as decoding abilities. Peterson’s (2011) examination of writing in rural districts shares ideas teachers have used to make connections between schools, homes, and communities. She indicates that students “contributed to a town history book, a collection of local poetry and music, and a cookbook….written letters to local heroes” (Peterson, 2011, p. 43). Even in economically disadvantaged communities opportunities exist to make literacy relevant and exciting for low SES students.

Teachers face further difficulties when there is a “lack of perceived educational benefit” attitude in low SES families that may be generations in the making (Durham, 2006, p. 629). Many low SES families do not see a value in education or literacy development. These anti-school sentiments and cycles of deficit literacy skills may be stopped or slowed if low SES families could understand that as Ferguson (2011) found in his multi-generational study, there is a positive connection between salary levels and level of education received. Still, there are families where literacy is not promoted and it is because of these types of families that teachers must work even harder to foster engaging and positive literacy and academic experiences for students. In her study, Aikens (2008) describes literacy rich classrooms as places that “are rich in literacy materials, that have teachers with high expectations of students and with adequate
preparation to teach reading, that provide opportunities for dialogic reading or for children to be involved in the book reading experience, that provide support and opportunities for writing and that promote stimulating teacher-child conversations to enhance early language and literacy skills” (p. 236). Ultimately, if low SES parents cannot or will not make necessary changes to HLEs, then as Aikens describes, teachers must fulfill the role free of support from home.

Effective interventions require collaboration between school and home.

If parents are able to support schools, they must make every effort they can with the limited resources available to endorse literacy development. Through inclusion of children in daily tasks such as writing a grocery list, reading traffic signs, or asking open-ended questions, authentic teachable moments are created. Teachers cannot assume that all students have the same support or resources at home.

Equally important, teachers must make attempts to work with parents and caretakers especially of children from low SES communities. Raban and Nolan (2005) encourage collaboration between teachers and parents through the use of “relevant information about ways to enhance literacy experiences at home and this information needs to be culturally sensitive and easily accessible” (p. 296). Explicit literacy instruction will scaffold the language and literacy work done at school.

Conclusion

Literacy development is deeply rooted in language development and exposure. This exposure and development primarily occurs within the home. As a result, children enter school every year with varying skills based on the literacy experiences they observed and participated in. Holt (2005) reminds educators that “different kinds of social and material resources available to individuals within and across different social contexts may have significant impact upon their
literacy skills and the kids of literacy practices in which they participate” (pp. 2-3). Knowing that even within low SES backgrounds literacy diversity exists, three themes were presented in this review of the literature examined.

The first theme focused on characteristics of the HLE. The importance of the HLE was established and qualities of effective HLEs were discussed. The impact of low SES on a child’s HLE and literacy success and interests were examined. The second theme examined the impact of parental education levels and parental beliefs on children’s literacy development and the HLE where they were raised. This is an especially important area of consideration for teachers of students from low SES families. Children are products of their environments and this is especially true for literacy development and interests in reading. Children should not be penalized or looked at as deficient because of circumstances beyond their control. The final theme looked at possible interventions to catch up students who lack necessary language and literacy skills to be successful throughout formal schooling. Effective large scale reading programs and less-invasive interventions were presented. Ideal HLEs have many literacy related activities and opportunities for language and literacy development. However, children from low SES backgrounds typically are the products of parents who struggled themselves with literacy and language themselves.

Consequently, the HLEs produced in low SES families tend to be lacking in necessary resources to promote literacy growth such as parental time, texts, and value placed on education. By examining the obstacles low SES students may encounter (i.e. poor HLEs, school absences, economically depressed neighborhoods, skills deficits, homogeneous classes, etc.), teachers can more effectively design and implement valuable and relevant interventions. Interventions may be effective if they are intense and frequent.
Likewise, children must attend school regularly to benefit from such interventions. Although many economically depressed or rural communities may be lacking literacy-rich resources, teachers should still seek out and promote connections for students to engage in literacy related activities in their local communities. Schools should actively connect with parents and provide opportunities and resources for education regarding what an effective HLE looks like and suggestions for intergenerational literacy activities. Overall, the literature presented in this review supports the importance of producing engaging and stimulating HLEs. Literacy is a social practice and the environmental effects on children cannot be denied.

**Method**

**Context**

This study analyzes data collected from students attending a high school (grades 9-12) communication skills development program in a rural town in Western New York. There is no New York State report card specific to this program. However, students from 14 component districts attend the program. The tuition per student in the program is $34,946. The students who attend this program are all diagnosed with some type of language impairment ranging from mild to severe in the areas of speech, language, processing, or hearing. Every student receives a speech language therapy at least once a week. All of the students in the program are regents track students although they are able to remain in the program until the age of 21. Free and reduced lunches are received by the majority of the students at this high school. This special education program has 24 students in all with no single class containing more than 12 students. Each classroom has an aid and several students have 1:1 aids to assist with behavioral needs, severe processing delays, or sign language interpretation. Of the 24 students only two are not Caucasian (one student is African American, the other student is Puerto Rican). All of the
teachers within the program are also Caucasian and all teachers, except for the physical education instructor, are female. With the exception of lunch, the students in this program do not integrate with general education students as their academic and social needs are too severe. Two students do attend mainstream English and Technology classes however, the majority of the students take classes only within the program (including a small group physical education class).

**Participants**

**Teacher**

Debbie (a pseudonym) is a certified Special Education (grades k-12) teacher who has taught for over 20 years in both urban and rural schools. For the past 12 years Debbie has taught at her current school (the communication skills program previously described) which is where the data for this study will be collected. She is a vibrant, engaging teacher with a gregarious personality and a larger-than-life laugh. As the veteran teacher of the group, she is looked at by both colleagues and students as being the leader of the program. Debbie will retire at the end of this year but remains committed to helping her students achieve success on a daily basis. She is a child advocate and will fight passionately on behalf of her students if she perceives injustice is occurring. Debbie teaches English Language Arts for the 9-12th graders in the communications skills program. The desks in her classroom are arranged in a semi-circle to foster group discussion—a hallmark of her instructional style.

**Student(s)**

The give student participants (four females, one male) represented in this study all attend the communication skills development program. These students all come from families of low socioeconomic backgrounds and all receive both free or reduced lunches and breakfasts. These
four students are reading below grade level and all have individualized educational plans (IEPs). The names of the students presented in this study are pseudonyms.

Kim is a 17-year old senior in the communication skills program who is classified as learning disabled. Kim lives with her mother and boyfriend. English is Kim’s second language although she does not receive ESL services anymore at school. Kim is popular and friendly with peers. She enjoys music, movies, and talking with friends. She hopes to become a nail technician after high school. Kim is reading significantly below grade level at approximately a 3.5 grade equivalency. Kim desires to do well in school and completes homework regularly. She receives speech and counseling services a total of four times every week.

Anna is a 19-year-old senior in the communication skills program who is classified with traumatic brain injury. Anna lives with her mother and younger sister. Anna enjoys animals and hopes to work with animals after graduation. Anna is currently reading at approximately a 3.5 grade level. She struggles with critical thinking skills and benefits from extra time to verbally process information. Anna receives counseling and speech services six times a week.

Adam is a 14-year-old ninth grader in the communication skills program. He is classified as other health impairment with a diagnosis of oppositional defiance disorder. Adam lives with his mother, step-father, and siblings. On the weekends he stays with his father. He enjoys hunting, fishing, and spending time outdoors. Adam hopes to become either a veterinarian or a firefighter after high school. In addition to weak language skills, Adam has severe behavioral issues that can cause him to miss instructional time as he needs to leave the classroom. Currently, Adam is reading at approximately a 5.7 grade level. He receives speech and counseling services four times a week.
Mary is a 17-year-old junior in the communication skills program who is classified with multiple disabilities and Autism. Mary is a caring student who enjoys making crafts for people and is interested in facts about the United States. She lives with her grandmother and siblings. Mary is currently reading at approximately a 6th grade level. She receives speech and counseling services five times a week.

Sarah is a 16-year-old junior in the communication skills program who is classified with multiple disabilities. Sarah is a conscientious student who strives to complete all assignments with care. She hopes to become a hair stylist after completing high school. Sarah is the only student of the 5 examined in this group whose parents are married and living in the same home. She receives speech and counseling services five times every week. Parents and guardians of the students were given a questionnaire to complete regarding their HLEs. The occupations of the employed guardians include primarily factory and service industry jobs.

**Researcher Stance**

I am a graduate student at St. John Fisher College in Rochester, New York. I am working towards achieving a Master’s degree in literacy education for grades 5-12. I received my Bachelor’s degree in History with a minor in education from Nazareth College of Rochester. I am dual-certified in Social Studies and Special Education grades 7-12. I have taught full-time for three and a half years and I currently teach World History I, World History II, US History, Algebra, basic math, and study skills at a BOCES program in Western, New York. I acted as a passive observer during the first portion of this study. According to Mills (2011) “when teachers take on the role of passive observer, they no longer assume the responsibilities of the teacher—they should focus only on their data collection” (p. 75). This label is appropriate because although I teach the four students previously described, for purposes of this study I solely
observed them and their literacy performance in another teacher’s (Debbie) ELA class (Mills, 2011). A passive observer role allowed me to assess my students’ literacy performances as an objective observer therefore I was able to easily examine the impact of their HLEs without any influences of my instruction on their performances.

Method

The purpose of this research study is to assess the impact of children’s HLEs on their literacy performances in school. Using a variety of data collection methods I examined the reading levels, literacy performance, and HLEs of the students presented in this study. During my observations of Debbie’s ELA classes I took copious notes regarding the students’ literacy performance (see appendix A). I observed two classes (9-10th graders are in one class, 11-12th graders are in another class) which are 40 minutes in length. I sat in a corner of the classroom and recorded information about students’ literacy performance in class. Specifically I noted students’ answers to questions when prompted, class discussions, questions posed by students, and test scores. The accuracy and quality of student’s work and answers was then recorded. I also documented Debbie’s lesson including the types of questions and discussions she facilitated.

I also took field notes regarding the richness of literacy resources in the environment of the town where the communication skills program is located. This required me to drive around the town noting specific literacy resources on a community literacy index (see appendix B) such as bookstores (hours of operation), public library (hours of operation), opportunities for read alouds and community theater (times and locations). I explored literacy resources of the town both in person as I drove around the community (roughly 20-30 minutes will be necessary) and online.
When gathering data during the enquiring portion of the study, I used a parental questionnaire (see appendix C) to assess the home literacy environments of my students. The questionnaires were sent home to have parents complete independently and they were then returned to me. Parents were encouraged to answer truthfully and no consequences would result from any responses given (Mills, 2011). The questionnaire prompted parents to answer questions using a Likert scale. As Mills indicates, this data collection instrument provided me with descriptive and quantifiable data.

The examination collection of data consisted of literacy test scores and results of formal assessments. Twice during this school year (in October and January) the four students independently took a computer literacy test, Star Assessment by Renaissance Learning. Scores from these two tests and English Regents examinations (where applicable) were taken into account as did other literacy assessments administered during the course of this research, primarily the Qualitative Reading Inventory assessments (see appendix D).

**Quality and Credibility of Research**

According to Mills (2011), when conducting action research, quality can be ensured through “attention to three important concepts of validity, reliability, and generalizability” (p. 101). Furthermore, when examining qualitative data, Mills refers to the work of Guba (1981) who describes the necessary characteristics to ensure trustworthiness of research. These characteristics include credibility, transferability, dependability, and confirmability. My research revealed that I have ensured the necessary characteristics in order to produce the most accurate and consistent study possible.

I achieved credibility in my research through triangulation of data sources. By having multiple sources of information (i.e. teacher observation, parent questionnaires, students’ scores,
environmental resources, etc.), I have shown consideration to, what Mills (2011) describes “the complexities that present themselves in a study” (p. 104). When examining a complex topic such as the effect of home literacy environments on low SES children, many variables could impact the data. Triangulation encourages reliability of multiple data sources “it is generally accepted in action research circles that researchers should not rely on any single source of data” (Mills, p. 92). When working with many people and data collection methods it is important to cross reference information.

The second characteristic of trustworthiness, transferability, is described by Guba (1981). I confirmed transferability in my research by thoroughly describing the context and participants I studied. One of Guba’s possible methods for achieving transferability states that the researcher should “develop detailed descriptions of the context to make judgments about fittingness with other contexts possible” (Mills, 2011, p. 104). The communication skills program the students presented in this study attend is very unique and individualized to meet their needs. Therefore, no sweeping generalizations or assumptions should be drawn from anyone reading this study regarding the impact of HLEs on all high school students from low SES families. The data collected is presented for the reader to interpret and apply to other contexts if and when possible.

Guba’s (1981) third characteristic to ensure validity is dependability. Similar to triangulation, overlapping methods (a recommendation of Guba) requires the researcher to use multiple methods “in such a way that the weakness of one is compensated by the strength of another” (Mills, 2011, p. 104). I achieved this through the multiple data collection techniques described earlier (parent questionnaires, classroom observation, standardized test scores, field notes, etc.). For example, the responses gathered in the questionnaires may be weak (inaccurate responses recorded due to perceived social expectations); however there is supplemental
information such as personal field notes of the classroom and community, as well as test scores to strengthen the accuracy of data.

Confirmability is the final characteristic Guba (1981) outlines. I ensured confirmability by again practicing triangulation “a variety of data sources and different methods are compared with one another to cross-check data” (Mills, 2011, p. 105). This step is especially important when comparing parental questionnaires regarding the HLEs they produce and the literacy scores or their children. Parental questionnaires may describe rich home literacy environments which will either be confirmed or weakened by the inclusion of the students’ test scores and overall literacy performance. By addressing the four criteria of validity I am confident that the data I presented in this study is accurate and truly represents the participants’ literacy performances.

Informed Consent and Protecting the Rights of the Participants

I explained to all the participants of the research study that they need only participate if they desire. I was clear with my expectations and requirements for the study and what will happen to the data collected. Prior to collecting any data I asked for permission of the parents of the five students I studied. When parents agreed, I received written assent from the students and the teacher I observed. I also acquired informed consent from the parents and guardians who completed the HLE questionnaire. The research I conducted did not put my students at risk for any harm. Confidentiality and anonymity were maintained throughout the course of the study and beyond through the use of pseudonyms and removal of any names or identifying information from materials collected.

Data Collection

I collected baseline reading levels for the students in the study from two literacy tests administered in October of 2012 and January of 2013. I then administered a Qualitative Reading
Inventory to each student. I selected the reading level for the QRI based on the students’ scores from the previous two literacy tests. Prior to reading the students were asked a concept questions to assess their background knowledge. While the student read the text I noted any miscues which I then calculated to assess their reading levels based on their accuracy. After each student finished reading I asked them a series of comprehension questions. I scored their answers to both the implicit and explicit questions, noting any increases gained by looking back in the text. Using this information I was able to assess their reading levels based on comprehension. I then noted any growth in reading levels since October.

The first method of data collection I completed was the observation of Debbie’s ELA classes. During these classes I sat in the corner of the room and record the class. In addition to recording, I wrote field notes in order to focus on student’s literacy performance. In particular, I focused on the quality and quantity of the four students’ responses to comprehension questions, decoding abilities, and participation in class discussions. I noted the level of participation and engagement of the four students.

I also observed and recorded field notes regarding the literacy resources of the town where the communication skills program is located. Using a literacy resource index, I assessed the richness of the community by specifically looking at the presence (or lack) of book stores, public libraries, community theater or read aloud locations, and poetry readings. These are characteristics of community literacy environments and provided me with important information regarding the presence of such resources in this rural community. Literacy is socially constructed therefore the environment of this economically disadvantaged community may contain important information regarding students’ literacy experiences.
I also used parental questionnaires to assess the impact of HLEs on students’ literacy performance. This Likert scale questionnaire was designed to address key components of an effective HLE such as number of books in home, parental education levels, frequency of joint book-reading activities or literacy activities, enjoyment of reading, frequency of library visits, and types of texts present. Using the parent questionnaire was an important method in order to access the makeup of the child’s HLE. Without physically being present in their homes, I was able to gain a sense of the literacy environments for each of the students in the study. I added up the scores of the questionnaires and this information provided me with valuable quantitative information that is also descriptive of the HLEs.

The final data I collected were literacy test scores to measure reading levels. Prior to this research, the five students were tested using the Star Literacy Assessment, a reading test on the computer in October (2012) and January (2013). These test scores provided me with a baseline of where the students were currently performing. I then administered the Qualitative Reading Inventory assessment for each student in order to further assess any growth in literacy abilities (decoding, comprehension, critical thinking skills, etc.)

Data Analysis

The parents and guardians of the students were given a questionnaire to complete. After participants returned their questionnaires I analyzed the data. I read the parent responses to the 15-question Likert scale questionnaire. I tallied responses by labeling each question with the initials of the student for easier reference during analysis. Next, I calculated the percentages of answers for each question by averaging the point values of the responses.

Data was also collected through the observation of two 40 minute English Language Arts classes of the five participants in this study. I recorded the classes and transcribed the
discussions of the students and Debbie, the teacher. I examined the quantity and quality of the students’ responses to Debbie’s questions by counting the number of responses. I also counted the length of the students’ responses. The information I gathered during the students’ ELA classes was used to supplement the profiles of the student participants in this study.

Another source of data gathered was field notes of the community where the Communication Skills Program is located. Using a Community Literacy Index, I recorded the presence of literacy resources present in the area. The data collected using the Community Literacy Index was also used as supplemental, descriptive data to provide a more detailed description of each student.

The final data for this study was accumulated through the administration of Qualitative Reading Inventory (QRI) literacy tests. The QRI is an informal, diagnostic assessment that tests a child’s fluency and comprehension. The QRI requires students to provide specific answers and demonstrate specific skills—in doing so, the student earns corresponding points. I met with each student individually and gave them the QRI test using a previously determined baseline reading level. Prior to reading, I asked each student some concept questions to assess background knowledge. This data was analyzed according to the QRI guidelines. A thorough answer would earn three points, a basic understanding earns two points, a general association to the topic would earn one point, and an unconnected response or no response would earn zero points. While each student read aloud, I marked any miscues they made. I then tallied the miscues, counted them, and designated their word identification and fluency level (independent, instructional, or frustrational).

After reading, each student was asked eight comprehension questions. I transcribed and later analyzed their responses to the four implicit and four explicit comprehension questions. I
followed the QRI’s guidelines for scoring answers. In order to have an explicit answer be considered correct, the QRI states that the answer must come directly from the text. Implicit questions were determined to be accurate if they related to a clue in the text. I calculated the number of correct answers and then correlated their scores to the corresponding reading level. Eight correct answers translated to an independent reading level, six to seven answers equaled an instructional level, and zero to five answers translated to a frustrational level. Students were then given the opportunity to look back through the text for answers. If they were able to find the answer, they would then earn a point for that question, and their reading levels would be adjusted accordingly.

**Findings and Discussion**

For this study I collected quantitative data about the literacy performance and home literacy environments for five students. In this first section I will present the parental questionnaire designed to assess the literacy environments and activities of the families of the students in this study. I scored the Likert scale questionnaire and was able to track similarities and differences among the students’ HLEs. In the second section of the data findings I will profile three of the participants using supporting details from field notes gathered during their English Language Arts classes. The observations of students were recorded and transcribed in order to examine their literacy performance in the classroom environment. Furthermore, the profiles will include information regarding the students’ performances and literacy growth on the Qualitative Reading Inventory and Literacy Star Assessments. After I describe the three students I will then compare the participants in a cross study noting any similarities or differences that may exist among the students. Throughout the findings and discussion I will connect the data to the literature outlined in the literature review section of this study.
Parental Questionnaire

I collected quantitative data about participants’ Home Literacy Environments through the completion of a parental questionnaire. Of the five participants, one questionnaire was not returned. The parental questionnaire was 15 questions in length and answers were recorded by selecting the most appropriate response from Likert scale answer options. The parents or guardians who completed the questionnaire are all from middle to low income backgrounds. The wealthiest parent indicated earning an annual income of $20,000-30,000 while 50% indicated they made under $20,000 (one parent did not respond to this question). The majority of the questions were designed to measure typical literacy activities of these families.

Parental interest in reading is an important predictor of children’s literacy success and motivation according to Loera (2011). Therefore I included some questions which were specifically intended to assess the level of parental education, attitudes towards education, educational performance, and interest in reading. Fifty percent of the guardians had received Associates Degrees and no parent obtained a Bachelor’s Degree (Questionnaire, 2013). When asked how they would rate their academic experience in high school, fifty percent indicated they liked school, twenty five percent felt they performed below average, and twenty five percent indicated they performed at average (Questionnaire, 2013).

The participants also responded to a question regarding how often they read for pleasure during a week. Parental reading habits are proven to be powerful indicators of reading routines for children. Below is Table 1 to illustrate their recorded answers.

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parental Response to Personal Interest in Reading</strong></td>
</tr>
</tbody>
</table>
Question 8: On average, how often do you read for pleasure during the week?

<table>
<thead>
<tr>
<th></th>
<th>10 minutes or less</th>
<th>10-30 minutes</th>
<th>30-60 minutes</th>
<th>1-2 hours</th>
<th>Over 2 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>0%</td>
<td>50%</td>
<td>25%</td>
<td>25%</td>
<td>0%</td>
</tr>
</tbody>
</table>

As shown in Table 1, fifty percent of parents indicated they read for pleasure between 10-30 minutes every week. Twenty five percent indicated they read for pleasure between 30-60 minutes while the other twenty five percent reported reading for 1-2 hours every week (Questionnaire, 2013). In general, it could be interpreted through examining the data that low SES parents do not read for pleasure for extended amounts of time. The lack of reading for pleasure could be due to a variety of reasons including multiple jobs or low parental education levels. If parents do not see reading as a source of pleasure or entertainment, they may be less likely to promote individual reading practices for their child. Another question that was designed to determine parental literacy activities (i.e. leisure or work related reading) and interests is illustrated in Table 2.

Table 2

**Frequency Child Observes Parent Reading**

<table>
<thead>
<tr>
<th>Question 3: How often does your child see you reading a book/newspaper/magazine or work related materials?</th>
<th>Never</th>
<th>Rarely</th>
<th>Once in a while</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Percentage</td>
<td>25%</td>
<td>0%</td>
<td>50%</td>
<td>25%</td>
<td>0%</td>
</tr>
</tbody>
</table>

According to Table 2, twenty five percent of participants reported their child never sees them reading, while fifty percent indicated once in a while, and the final twenty five percent
stated their child sometimes sees them reading (Questionnaire, 2013). I interpreted these findings to mean that the majority of the students in this study are not seeing their guardians read on a regular basis. It is important for children to see a guardian reading as this act is one of the characteristics of an effective HLE. The act of observing a guardian reading is positively linked to a child’s own reading motivation. I found this to be interesting because in Table 1, all parents indicated they read at least 10 minutes every week (Questionnaire, 2013). However in Table 2, the responses suggest that parental reading may occur in private (possibly when children are gone or asleep) (Questionnaire, 2013). Reading in isolation does not help to promote a family culture of reading in HLEs which Kirby (2008) describes as being a powerful predictor of students’ literacy interests and motivation levels.

The majority of the questionnaire focused on the characteristics of the participants’ HLEs such as number of books present, frequency of joint literacy activities, and at what age parents began reading to their children. Surprisingly, one hundred percent of participants reported that they and their children were remembers of the local library in their community. In theory these students have access to literacy materials even if their homes are lacking such resources. Aulls (2003) noted a disparity of library membership among families depending on their income levels. What seemed to be more descriptive for the purposes of this study was the question regarding the frequency their child visits the local library which is displayed in Table 3.

Table 3

<table>
<thead>
<tr>
<th>Question 5: How often does your child visit the local library?</th>
<th>Never 1</th>
<th>1-10 times/year 2</th>
<th>1-10 times/month 3</th>
<th>1 time/week 4</th>
<th>Multiple times/week 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
While all children in this study are members of their local library, according to Table 3, only twenty-five percent go to the library multiple times every week, twenty-five percent go 1-10 times a month, and fifty percent go only 1-10 times every year. The student participants in this study are all behind grade level peers for reading. Still, there is little motivation or activity beyond the school environment to develop the lacking literacy skills. The HLE questionnaire will continue to be referenced throughout the future student profiles to fully illustrate each student’s literacy performance. When interpreting the data from the questionnaires I recalled Umek’s (2005) warning regarding potential issues of validity of parental questionnaires. Often parents will slightly alter their answers towards “socially desired responses,” and I feel this may partially be the case due to the fact that not only am I an action researcher but, also, I teach these children in school (p. 272). Triangulation of multiple data sources will aid in ensuring reliability and consistency among the parent answers, student performances on literacy assessments, and my observation field notes.

**Student Profiles**

In this portion of the data findings I will profile three of the student participants of this study. For each student, I will briefly describe any literacy growth from formal reading assessments, support findings with information gathered during observations of the student in ELA class, and when appropriate, include relevant information from parental questionnaires of the literacy environment in her home.

**Kim**

Kim is a 17-year old senior in the communication skills program who is classified as learning disabled. Kim lives with her mother and boyfriend. English is Kim’s second language.
although she does not receive ESL services anymore at school. In October, Kim’s reading level was assessed using a computer literacy program, the Star Reading Test by Renaissance Learning. Her level was approximately a 2.3 grade equivalency. In January, Kim took the same type of test and received a score that translated to a 2.5 grade equivalency. Her performance demonstrated a gain of .2 grade equivalency in those three months. For the purpose of this study, I administered a Level 4 Qualitative Reading Inventory test to Kim. Her accuracy placed her within the independent level as many of her miscues were omissions of a plural “s” at the end of words (possibly due to the language barrier). However, her comprehension placed her within the frustrational range for this piece. Kim read an expository text about beavers and it was evident from the pre-reading concept questions that she had little background knowledge about the topic. Kim scored 0/4 for these concept questions. The questions were simple ones, designed to assess the student’s familiarity with beavers (i.e. What is a beaver? What are dams built by beavers?) Her performance supports Durham’s (2006) emphasis on the importance of building background knowledge for students of low SES homes and communities. Perhaps Kim’s overall comprehension would have increased had she been more familiar with the topic.

Furthermore, when taking into account the ESL component, it is also possible that she would have done better had the text been written in Spanish. Kim’s recollection of explicit comprehension increased from twenty five to one hundred percent when given the opportunity to look back in the text for information increasing her reading level from frustrational to instructional. She did not independently pass the Level 4 QRI therefore Kim’s most recent reading assessment would place her at approximately a third grade level. Kim’s reading progress is illustrated in the table below.

Table 4
**Kim’s Reading Growth**

<table>
<thead>
<tr>
<th>Date of Literacy Assessment</th>
<th>Grade Level Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2012</td>
<td>2.3</td>
</tr>
<tr>
<td>January 2013</td>
<td>2.5</td>
</tr>
<tr>
<td>March 2013</td>
<td>3.0</td>
</tr>
</tbody>
</table>

According to Table 4, since October, Kim’s reading level has increased by .5 grade levels. In October 2012, Kim was reading at approximately a 2.3 grade level. When tested again in January 2013, her score had increased .2 to a 2.5 grade level equivalency. When most recently tested using the QRI, demonstrated further growth and achieved an early 3rd grade reading level. While it may be minimal, there is growth. It is possible such growth could be due to a desire to graduate early which may have motivated Kim to perform better on the test in January.

Kim missed two months of school in the late fall because she had a baby. I previously questioned whether her scores would have improved had the QRI text been written in Spanish. Similarly, I wonder if Kim had been present in school for the months she was out due to her maternity leave, would her literacy gains have been greater? Aikens (2008) notes for students from low income families, being present in school can help to combat the deficits of a weak HLE. Especially for Kim, a former ESL student, daily immersion in English at school will only help to further develop her language and literacy skills.

When observed in Debbie’s ELA class, it is evident that Kim takes on the role of a more passive learner. Although she was engaged, (she followed along with the group read aloud, and completed her handout) Kim participated very little during the ELA class. She rarely spoke up,
initiated discussion, or gave thorough verbal answers. The two times she participated she were in response to Debbie’s initiate-response-evaluate type questions, simply stating, “me too” for one question and “I got ‘C’” in response to another (Field Notes, 2013). The behavior observed in the classroom is consistent with other low SES students described in Kelly’s research (2008). Passive learners such as Kim usually come from homes with HLEs that are not stimulating and where interactions during read alouds were not encouraged.

Responses by Kim’s mother regarding joint literacy activities support the theory that Kim was raised in a home with a weak literacy environment. When asked “How much do you or another adult at home read books with your child?” Kim’s mom indicated this never happens (Questionnaire, 2013). Her mother also designated that she and Kim never “Read other pieces of text together (for example: magazines, recipes, grocery lists, etc.)” (Questionnaire, 2013). Lastly, Kim’s mother stated that she never observes Kim reading independently (Questionnaire, 2013). It is evident through the examination of multiple data sources that Kim is a struggling reader from a home with a weak literacy environment. Any free time she may have had to read independently is most likely now consumed by her young baby. Kim has been encouraged by teachers to read to her own daughter. Furthermore, Kim moved to this country from Puerto Rico while in elementary school. If her HLE and school environment had more texts in her native language it is possible she may be a more motivated reader. Although she has a desire to do well in school ultimately there is a lack of intrinsic motivation as well as multiple obstacles preventing her from achieving large-scale growth. Hopefully Kim will produce a more stimulating literacy environment for her five-month-old daughter in order to break the cycle of low SES parents producing children who are below grade level. Sadly, without early and
frequent intervention Kim may produce an HLE similar to the one she grew up in—a common occurrence for low SES parents according to Durham (2006).

Sarah

Sarah is a 16-year-old junior in the communication skills program who is classified with multiple disabilities. Sarah lives with her mother, father, and sibling. In October 2012, Sarah took the Star Reading Test by Renaissance Learning and scored approximately a 3.3 grade level equivalency. In January, when Sarah took the same test she received a score that translated to a 5.1 grade equivalency. I chose a fourth grade test from the Qualitative Reading Inventory for Sarah to complete in March 2013. The table below illustrates her assessment results from these three tests.

Table 5

Sarah’s Reading Growth

<table>
<thead>
<tr>
<th>Date of Literacy Assessment</th>
<th>Grade Level Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2012</td>
<td>3.3</td>
</tr>
<tr>
<td>January 2013</td>
<td>5.1</td>
</tr>
<tr>
<td>March 2013</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Table 5 displays Sarah’s scores for the Star Literacy Assessments and Qualitative Reading Inventory. In October 2012 Sarah’s score translated to approximately a 3.3 grade level equivalency; her January 2013 reflected significant growth (1.8) to approximately a 5.1 grade level. In March 2013, Sarah took a Level 4 QRI reading test. Her accuracy places her within an instructional range as she had many minor miscues when reading (.05% were errors that impacted meaning). According to her comprehension skills, Sarah scored within the
instructional range. After being given time to look back for information, Sarah’s score implicit comprehension score increased from fifty percent to one hundred percent increasing her comprehension level to independent. Sarah read a passage about Johnny Appleseed. Prior to reading she answered some concept questions and scored an eighty three percent demonstrating her familiarity with the topic. I attributed the perceived drop in Sarah’s reading levels to the fact that the QRI is more challenging than the Star Reading Assessment. Furthermore, the Star Assessment is an online reading test that offers students multiple choice answers. One possible factor for such a dramatic increase in her scores from October to January may be that Sarah guessed correctly on some answers while the QRI assessment is not a multiple choice test.

Sarah’s literacy growth has also been noted in the classroom more this year as Sarah can be found participating more frequently.

During an observation of Sarah during a 40 minute ELA class, she spoke 10 times. The majority of her participation was in the form of answers to questions posed by Debbie, her teacher. Many were simple answers such as “He’s gonna’ get trained” in response to Debbie’s question “So what’s going to happen to Black Beauty” (Field Notes, 2013). Debbie’s class was run primarily using the rote, initiation-response-evaluation style of questioning (IRE) which requires students to essentially regurgitate lower level answers from texts (Wells & Arauz, 2006, p. 380). Questions of this nature leave few opportunities to challenge students to think or respond on a higher level.

Sarah did demonstrate some ability to go beyond the text during an interaction between her and the teacher. When asked by Debbie “What would be another good title for this part of the story?” Sarah responded “A new beginning” (Field Notes, 2013). Her teacher then challenged her answer asking, “Why would you call it that?” Sarah was able to support her
answer by stating “Because he’s going somewhere and he’s going to be in a different place” (Field Notes, 2013). The response of “a new beginning” was an answer option given by Debbie for this multiple choice question. It would be interesting to see what Sarah could have produced if asked the same question without answer prompts. Still, the fact that she was able to support her answer demonstrates some higher level thinking skills.

Although Sarah may be making progress, she is still significantly behind her grade level peers. The questionnaire corroborates that she does not engage regularly in literacy activities with her parents (they indicated ‘rarely’) (Questionnaire, 2013). Sarah’s parents noted that she is “sometimes” observed reading independently (Questionnaire, 2013). Interestingly, while her parents’ highest education level was selected to be General Education Diplomas, her parents recorded that they have over 75 books in their home—the highest number of any of the participants (Questionnaire, 2013). However, as Kirby (2008) expresses, having books in the home does not automatically translate to a stimulating HLE or proficient literacy skills. It is beneficial for children to be read to by parents and to interact with parents in joint literacy activities. Based on the data, Sarah’s HLE has text resources yet is lacking in effective usage of such materials.

Anna

Anna is a 19-year-old senior in the communication skills program who is classified with traumatic brain injury. Anna lives with her mother and younger sister. Her stepfather is incarcerated. In October 2012, Anna took the Star Reading Test by Renaissance Learning and scored approximately a 2.7 grade level equivalency. Anna’s score decreased by .4 bringing her grade equivalency to a 2.3 grade level in January when she took the same type literacy test. I
chose a Level 4 test from the Qualitative Reading Inventory for Anna in March 2013. The results from these three tests are depicted in the table below.

Table 6  
*Anna’s Reading Growth*

<table>
<thead>
<tr>
<th>Date of Literacy Assessment</th>
<th>Grade Level Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2012</td>
<td>2.7</td>
</tr>
<tr>
<td>January 2013</td>
<td>2.3</td>
</tr>
<tr>
<td>March 2013</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Table 6 depicts the changes in Anna’s literacy scores. In October 2012, Anna scored a 2.7 grade equivalency on the Start Literacy Assessment. Three months later in January 2013, her score dropped by .4 bringing her to a 2.3 grade equivalency. There are many factors that may have influenced Anna’s changing scores. Her traumatic brain injury most likely plays the largest role in preventing long-term memory development. The regression may also be due to severe headaches on testing days resulting from the TBI. When given a Level 4 QRI passage in March 2013, Anna failed the test placing her within the frustrational range. Therefore I interpreted these results as her reading currently at an early 3rd, late 2nd grade level. Anna read a passage about Amelia Earhart. Prior to reading I asked her some basic concept questions to measure her background knowledge on the topic. She scored a twelve percent demonstrating a very limited understanding of Earhart’s history.

Anna’s below grade level literacy performances on reading assessments are consistent with her participation in ELA class. During the ELA class, Anna never voluntarily answered
questions or posed topics for discussion. When her teacher asked a multiple choice question, “This story is mostly about…” Anna was able to correctly respond “A young horse growing up” (Field Notes, 2013). In this isolated example, she was able to recall basic explicit answers from the text and choose from the potential answers given by the teacher. Anna will not advocate for herself when she is confused. The unwillingness to participate is a common, reoccurring characteristic of low SES students as described by Kelly (2008). Using Kelly’s labels, Anna would fit in his category of passive learners. These are low SES students who do not consistently engage with teacher or peers regarding content. They rarely offer discussion questions or topics and will seldom answer questions voluntarily.

Anna’s mother reported she sometimes observes Anna reading books (Questionnaire, 2013). However she indicated they never go to the bookstore, reader’s theater, plays, or poetry readings together. Anna’s mother did indicate that she began reading to her child when she was pregnant with Anna. Reading to children even as young as infants is a powerful practice and as Mol (2011) notes, establishing a reading routine early is important for children’s future literacy growth. Had Anna not experienced the trauma to her brain it is possible she would be making greater literacy gains today. Still, her mother could increase the frequency of joint-book reading as her disability caused significant regression in Anna’s skills. Similar to many students who are significantly behind grade level, Anna needs frequent and intensive interventions to help her to develop her literacy skills.

Cross Case Analysis

The three profiles previously described illustrate the diversity of the low SES, special education population who attends the communication skills program in Jefferson County. There
are multiple obstacles that prevent low SES students from achieving literacy success including poor attendance, uninteresting HLEs, anti-school attitudes, and lack of resources. There were many differences and similarities among the students presented in the previous section. The student profiles will now be crossed analyzed in order to compare and contrast their backgrounds, reading levels, performances on the QRI, and class observations.

**Backgrounds**

The student participants in this study are all special education students with varying classifications: Kim is an ELL student who is classified as Learning Disabled, Sarah is classified as multiple disabilities, and Anna is classified as having a Traumatic Brain Injury. Both Kim and Anna come from homes with single mothers while Sarah lives with both her mother and father. The HLEs of the students differ in their degrees of literacy activities and resources. Kim’s mother reported that she and Kim never read together (Questionnaire, 2013). Sarah’s parents expressed that they sometimes observe Sarah reading independently (Questionnaire, 2013). Similarly, Anna’s mother stated that Anna can sometimes be observed reading (Questionnaire, 2013). Weigel (2006) describes a significant difference between low SES HLEs and wealthier ones. Often, higher SES parents and children view reading as a source of entertainment while lower SES families tend to view reading as purposeful. Lower SES families may not have the luxury of time to read for pleasure as parents (and children) may be working multiple jobs or babysitting peers. These students seem to be lacking intrinsic motivating factors for frequent reading.

While the reasons for their delays are varied, all students would benefit from relevant reading materials and explicit instruction for parents to promote literacy activities at home. The
three students come from HLEs with moderate to little intergenerational joint-literacy activities. The participants’ weak HLEs and severe learning disabilities are significant obstacles that likely contributed to the significant delays in their reading levels.

**Reading Levels**

Kim’s reading level has improved this year from a 2.3 grade level in October, 2.5 in January, and approximately a third grade level in March. Although Sarah and Anna also demonstrate some growth, the levels were inconsistent. Sarah’s baseline reading level in October was measured at approximately a 3.3 grade level. In January Sarah’s levels increased dramatically to a fifth grade level. When tested again in March, her reading level was calculated to be approximately a fourth grade level. In October, Anna’s score was approximately a 2.7 grade level. This score dropped to 2.3 in January. In March, Anna’s score increased to roughly a third grade level. The three students all demonstrated growth in their reading levels. Still, each participant remains significantly below their grade levels. It would be interesting to see if further growth could be achieved through regular literacy intervention as this idea is supported by the research presented in this study.

**Qualitative Reading Inventories**

When given the QRI, Kim failed the fourth grade test placing her at a third grade level. Sarah’s score was equivalent to approximately a fourth grade level. Anna earned about a third grade level on her assessment. One commonality among the three profiles is the importance of background knowledge. Sixty seven percent of the participants had some background knowledge of the topic they read during their QRI assessment. Sarah has the highest reading level and scored the best on the pre-reading concept questions with eighty-three percent
accuracy. Anna’s background knowledge was calculated at twelve percent while Kim
demonstrated no understanding of the content she was going to read. Perhaps their overall scores
could have increased with pre-teaching of key ideas and vocabulary that they would encounter in
the readings.

Another similarity was noted during the comprehension questions of the QRIs. Students
were given an opportunity to look back and correct or expand on previously given answers.
Those that chose to look back saw their scores increase. Looking back is a strategy that should
be explicitly taught to students. If students were never taught this skill they may not know that
some answers can be found in the text. Furthermore, looking back requires motivation to read
and perform well—an intrinsic characteristic some students may lack.

Classroom Observations

During the classroom observation, Kim was recorded as only speaking aloud twice. Both
of her answers were simple and Kim never initiated any class discussion. In contrast, Sarah
participated ten times. Like Kim, most of Sarah’s answers were simple. There was one time
when Sarah did demonstrate some higher level, critical thinking. Anna did not offer any
voluntary answers or participation. The students were primarily passive learners. They seemed
to wait for others to respond first or for their teacher to call on someone rather than volunteering
possible answers. Perhaps their lack of participation was done to save face if they were unsure if
an answer was correct. Another possibility could be the students did not understand that
question. This limited participation is consistent with many low SES students who are less
actively engaged in classes. Lower achieving students do not regularly advocate for themselves,
causing them to miss information or possibly appear disinterested (Kelly, 2008).
Implications and Conclusions

The sociocultural theory was the guiding framework for this study. Literacy is socially and culturally constructed. Therefore, a child’s home literacy environment plays a profound role in his or her language and literacy development. This study attempted to answer the question, how does a low socioeconomic student’s home literacy environment affect his or her literacy experiences and interests in reading? Based on the data collected during the course of this study, it is evident that the home literacy environments of low socioeconomic students can negatively impact their literacy success, minimize their literacy experiences, and produce average to low levels of motivation for reading. Without a strong HLE, children may enter school behind their grade level peers and struggle to catch up the age appropriate reading level. The participants of this study were primarily from low income families with the wealthiest indicating an income between $20,000-30,000 (although this guardian was a single mother of two children) (Questionnaire, 2013). Some commonalities between the participants included lack of participation in English classes, low number of visits to libraries or bookstores, below-grade reading levels, few joint-reading activities at home, and limited parental education levels.

Teachers must not assume that all students bring with them to school similar levels of background knowledge about literacy, texts, or reading behaviors. Lack of background knowledge among low socioeconomic students is common as they may not have as many books, access to books, or joint-literacy experiences as wealthier peers. Teachers must then support students by providing them with valuable background knowledge at the beginning of every unit. Durham’s (2006) work supports the importance of intervening for low SES students who lack the school readiness necessary to be successful in formal education. Pre-teaching of key ideas or
vocabulary terms are simple yet powerful strategies teachers can do to ensure students of low income families are not further disadvantaged.

While all the participants in this study were members of their local library, the majority did not visit the library or bookstores frequently. For some living in rural areas, access to such literacy resources may be limited. Still, regardless of access, teachers should promote a rich classroom library with culturally diverse books ranging in a variety of topics. Students are more likely to read books that they find interesting and relevant to their lives.

Another implication which emerged through this study and the research presented is the need for explicit literacy instruction for parents at a young age. Many less educated parents are unsure of when and how to start joint literacy activities. In the town where the participants’ school is located, the public library has many events for families. However, some of these events required online registration which would exclude some families from participating (Community Literacy Index, 2013). Although all joint-literacy activities are beneficial, some have a more influential role in children’s language and literacy development. Kirby (2008) explains “simply reading to children is not enough. It is important to engage them, direct their attention to key features of text and introduce them to the mechanics of reading” (p. 15). Explicitly teaching parents and guardians how to engage with their children is a proactive approach to developing literacy rather than trying to intervene after students have fallen behind.

If I were to do this action research again, I would like to have observed the students more times. I feel it would have been beneficial to observe the students in a variety of settings as well. In doing so, I would be able to see the students interacting with different teachers who may have more discussion-based instructional styles. Furthermore, I would be able to observe the
participants reading a variety of texts such as expository books in science or social studies classes.

Another possible limitation of this study was the reliability of the Star Literacy Assessment. The Star Assessment is a multiple choice test which could account for part of Sarah’s drastic reading level increase (from 3.3 in October to 5.1 in January). Tests with multiple answers make it difficult for the assessor to interpret a student’s skills as guessing could still result in a correct answer. In contrast, the QRI was a reading test which required the students to formulate their own answers without any options. This may be one of the reasons as to why all participants seemed to struggle with some aspect of the QRI assessment.

Given that the participants of this study were all special education students, I would also be interested for possible future research in examining the HLEs of low SES students who are non-disabled. I think it would be fascinating to observe whether the literacy delays were due primarily to the HLEs, disabilities, or, as I suspect, both. The participants in this study are all high school students. Furthermore, I would also like to compare the literacy performances of low SES and higher SES students. This study has caused me to wonder what literacy interventions exist for this age group and students after completion of high school?

This study explored the impact of home literacy environments on students from low socioeconomic backgrounds students’ literacy scores and interests in reading. For many low SES students, the HLEs environments in which they were raised lack the resources and activities necessary to build a strong literacy and language foundation. Without a solid foundation, future growth is delayed which can lead towards poor motivation in reading and weak performance in school. With intervention, low SES students can make significant gains and become more
successful as readers. Ideally, schools and parents should work together to improve the quality of low SES children’s HLEs as this is the crucial location where earliest learning occurs.
References

Aikens, N. Socioeconomic differences in reading trajectories: The contribution of family, neighborhood, and school contexts. *Journal of Educational Psychology*, 100, 235-251.


Kelly, S. Race, social class, and student engagement in middle school English classrooms. *Social Science Research*, 37, 434-448.


instructional practices, and reading proficiency in second-grade Chinese children.

*Research In Education*, 80, 37-51.

Loera, G. The association between parental involvement in reading and schooling and children’s reading engagement in Latino families. *Literacy Research and Instruction*, 50, 133-155.


Ortiz, R. The many faces of learning to read: The role of fathers in helping their children to develop early literacy skills. *Multicultural Perspectives*, 2, 10-17.


Storch, S. The role of family and home in the literacy development of children from low-income backgrounds. *New Directions for Child and Adolescent Development*, 92, 53-71.


van Steensel, R. Relations between socio-cultural factors, the home literacy environment and children’s literacy development in the first years of primary education. *Journal of Research in Reading*, 29, 367-382.

Weigel, D. Mother’s literacy beliefs: Connections with the home literacy environment and preschool children’s literacy development. *Journal of Early Childhood Literacy*, 6, 191-211.


Appendix A

Field Notes

11th and 12th Grade ELA Class

3/14/13

Debbie- Does anybody know if Black Beauty is a true story? Anybody know?

Student- I’ve seen it as a movie.

Debbie- Movie may be different than the book. Remember we talked about that? Remember we watched the Secret life of bees? There were parts that were the same.

Sarah- Like Meg dying.

Debbie- Right, and parts that were different.

~~~

Debbie- Is this book fiction or non-fiction? Alright now let me give you a hint. It’s a little different because it’s being narrated by the horse. What does that mean? So is that going to help you decide whether its fiction or non-fiction.

Student- Fiction because a horse can’t talk. Maybe it’s speaking in its mind.

Debbie- Alright, if a horse could talk in its mind would, it be talking in the language we talk in?

Student- Yes. Because some animals might say “mrrrrrrrrr” some animals can just know and think about it and their minds in English.

Debbie- Well what if this horse lived in Germany would it be thinking in English? Do you really think animals think in languages? I don’t think animals think the way we do. Animals think the way they do because of instincts. So this is being narrated by the horse. What does fictional mean?

Student- Not true.

Debbie- What does autobiography mean?

Student- About my life.

Debbie- So it’s the autobiography of the horse. My mother and I would run around the farm all day. Just by reading that first sentence who was telling the story.

Sarah- The baby. The horse.

Debbie- Who do you think the mother meant by the father’s name?

Sarah- The good things he did.
Debbie- Hmm, I don’t know if it’s the good things he did. Can anyone else think of anything else about why she would say remember father’s good name? Remember your father’s good name? Alright, let me ask it this way, does anybody know thorough bread horses?

Sarah- It’s where they bread near people.

Debbie- We read about a thorough bread horse a long time ago. What was it? Manaware? Usually horses that come from a long line of really good race horses. So in other words the little horse was brought—the father of the horse was an excellent horse. His bloodline was a good line. Thoroughbred horse is like the king and queen.

~~~

Debbie- Why was darky’s mother sad?

Sarah- Because it was her son.

Debbie- It was her son, it was a horse that she had given birth to.

~~~

Debbie- So what’s going to happen to black beauty?

Sarah- He’s gonna’ get trained.

Debbie- Will he stay there or will he move.

Sarah- Maybe moved?

Debbie- How do you know that?

Sarah- Because Squire Gordon came and wanted to buy him.

~~~

Debbie- Okay let’s turn the page and do the questions. You may go back to the story to get the answers to these questions. I will read the questions to you [multiple choice questions]. Rabbit hunting was…

Student- “Dangerous for men and horses”

Debbie- What did you have?

Student- I said it “stopped after the horse fell”

Kim- Me too.

Debbie- Yeah, I disagree with the book. You could do both of those okay?

~~~

Debbie- Darky was sent to a farm where a train ran by…. What do you think?
Student- So he could get used to loud noises.

Kim- I got “c”. [correct answer]

~~~

Debbie- What would be another good title for this part of the story.

Sarah- A new beginning.

Debbie- Why would you call it that?

Sarah- Because he’s going somewhere and he’s going to be in a different place.

~~~

Debbie- This story is mostly about…

Anna- A young horse growing up.

Debbie- Alright, very good.

~~~

Scores from 10 multiple choice questions:

Kim- 6 wrong

Sarah- 1 wrong

Anna- 5 wrong
Appendix B

St. John Fisher College Literacy Graduate Program

Community Literacy Index

Rate and describe the presence or absence of the following literacy and cultural resources in Jefferson County:

1. Book stores
   
   Yes    No

   Description: There was only one book store in the town where the Communication Skills Program that was examined is located. This store is a comic book shop and a video game store. 
   Hours: Tuesday-Thursday 11:00 am- 11:00 pm.

2. Public libraries
   
   Yes    No

   Description: There is a public library in this town. Information for the following events was posted in the lobby and on the library doors. Also posted in the library was information about Head Start, Early Start, and WIC. Below are descriptions of the hours of operation and events featured at this library.

   Hours: Monday-Thursday 9:30am-8:00pm, Friday 8:00am-6:00pm, Saturday 9:30am-3:00pm, Sunday closed

   Events:

   Book sale April 10th

   Drop in crafts on Saturdays

   Pokemon club third Mondays of month

   Cards and coffee at 1:30pm first Tuesday of month

   1st and 3rd Wednesdays at three Teen Time grades 6 and up

   2nd Monday 6:30 pm Kids’ Night different theme each month

   Tuesdays at 10:00am Preschool story time

   Thursdays at 6:30pm family Legos, Games, Bingo, Crafts

   Author Visit David Seaburn Tuesday April 9th, 6:00-7:30 pm

   Kids Night – 2nd Monday of every month 6:30-7:30. March: Dr. Seuss, April: Pete the Cat Party, May: Fancy Nancy Tea Party, June: Dinosaur Party. Please register online for these events

   Baby’s Morning Out (Wednesday at 11:00am) toddlers through three years old, 15 minutes of stories and songs, 30 minutes of playtime with toys and babies
3. Museums

Yes  No

*Description: Jefferson Historical Museum

   Hours: Saturday 1:00-3:00pm

   *The Jefferson Clock Museum, located in public Library

4. Community theaters

Yes  No

5. Internet Cafes

Yes  No

6. Art Galleries

Yes  No

*Description: Jefferson* County Council for the Arts

   Hours: Thursday-Saturday 12:00-3:00pm

7. Other relevant resources

*Description: Public transportation provided in town through busses.

(*pseudonyms)
Appendix C

St. John Fisher College Literacy Graduate Program
Home Literacy Environment Questionnaire

Name of person completing form: ____________________________________

Relation to student: ________________________________________________

Directions: Please answer the following questions as accurately as possible. Circle the answer that best reflects your opinion.

1. How much do you or another adult at home do the following activities with your child?
   Read books together.
   
<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Once in a while</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

   Read other pieces of text together (for example: magazines, recipes, grocery lists, etc.).

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Once in a while</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

2. How often do you observe your child reading independently?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Once in a while</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

3. How many books do you have in your home?

   Less than 15  15-30 books  30-45 books  45-60 books  60-75 books  Over 75 books

4. How much does your child see you doing the following activities each week?

   Writing notes, letters, papers, or checks to pay bills.

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Once in a while</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

   Using a computer to type letters or papers.
5. How much do you agree with these ideas?

It is the school’s job to teach reading.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Parents should read to their children.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Parents also should teach their children to read.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Reading to children helps them to learn to read

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5. Are you a member of your local library?

Yes

No

Is your child a member of your local library?

Yes

No

How frequently does your child visit the local library?

<table>
<thead>
<tr>
<th>Never</th>
<th>1-10 times/year</th>
<th>1-10 times/month</th>
<th>1 time/week</th>
<th>Multiple times/week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
How often do you go to the bookstore with your child?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
</tr>
<tr>
<td>1-10 times/year</td>
<td>2</td>
</tr>
<tr>
<td>1-10 times/month</td>
<td>3</td>
</tr>
<tr>
<td>1 time/week</td>
<td>4</td>
</tr>
<tr>
<td>Multiple times/week</td>
<td>5</td>
</tr>
</tbody>
</table>

6. At what age did you begin reading with your child? ______________

7. Do you receive any published reading materials at home, such as newspapers or magazines?
   Yes       No

8. On average, how often do you read for pleasure during the week?

<table>
<thead>
<tr>
<th>Duration</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 minutes or less</td>
<td>1</td>
</tr>
<tr>
<td>10-30 minutes</td>
<td>2</td>
</tr>
<tr>
<td>30-60 minutes</td>
<td>3</td>
</tr>
<tr>
<td>1-2 hours</td>
<td>4</td>
</tr>
<tr>
<td>Over 2 hours</td>
<td>5</td>
</tr>
</tbody>
</table>

9. Do you enjoy spending time reading?
   Yes       No

*Optional* 11. What is the highest level of education you have completed? (Circle any that apply)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some high school</td>
<td></td>
</tr>
<tr>
<td>High school graduate</td>
<td></td>
</tr>
<tr>
<td>General Education Diploma (GED)</td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td></td>
</tr>
<tr>
<td>Associates Degree</td>
<td></td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td></td>
</tr>
<tr>
<td>Master’s Degree</td>
<td></td>
</tr>
<tr>
<td>PHD</td>
<td></td>
</tr>
<tr>
<td>Certificate from Technical college/school</td>
<td></td>
</tr>
</tbody>
</table>

*Optional* 12. What is your annual income level?

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,000 or less</td>
<td>1</td>
</tr>
<tr>
<td>$10,000-20,000</td>
<td>2</td>
</tr>
<tr>
<td>$20,000-30,000</td>
<td>3</td>
</tr>
<tr>
<td>$30,000-40,000</td>
<td>4</td>
</tr>
<tr>
<td>$40,000-50,000</td>
<td>5</td>
</tr>
<tr>
<td>$50,000-75,000</td>
<td>6</td>
</tr>
<tr>
<td>$75,000 or more</td>
<td>7</td>
</tr>
</tbody>
</table>

13. How would you rate your academic experience in high school? (circle any that apply)

<table>
<thead>
<tr>
<th>Experience Level</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disliked school</td>
<td></td>
</tr>
<tr>
<td>Liked school</td>
<td></td>
</tr>
<tr>
<td>Performed below average</td>
<td></td>
</tr>
<tr>
<td>Performed at average</td>
<td></td>
</tr>
<tr>
<td>Performed above average</td>
<td></td>
</tr>
</tbody>
</table>
14. I go to reader’s theater, plays, or poetry readings with my child.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1-10 times/year</th>
<th>1-10 times/month</th>
<th>1 time/week</th>
<th>Multiple times/week</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

15. I go to museums or art galleries with my child.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1-10 times/year</th>
<th>1-10 times/month</th>
<th>1 time/week</th>
<th>Multiple times/week</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
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</table>
Appendix C

Level: Four

Expository

Concept Questions:

What is a beaver?

(3-2-1-a)

What are dams built by beavers?

(3-2-1-b)

What are problems caused by beavers?

(3-2-1-c)

How do beavers protect their young?

(3-2-1-d)

Score: ______ /12 = ______ %

FAM ______ UNFAM

Prediction:


“The Busy Beaver”

Have you ever heard someone say “busy as a beaver”? Beavers are very busy animals and they are master builders. This furry animal spends its life working and building. As soon as a beaver leaves its family, it has much work to do.

First, the beaver must build a dam. It uses sticks, leaves, and mud to block a stream. The beaver uses its two front teeth to get the sticks. The animal uses its large flat tail to pack mud into place. A pond forms behind the dam. The beaver spends most of its life near this pond.

In the middle of the beaver’s pond is a large mound. This mound of mud and twigs is the beaver’s lodge or house. The beaver’s family is safe in the lodge because it is well hidden. The doorway to the lodge is under the water. After the lodge is built, the beaver still cannot rest. More trees must be cut down to be used as food for the coming winter. Sometimes there will be no more trees around the pond. Then the beaver has to find trees elsewhere. These trees will have to be carried to the pond. The beaver might build canals leading deep into the forest.

All this work changes the land. As trees are cut down, birds, squirrels, and other animals may have to find new homes. Animals that feed on trees lose their food supply. The pond behind the dam floods part of the ground. Animals that used to live there have to move. However, the new environment becomes a home for different kinds of birds, fish, and plants. All this happens because of the very busy beaver. (281 words)

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Level: Four

| Number of Total Mists (Total Accuracy): | | |
| Number of Meaning-Change Mists (Total Acceptability): | | |
| **Total Accuracy** | **Total Acceptability** |
| 0-7 mists | independent | 0-7 mists |
| 8-29 mists | Instructional | 8-15 mists |
| 30+ mists | Frustration | 16+ mists |
| **Rate:** 281 × 60 = 16,860 | **seconds** = **WPM** |
| **Correct WPM:** (281 - errors) × 60 = | | |
| | | |

Retelling Scoring Sheet for “The Busy Beaver”

**Main Idea**
- Have you heard
- “busy as a beaver”?
- Beavers are animals
- busy animals
- and builders
- master builders.

**Details**
- As soon as a beaver leaves its family,
- it has much work to do.
- The beaver builds a dam.
- It uses sticks,
- leaves,
- and mud
- to block a stream.
- The beaver uses its teeth
- its front teeth
- to get sticks.
- The animal uses its tail
- to pack mud.
- A pond forms
- behind the dam.

- The beaver spends its life
- near the pond.
- The beaver's home is a mound
- in the pond.
- The family is safe
- because the lodge is well hidden.
- The doorway
- to the lodge
- is under the water.
- Trees are cut down
- to be used as food.
- for the winter.
- Sometimes there will be no trees
- around the pond.
- The beaver has to find trees
- and carry them
- to the pond.
- The beaver might build canals.

**Main Idea**
- This changes the land.

**Details**
- As trees are cut,
- birds,
- squirrels,
- and animals have to find new homes.
- Animals lose their food supply.
- The pond floods the land.
- Animals have to move.
- A new environment becomes home
- for different birds
- and fish.

49 Ideas

Number of ideas recalled _____

Other ideas recalled, including inferences:
Level: Four

Questions for “The Busy Beaver”

1. What is the passage mainly about? *Implicit*: how a beaver keeps busy; or what a beaver does

2. According to the passage, what are the beaver's front teeth used for? *Explicit*: to get the sticks

3. Describe the beaver's tail. *Explicit*: large and flat

4. Why does the beaver build a dam? *Implicit*: to make a pond; or to make a place for his lodge

5. What is the beaver's lodge or house made of? *Explicit*: mud and sticks

6. Why is the doorway to the beaver's house under the water? *Implicit*: it is safer and more hidden; or so enemies can't get in

7. What does the beaver eat during the winter? *Explicit*: trees

8. Why might some people dislike beavers? *Implicit*: they change the land by flooding; they drive out animals; or they cut down too many trees

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<th>Without Look-Backs</th>
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<th>Number Correct Implicit:</th>
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Level: Four

Narrative

Concept Questions:
Who was Johnny Appleseed?

(3-2-1-0)

Why do people plant fruit trees in certain places?

(3-2-1-0)

Why do people plant apple trees?

(3-2-1-0)

What does “making apple cider” mean to you?

(3-2-1-0)

Score: _______ /12= _______ %

FAM UNFAM

Prediction:

“Johnny Appleseed”

John Chapman was born in 1774 and grew up in Massachusetts. He became a farmer and learned how to grow different kinds of crops and trees. John especially liked to grow and eat apples. Many people were moving west at that time. They were heading for Ohio and Pennsylvania. John knew that apples were a good food for settlers to have. Apple trees were strong and easy to grow. Apples could be eaten raw and they could be cooked in many ways. They could also be dried for later use. So in 1797, John decided to go west. He wanted to plant apple trees for people who would build their new homes there.

John first gathered bags of apple seeds. He got many of his seeds from farmers who squeezed apples to make a drink called cider. Then, in the spring, he left for the western frontier. He planted seeds as he went along. Also, he gave them to people who knew how valuable apple trees were.

John walked many miles in all kinds of weather. He had to cross dangerous rivers and find his way through strange forests. Often he was hungry, cold, and wet. Sometimes he had to hide from unfriendly Indians. His clothes became ragged and torn. He used a sack for a shirt, and he cut out holes for the arms. He wore no shoes. But he never gave up. He guarded his precious seeds and carefully planted them where they had the best chance of growing into strong trees.

John’s fame spread. He was nicknamed Johnny Appleseed. New settlers welcomed him and gratefully accepted a gift of apple seeds. Many legends grew up about Johnny Appleseed that were not al-
Level: Four

ways true. However, one thing is true. Thanks to Johnny Appleseed, apple trees now grow in parts of America where they once never did. (308 words)


Number of Total Miscues
(Total Accuracy):

Number of Meaning-Change Miscues
(Total Acceptability):

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<td>Independent</td>
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<td>8–32 miscues</td>
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<tr>
<td>33+ miscues</td>
<td>Frustration</td>
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Rate: 308 \times 60 = 18,480 \text{ seconds} = \text{WPM}

Correct WPM: \frac{308 - \text{errors}}{\text{seconds}} = \text{CWPM}

Retelling Scoring Sheet for “Johnny Appleseed”

Setting/Background
__ He wanted
__ to plant apple trees.

Events
__ John got many seeds
__ from farmers
__ who squeezed apples
__ to make a drink
__ called cider.
__ He left
__ for the frontier.
__ He planted seeds
__ as he went along.
__ He gave them away.
__ John walked miles.
__ He crossed rivers
__ and went through forests.
__ He was hungry
__ and wet.
__ He had to hide
__ from Indians.
__ Unfriendly Indians.
__ His clothes were torn.
__ He used a sack
__ for a shirt.
__ and he cut out holes
__ for the arms.
__ He wore no shoes.

Resolution
__ John’s fame spread.
__ He was nicknamed
__ Johnny Appleseed.
__ Settlers accepted seeds
__ gratefully.
__ Thanks to Johnny Appleseed.
__ apple trees grow
__ in many parts
__ of America.

47 Ideas

Number of ideas recalled __

Other ideas recalled, including inferences:
Level: Four

Questions for “Johnny Appleseed”

1. What was John Chapman’s main goal?
   Implicit: to plant apple trees across the country

2. Why did John choose apples to plant instead of some other fruit?
   Implicit: the trees were easy to grow; the fruit could be used in a lot of ways; or be especially liked apples

3. Where did John get most of his seeds?
   Explicit: from farmers or from people who made cider

4. Why would John be able to get so many seeds from cider makers?
   Implicit: cider is a drink and you don’t drink seeds; or apples have a lot of seeds and you don’t use seeds in cider

5. How do we know that John cared about planting apple trees?
   Implicit: he suffered hardships; or he guarded the apple seeds carefully

6. How did John get to the many places he visited?
   Explicit: he walked

7. Name one hardship John suffered.
   Explicit: being hungry, cold, wet, lost, in danger from unfriendly Indians

8. Why should we thank Johnny Appleseed?
   Explicit: apple trees now grow in parts of America where they once never did

Without Look-Backs

Number Correct Explicit: ___
Number Correct Implicit: ___
Total: ___
   Independent: 8 correct
   Instructional: 6-7 correct
   Frustration: 0-5 correct

With Look-Backs

Number Correct Explicit: ___
Number Correct Implicit: ___
Total: ___
   Independent: 8 correct
   Instructional: 6-7 correct
   Frustration: 0-5 correct
Level: Four

Narrative

Concept Questions:

Who was Amelia Earhart?

What are the dangers of flying a small plane?

What is an adventurer?

What are women's rights?

Score: ___/12 = ____%  FAM  UNFAM

Prediction:

“Amelia Earhart”

Amelia Earhart was an adventurer and a pioneer in the field of flying. She did things no other woman had ever done before.

Daring World War 1, Earhart worked as a nurse. She cared for pilots who had been hurt in the war. Earhart listened to what they said about flying. She watched planes take off and land. She knew that she, too, must fly.

In 1928, Earhart was the first woman to cross the Atlantic in a plane. But someone else flew the plane. Earhart wanted to be more than just a passenger. She wanted to fly a plane across the ocean herself. For four years, Earhart trained to be a pilot. Then, in 1932, she flew alone across the Atlantic to Ireland. The trip took over fourteen hours.

Flying may seem easy today. However, Earhart faced many dangers. Airplanes had just been invented. They were much smaller than our planes today. Mechanical problems happened quite often. There were also no computers to help her. Flying across the ocean was as frightening as sailing across it had been years before. Earhart knew the dangers she faced. However, she said, “I want to do it because I want to do it. Women must try to do things as men have tried. When they fail, their failure must be a challenge to others.”

Earhart planned to fly around the world. She flew more than twenty thousand miles. Then, her plane disappeared somewhere over the huge Pacific Ocean. People searched for a long time. Finally they
Level: Four

gave up. Earhart and her plane were never found.

(263 words)

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Retelling Scoring Sheet for "Amelia Earhart"

Setting/Background
- Amelia Earhart was an adventurer.
- During World War I
- she was a nurse.
- She cared for pilots
- who had been hurt.
- Earhart watched planes
- take off
- and land.

Goal
- She knew
- that she must fly.
- Earhart was the first woman
- to cross
- the Atlantic

in a plane.
- Someone else flew the plane.
- Earhart wanted to be more
- than a passenger.
- She wanted
- to fly a plane
- across the ocean.

Events
- Earhart trained
- to be a pilot.
- In 1932
- she flew
- alone
- across the Atlantic
- to Ireland.
- Earhart faced dangers.
- Airplanes were smaller.
- Problems happened often.
- There were no computers.
- Earhart said
- women must try
- to do things
- as men have tried.
- Earhart planned
- to fly
- around the world.

Resolution
- Her plane disappeared
- over the ocean
- the Pacific Ocean.
- People searched
- for a long time.
- They gave up.
- Earhart
- and her plane were
- never found.

47 Ideas

Number of ideas recalled ___

Other ideas recalled, including inferences:
Level: Four

Questions for “Amelia Earhart”

1. What was Amelia Earhart’s main goal?  
   Implicit: to fly; or to do things that were challenging

2. What was Amelia Earhart doing in a plane when she first crossed the Atlantic?  
   Explicit: she was a passenger

3. How long did it take Amelia Earhart when she flew alone across the Atlantic?  
   Explicit: over fourteen hours

4. Why would flying alone across the Atlantic be an especially dangerous thing to do?  
   Implicit: it was a long trip; there was no one to help with problems; or there was no one to help her stay awake or give her a break

5. What was one of the dangers of flying in those early days?  
   Explicit: small planes; mechanical problems; or no computers

6. How do we know Amelia Earhart believed in equal rights for women?  
   Implicit: she said women should try to do things just as men have tried

7. What was Amelia Earhart trying to do when her plane disappeared?  
   Explicit: fly around the world

8. Why do you think her plane was never found?  
   Implicit: probably sank in the ocean; ocean was so big; or plane was very small