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ABSTRACT

This thesis is an exploration of the first year of the Hillcrest Reading Program as well an analysis of related state education policy. Established in the summer of 2008, the Hillcrest Reading Program was created by faculty and graduate students at the University of North Carolina Wilmington in order to address the racial achievement gap in New Hanover County, North Carolina. The program recruited 30 university student volunteers to tutor 15 African American, low-income elementary school students during the 2008-2009 academic year. The program utilizes a direct instruction phonetics approach with the text *Teach Your Child to Read in 100 Easy Lessons* (Englemann, Haddox, & Bruner, 1986). The following analysis investigates the statistical significance of the program participants’ progress compared to local elementary school control groups, one of which utilizes whole language instruction methodologies; the other applies a curricular wide, group direct instruction approach. Results of a paired sample T-test showed that program participants and both control groups consistently made significant progress throughout the academic year. Analysis of the change scores of the experimental and control groups found that reading program participants made significantly more progress than both control groups.

The policy analysis provides suggestions as how to best enforce the state mandate (§ 115C-81.2) which requires schools of education to teach pre-service teachers to teach reading with phonetics; and North Carolina elementary school teachers to teach children to read through phonetics. Finally, a qualitative exploration of the experiences during the first year of the reading program is included in the thesis appendix.
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Finally I would like to acknowledge the many people working to make the WHA-UNCW Community Campus a reality (many of whom have already been mentioned)! Your groundbreaking work made the reading program possible, and you are making a monumental impact on the lives of residents at Hillcrest.
DEDICATION

This thesis is dedicated to the children in the Hillcrest Reading Program past, present and future- without whom I would have been unable to do this work. Your joy, your insight, and your brilliance are something I will never forget. Your faces, your hearts, and your minds will forever be my inspiration in life. Keep on Reading!
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INTRODUCTION

The Hillcrest Reading Program

The Hillcrest Reading Program was created in the summer of 2008 by Dr. John Rice, Dr. Martin Kozloff, and Eric Irizarry, professors and graduate student at the University of North Carolina Wilmington. The program was established to address the long standing racial achievement gap in New Hanover County, the county in which the university is located. The program’s founders believed that by providing empirically validated reading instruction to program participants, the children would not only improve their literacy, but become successful in their other academic subjects as well. I was brought on to the research team that summer, as a first year graduate student in Public Sociology, to act as program coordinator and manage the logistics of running the program. The program was to be held at the newly established Wilmington Housing Authority- University of North Carolina Wilmington Community Campus, a collaborative relationship created to provide the venue for UNCW students, faculty, and staff to provide services to Hillcrest residents. The goal of the community campus was not only to improve relationships between the community and the university, but to provide an opportunity for applied learning, rooted in the philosophies of public sociology.

The Hillcrest neighborhood is a public housing project, where 97% of residents are African American, the average annual household income is $9,893 and female-headed households make up 77% of the homes in the community. The Hillcrest Reading Program was the first program established at the community campus, and provides free, one-on-one after school reading tutoring from 4:00 to 5:00, Monday through Thursday. Students on average receive 20 minutes of scripted tutoring daily, with the remainder of time being spent reading story books and eating after school snacks. Although the target age for participants is 4 to 7
years old, participants who are in elementary school and are not reading on grade level are also admitted into the program. In the 2008-2009 academic year, the program enrolled 15 African-American students, ages 4-10, all of whom were residents or relatives of residents at Hillcrest. Each participant must be enrolled by their parent or guardian, who provides background information and consent for participation.

The primary text used by the program is Siegfried Englemann, Phyllis Haddox, and Elaine Bruner’s (1986) *Teach your Child to Read in 100 Easy Lessons* (henceforth *100 Easy Lessons*), which uses direct instruction phonetics to teach reading. When a child completes the 100 lessons, they are able to read at a 2nd grade level. Because we did not want to exclude children in the Hillcrest Reading Program who complete Englemann’s lessons, we moved these children into other higher level direct instruction texts, based on their abilities. The program uses UNCW student volunteers, all of whom participate in a three-hour training in direct instruction and *100 Easy Lessons*. Each tutor works two days a week, for an hour a day with the same child. By ensuring that children work with the same two tutors each week, the children are not only improving their literacy skills, but establishing a mentoring relationship with their tutors. This ensures stability and consistency for the participants, and provides tutors with a chance to work with one child and witness their growth and improvement day to day.

Purpose

The purpose of this research is to explore the quantitative benefits and qualitative experiences of creating and implementing the Hillcrest Reading Program. Rooted in the goal of reducing the racial achievement gap in schools, this thesis first investigates the influence of the direct instruction reading tutoring received by the participants in the Hillcrest Reading Program as a means to increasing their chances at academic success. In order to examine the influence of
our efforts, I conducted a statistical analysis of the participants’ progress, as well as the comparison of the achievements of the Hillcrest Reading Program participants in two control groups. Additionally, I conducted a policy analysis to investigate the feasibility and potential impact of enforcing mandated phonetics instruction in schools, and finally I have included a qualitative exploration of the first year of the pilot program in Appendix C.

LITERATURE REVIEW

Social and Human Capital

The motivation for the creation and implementation of the Hillcrest Reading Program, as aforementioned, is to provide aid to a group of African-American students who do not receive effective reading instruction in school. Although the primary focus of this thesis is on the curriculum and instruction as effective means to close the racial achievement gap, it is necessary to explore the theoretical underpinnings that have framed our intervention. Instructional methods currently used rely on the false assumption that students have equal access to educational support at home. This support, just one form of social capital, is inherently related to academic success under the current model of instruction. We must then understand the access to and inequality in social capital and its role as a conduit for increasing human capital in order to fully comprehend the issues surrounding the achievement gap and literacy instruction.

Social capital was first defined by Bourdieu (1985) as the “aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance recognition” (p. 248). Coleman defined the term as “a variety of entities with two elements in common: They all consist of some aspect of social structures, and they facilitate certain action of actors- whether persons or corporate actors- within the structure” (1988, p. S98). Portes (1998) defines the concept as the “ability of
actors to secure benefits by virtue of membership in social networks or other social structures,” and Burt (1992) interprets social capital as the “friends, colleagues and more general contacts through whom you receive opportunities to use your financial and human capital.” Lin wrote that “social capital may be defined as investment … of embedded resources in social relations for expected returns” (2000, p. 786).

Annette Lareau (2000; Lareau & Horvat, 1999) and Roscigno & Ainsworth (1999), have used the concept of cultural capital to refer to the same concept of social networks and the ability to utilize those networks to navigate social interactions (Kalmijn & Kraaykamp, 1996). For the purpose of this thesis, I use human and social capital as framing concepts, due to the varying ambiguous definitions of cultural capital. Bourdieu’s definition, which refers to the French upper-class knowledge of things such as fine wines and classical music, is largely irrelevant in American culture, where congruent concepts are difficult to identify. Moreover, the empirical evidence used to validate the influence of Bourdieu’s operational definition of cultural capital on academic success is not extensive, and several studies have found its impact to be inconclusive in the United States (Kington, 2001). Because many varying forms of cultural capital in the United States have been identified, the large umbrella concept is convoluted, especially compared to the more concrete concepts of human and social capital.

Although many sociologists have interpreted and reformatted the concept, social capital can essentially be defined as the relationships that an individual has that enable her to navigate through social life, and the ability of those relationships to promote or hinder her life chances. In short, it can be understood as who you know (McNamee & Miller, 2004). Social capital or lack thereof, has the negative effects of the exclusion of outsiders, excessive claims on group members and lower expectations for group norms (Coleman, 1988; Goddard, 2003; Lin, 1999;
When a member of a group fails to meet group expectations, it is likely that the group will lower expectations to allow the inclusion of that member rather than remove her and maintain the previous norms of behavior.

Connections that bring benefits to members of one group typically discriminate against others, sometimes unintentionally. If positions within a group are filled primarily on the basis of social contacts, then the group will tend to replicate its own social and demographic profile. Ultimately such informal networks reduce organizational efficiency, since otherwise qualified applicants for positions are never considered (McNamee & Miller, p.75-76, 2001).

Social capital is complementary to the idea of human capital, which can be understood as the “skill, knowledge and similar attributes that affect particular human capabilities to do productive work” (Schulz, p.8, 1961). Any investment made to improve the education, skill set, health or job prospects of an individual can be understood as human capital. The greater amount of social capital an individual has, the greater the access to resources that enable the growth of human capital. Social capital is the conduit through which human capital is gained, as relationships with individuals provide the opportunity to increase human capital (Coleman, 1988; Coleman, 2008). Many sociologists have linked the concept of social and human capital and inequalities in both with academic success and the achievement gap (Lareau, 2000; Lareau & Horvat, 1999; Kalmijn & Kraaykamp, 1996; Roscigno & Ainsworth, 1999; Burkham, Ready, Lee & LoGerfo, 2004; Ryder, Tunmer & Greaney, 2007; Lin, 2000; Bernstein, 1960). For the purpose of this thesis, social capital can be operationalized as the relationships that Hillcrest Reading Program participants have with their tutors, peers, and the staff of the program, through which the children will increase their human capital. Human capital can be operationalized as
not only the improved literacy skills of participants, but also their acquisition of manners and knowledge of acceptable group norms and behaviors.

Lin (2000) found that being born in a higher social position affords an individual better access to and utility of social capital. Higher social class networks consist of diverse individuals from different strata, while lower social class networks tend to be more restricted and homogenous. Inequality exists in social capital because individuals tend to engage in homophily, or to socialize with whom they share common characteristics like social class (Lin, 2000). African Americans are likely to have smaller networks that consist more of family, neighbors and friends (or strong ties) in opposition to having more weak ties and the social benefits with which those ties come. Strong ties are more likely to connect you with other members of your intimate group, without providing the networking benefits of acquaintances. While the former serves positive functions, weak ties are more likely to allow an individual to gain access to different opportunities. The individuals with whom you have weak ties have strong ties of their own, which allow you to gain access to the social benefits of that group through said acquaintance (Granovetter, 1983; McNamee & Miller, 2001).

Focusing specifically on the institutional arena of formal education, Lareau (2000) conducted a qualitative study that examined [social] capital and how school relationships affect educational success. While she used the terminology of “cultural capital,” she was largely investigating the relationships between parents and teachers, and parents and their children, which we understand to be social capital (Kalmijn & Kraaykamp, 1996). Her findings indicated that social “class related factors shape parents compliance with teachers’ requests for parental participation in schooling,” and that parental participation has a strong influence on student achievement (p. 288, 2000). Teachers and principals from both the working- and upper-class
schools she observed believed that parental involvement was key to educational success; emphasized the importance of reading to their child; and had reading incentives and encouraged participation. Lareau determined that there was no institutional discrimination in the schools studied, however parents at the upper-middle class school responded to teacher requests for involvement much more often than those in the working class school. Parents in the upper-middle class school volunteered and attended school events more regularly and, more importantly, were more involved in their child’s education. Since it was found that “teachers’ methods of presenting, teaching, and assessing subject matter were based on a structure that presumed parents would help children at home,” students with less involved parents are less likely to perform well in school (p.292). Having parents in a certain socioeconomic group can be understood as a child’s social capital, through which they are able to access their parents human capital- the skills needed to expose their child to literature and communicate effectively with teachers to advocate for their child’s needs. This difference in social and human capital mirrors the differences between the children in the Hillcrest Reading Program and their peers with middle class backgrounds.

Lareau also found that even when working class parents did participate and interact with their children’s teacher- which, as noted, occurred less frequently- the interactions were vastly different. Working class parents were less likely to discuss academic or curricular issues than middle class parents, and were more likely to see education as the job of teachers, not of the family. Whereas working class parents often see the teacher as a more educated professional, middle and upper class families see the teachers as equals, and take on more responsibility for their child’s education. This variability is also influenced by the lack of resources in working class families- a lack that does not exist for middle and upper class families. Upper and middle
class parents have the human capital necessary to be considered an equal by teachers, and the knowledge to be able to navigate interactions with teachers and school administrators effectively. These parents are also likely to have social ties to teachers and important school personnel, which increase their chances of obtaining favorable treatment for their child.

Lareau explains that “the level of parental involvement is linked to the class position of the parents and to the social and cultural [and human] resources that social class yields in American society. By definition, the educational status and material resources of parents increase with social class” (p.298). The intervention at Hillcrest, therefore, is designed to counter that resource discrepancy by providing educational resources and consistent interaction with tutors. Through their participation in the program, children are able to increase their social capital through interactions with their tutors as well as program staff. These interactions lead to an increase in human capital- in this case the greater ability to read and understand language.

Bernstein (1960) also found discrepancies in achievement based on social class, particularly in language development. He conducted an experiment that examined working class and middle class scores on vocabulary vs. non-vocabulary based intelligence tests. He found that the working class group had comparable non-vocabulary IQ test scores, but scored significantly lower on vocabulary-based intelligence measures. Bernstein found that different social classes develop language skills in differing ways, and the emphasis on goals of language is differing. “The resulting form of language use progressively orients the speakers to distinct different types of relationships to objects and persons, irrespective of the level of measured intelligence” (p.271). Working class individuals are more likely to have limited language use that focuses on descriptive rather than the theoretical or abstract thought, more common among dominant middle class speech. This offers evidence of the structural barriers for lower class individuals to
opportunities for advancement through job promotion or education that are based on verbal measures of intelligence, a form of human capital (Bernstein, 1960). The reading program at Hillcrest offers tutoring that not only helps with literacy, but also emphasizes comprehension, using questions about the reading material. By engaging in conversation with their tutors, children are able to also improve their comprehension and vocabulary skills, contributing to an overall improvement in communication ability, another important element in human capital.

Socioeconomic differences are related to differing levels of social and human capital, and minorities are more likely to be represented in lower socioeconomic groups, which can compound their lack of both forms of capital. While her first study examined the effects of class on social capital, Lareau’s 1999 work with Horvat included an examination of not only social class but race and its effect on social capital. They suggest that it is not only the possession of social capital that is important, but the successful activation and acceptance of that social capital in a specific institutional setting. Lareau and Horvat found that “parents’ cultural and social resources become forms of capital when they facilitate parents’ compliance with dominant standards in school interactions” (p.42). The schools that the children attended maintained that cordial, non-confrontational interactions were the only acceptable form of exchange, and even if parents possessed the human capital necessary for positive interactions, if they did not adhere to the institutional guidelines of the interaction, the exchange that resulted was not positive.

Lareau and Horvat (1999) found that in addition to large vocabularies; treating teachers as equals; having access to school and community networks; and having time and transportation flexibility; being white was seen as a form of [social] capital as well. Teachers thought they were broad and neutral in their request for parental involvement, yet they only accepted a narrow range of behaviors as appropriate parental involvement, which included parents being “positive
and supportive” and also trustful of teachers’ judgment. White parents are more likely to fit this description, as black parents are more likely to have problems with the institution and individual treatment based on race, especially because the community in which Lareau and Horvat’s research was based had a history of racial discrimination. Principals and teachers rejected the black parents’ allegations of racial discrimination and did not consider their criticisms as legitimate. Thus, as observed, another important variable in children’s academic fortunes is the effectiveness with which parents activate their social capital.

As Lareau and Horvat (1999) have found, then, social class has had an impact on racial tensions in the classroom, and middle class black parents were able to more successfully navigate the school system by activating their social and human capital by communicating with teachers in a way that is most conducive to positive interaction with teachers. Aggressive complaints were seen as hostile and unhelpful, while black parents who had the human capital and interpersonal skills to know how to navigate the system were able to express their concerns about racial discrimination in what the teachers would see as a more tactful manner.

Irrespective of race, social class in general, has an impact on teacher communications. White working and lower class parents also had problems communicating effectively with their children’s teachers. Lareau and Horvat (1999) explain that moments of inclusion, or the effective activation of parent’s social capital, produce positive effects for the parent’s child; yet if the relationship or interaction is negative, the result is negative for the child. One set of African-American parents discussed in the study experienced primarily social exclusion, because they framed their concerns in a critical and negative way that referenced the historic inequality of African Americans in the city and the country. Another set of middle class Black parents, conversely, were able to activate their social capital in ways that resulted in inclusion.
Whiteness is a type of social capital in this case, because even when parents were concerned or critical with the school, they were not grouped into a historically marginalized population.

Burkam, Ready, Lee and LoGerfo (2004) also found connections between race, social capital and the achievement gap in their examination of gender, socioeconomic and racial factors that influence loss or gain of learning in the summer months when school is out of session. Previous studies had found that African-Americans lose skills over the summer, while White and Hispanic students’ skill level stagnated or increased. Reading skills were found to increase or remain flat over the summer months among students whose parents read to them and encouraged reading, an increase related to mother’s education and poverty level. On the other hand they found that disadvantaged students lost reading skills over the summer. These losses seem to be related to race as well, with the racial achievement gap increasing over the summer months. By providing a source of social capital, the reading program enables students to make tangible academic improvements, gaining more human capital that they otherwise may have been unable to obtain.

Kalmijn & Krayycamp (1996) found that lack of social capital affects schooling through self-selection, indirect exclusion and teacher selection. In other words, lack of social capital “may discourage students [from staying] in school… may hamper their accomplishments while in school…or may lead to lack of recognition from teachers” (p.24). While the direct instruction method utilized in the reading program with the text *Teach your Child to Read in 100 Easy Lessons* is the most important element of the intervention at Hillcrest, we are also providing the opportunity for children to develop relationships that will increase their social capital, and, through these relationships, gain reading skills that will significantly improve their human capital as well.
The Achievement Gap

In New Hanover County, North Carolina, 34.7% of African American boys and 41.6% of African American girls in the third grade were reading at or above grade level in the 2008-2009 school year. In comparison, 80.8% of white boys and 85.2% of white girls in elementary school reached the same level of achievement during the same time period. 47.3% of economically disadvantaged children in the county are reading at grade level, compared to 85.1% of non-disadvantaged youths. This phenomenon is not unique to this county. 47.3% of African American third graders in North Carolina read at or above grade level, compared to 78.5% of their white peers (NC DPI, 2009). White students in North Carolina are reading successfully at a rate 1.65 times higher than North Carolinian black students. Although the achievement gap has narrowed since the civil rights movement of the 1960s, on average African Americans score below 75% of European Americans on standardized tests in the United States (Jencks & Phillips, 2000).

The discrepancies in the American education system continue to reinforce the historically and structurally based racial inequality in the country that violates the equal social and civil rights of African Americans (Owens, 2002; Minarik, 2006). The current system ensures that equal life chances for all racial groups will not be an American reality any time in the near future, and African Americans will continue to have decreased life chances relative to whites (Orr, 2003). The fact that only 51% of black students in the United States graduate from high school, with only 20% of them deemed college ready by the Manhattan Institute’s Center for Civic Innovation, is surely due, at least in part, to poor achievement during elementary education. The Talking Page Literacy Organization reported that if a child does not have any basic literacy skills by the time they are in Kindergarten, they are twice as likely to drop out of
high school (National Illiteracy, 2007). In comparison to the black graduation rate, 72% of White American high school students graduate, with 37% of them deemed college ready (Greene & Forster, 2003). By requiring all American children to attend schools, but failing to provide equal resources for low-income, inner-city and often times African American students, the American government is mandating inequality in public schools (Kozol, 1991). Improving black students’ human capital- their knowledge of school subjects and ability to complete school successfully- would allow those students to become more economically successful, and gain more social connections (social capital) in the process.

While studies have identified parental educational attainment and income; poverty; effort and motivation for learning; alcohol and illicit drug use; crime; segregation; instructional resources; quality of teachers; course options; and academic tracks as having an effect on the racial achievement gap, no single factor has been identified as the cause for the disparity (Lee, 2002, p.6). Lee (2002) performed a statistical analysis of the National Assessment of Education Progress and SAT scores to explore why the achievement gap narrowed in the 1970s and 1980s but “stabilized or widened in the 1990s” (p.3). He found that in the 1970s and 1980s, gains in achievement were found mostly in the lower achievers, and in the late 1980s and 1990s gains were made by the academically high achievers, which coincides with curricular changes that focused on more advanced content. When “minimum competency” was emphasized in schools, gains were found in low achieving students, and minority groups had higher levels of achievement. Conversely, when higher level content was emphasized, white students had higher gains. This seems to suggest that black students benefit more by the focus on basic curriculum than white students, who have achieved a baseline from which they could further improve (Lee, 2002, p. 6).
Lee also found that the Black-White achievement gap narrows in correlation with the Black-White socioeconomic gap, but argues that differences in socio-economic status cannot explain the entire gap. Grissmer, Kirby, Berends & Williamson (1994) found that “achievement of black students increased substantially more than predicted by changes in social class and family structure” (p.6). Therefore the academic improvement could be attributed at least partially, to educational policies that “especially helped blacks” (p.6). Teacher experience, teacher education level, and per capita resources to students increased when the achievement gap narrowed in the 1970s and 1980s, and stagnated along with the achievement gap in the 1990s. This suggests that resources, both monetary and human, play a crucial role in relation to the achievement gap. Similarly, overall patterns of school segregation and desegregation are also correlated with the achievement gap narrowing and then widening again (Lee, 2002). Researchers have hypothesized that when schools are more thoroughly desegregated, more resources are available for African American students. Further, the social capital gained by socializing with students from different racial and socioeconomic backgrounds may also contribute to increased progress.

In their ground-breaking ethnographic study of an African American high school in Washington D.C., Fordham and Ogbu (2000) presented a hypothesis that peer groups and community have a strong influence on the ability of African American students to achieve academic success. They found that “one major reason black students do poorly in school is that they experience ambivalence and affective dissonance in regard to academic effort and success” (p.303). This occurred because black Americans began to associate academic success with “acting white,” and were socially discouraged from high educational attainment. Fordham and Ogbu found that the students in the high school placed heavy importance on loyalty to the black
community, and rejected behaviors that were labeled “acting white,” including speaking in proper English, studying and doing well in school, and participating in white cultural activities such as going to the ballet, having cocktails, going camping or volunteering (p.304). Students who have the intellectual ability to earn good grades in school have been found to intentionally not work to their potential, because of the social stigma of acting white and being a “brainiac” (p.307).

Conversely, other students have chosen to embrace their academic ability and attempt to keep a low profile by “camouflaging” so that their achievement is not known by their peers. These students cope by avoiding extra-curricular academic activities and trying to appear less capable while still maintaining good grades. Students that earn good grades are afraid of being alienated from their peers, who assume they are conforming to the dominant institution. Fordham and Ogbu suggest that by changing the social structure to allow more opportunities for African American achievement in the work force, African American youth will be able to see what opportunities are available to them and decrease the peer pressure to reject academic achievement. They insist that educational barriers must be eliminated, and policies and programs should be implemented to address the “burden of ‘acting white’” (p.309).

Horvat and Lewis (2003) contribute to, but also complicate, the “burden of ‘acting white’” hypothesis by proposing that black peer groups are more diverse than Fordham and Ogbu originally suggested. Although they acknowledge that camouflaging and the “acting white” stigma do exist, Horvat and Lewis argue that reducing black students to one monolithic group that is against academic achievement ignores the diverse reactions to and opinions about educational success in the black community. They found that Fordham and Ogbu’s camouflaging
is only part of a larger practice they call “managing academic success” (p.266); which they explain as follows:

Although managing academic success includes camouflaging behaviors, it also includes instances in which students share their academic success with peers who are supportive of their academic endeavors. By using this term, we expand the understanding of the challenges to and supports for academic success for black students (p.266).

Contrary to Fordham and Ogbu, Horvat and Lewis found that respondents did not feel pressure to discuss their academics or modify their speech so that they could fit in, but instead so that their peers would not feel ashamed or guilty that they were not as successful. The finding that participants shared academic success with supportive peers speaks to the diversity within African American high school peer groups. Participants often spoke about peers- both academically successful and unsuccessful- in ways that offered them support and encouragement. They had access to formal organizations and informal peer networks that supported their academic achievements; and participants often spoke about feeling proud of being successful and considered smart. This is a clear example of increased social capital, and its ability to facilitate the acquisition of human capital. Finally, Horvat and Lewis found that these academically successful young women (who all went on to attend and complete college) had a very strong racial identity as black women. Many wanted to attend historically black colleges and universities for the capacity of those organizations to offer social support and the opportunity to learn about and participate in African American culture.

Horvat and Lewis found that not only do successful African American female students have access to supportive same-race networks, but they have strong racial identities that do not conflict with their meanings of academic and financial success. Fordham and Ogbu’s contention
that black students must choose either to be a member of the black community or be academically successful is, according to Horvat and Lewis’s findings, a false dichotomy. While this study is limited due to the narrow sample of African American young women who have been found to be less influenced by the “burden of ‘acting white’,” it suggests that creating and maintaining positive conceptions of education is one way to eliminate the negative psycho-social influences on the achievement gap. The Hillcrest Reading Program is creating a peer group in the neighborhood that emphasizes good behavior and success in education. Rewards are given for performance and completion of lessons and for respectful interactions with others, thereby fostering an environment that allows students to celebrate academic achievement.

Although there are many facets to the complex problem of the racial achievement gap, one identifiable and manageable piece of the problem is the curriculum, as well as the instructional methods with which the curriculum is devised. Here again, we see the salience of both human and social capital in literacy instruction. The substantive content of the reading curriculum at schools can be understood in this case to be synonymous with school defined human capital, or skills and knowledge that have economic value. The relationship between and among teachers and their students demonstrates social capital, as the teachers are the conduit through which human capital can effectively be transmitted from one generation to the next. If social capital is strong, but human capital is weak (i.e. lack of substantive content in the curriculum), nothing of substance can be transmitted. Likewise if human capital is present, but teacher relationships with students, the result is the same as in the latter scenario.

When students are unable to master basic literacy, they lack the skills to not only succeed in reading and literature courses but to comprehend written material in other subjects like science, math and social studies. It is imperative to academic success, therefore, that children are
able to achieve basic literacy. If the literacy achievement gap is minimized, the overall achievement gap would be minimized as well. The whole language teaching methods being used in classrooms today are, as previously discussed, based on a model that assumes that each child has the familial support necessary to succeed in the classroom. Students who do not have educational support at home are therefore automatically disadvantaged and less likely to succeed in school. The public school system, instead of being the only necessary source of education for children, has become just one source that is insufficient without extracurricular supplemental aid from parents and families, nonprofit and for profit organizations. Direct instruction in phonetics, on the other hand, has been empirically validated as an effective method for teaching reading, regardless of extracurricular support (Bessellieu, Rice, Kozloff & Seidel, 2000; Davenport & Jones, 2005, Donat 2006, Lindsey, 2009, Moats, 2000). In short, research shows that 100 Easy Lessons combines a method for ensuring that the teacher-student relationship is structural in ways that simultaneously ensure that human capital comprising literacy is effectively passed to the next generation. As the next section details, dominant ideas in the field of education accomplish neither of these goals.

The Reading Wars: Whole Language vs. Phonetics

The debate between whole language and phonetics-based methodologies has been one of the most prevalent and politicized education debates in recent history (Davenport & Jones, 2005; Pearson, 2004). Whole language stems from the work of John Dewey and Col. Francis Parker; the latter’s “Language Experience Approach,” created in the late 1800s, is the primary basis for whole language. “Parker’s educational philosophy can be summed up with the following quotation ‘Reading should be first of all, interesting to the learner; and in order to be interesting, it must come close to and enter the child’s stream of thought’” (Stahl, 1999, p.13).
Thus, the contention that explicit instruction in basic literacy skills is not necessary has been prevalent in educational thought for over a century. The modern development of this premise, whole language, first espoused in the 1960s and 1970s, can be traced back Kenneth and Yetta Goodman, whose approach focused on the idea that learning to read is as natural as learning to speak (Kozloff, 2002). By the 1980s, the whole language movement took off, being covered by academic journals, magazines, The New York Times. By 1992, 83% of teachers reported a moderate or heavy emphasis on whole language in their classrooms. At the heart of whole language is the idea that reading is an authentic, “child-centered” process that assumes a child will read when they are ready to do so, and that using “unauthentic” methods of instruction including explicit teacher directed instruction, worksheets, segmentation of sounds and text books is undesirable (Stahl, 1999). Instead, whole language practitioners emphasize that exposure to literature and language will facilitate reading development when the child is ready. This approach is therefore based on the critical assumption that all children have equal opportunity to be exposed to literature and language. The whole language movement is seen by its devotees not as a method, but as a philosophy, and as the foundation of a political movement to reform American society. One whole language advocate, in 1994, said “I’ve come to the conclusion that I cannot advance a whole language agenda without taking on a political agenda—one that entails profound changes in the way we view curriculum, leadership, school organization, our roles and relationships within the institution, and the change process itself” (Stahl, p. 7, 1999). Deeply rooted in the whole language movement is the idea that parents, children and teachers are empowered in the learning process (Stahl, 1999). Teachers who were taught at schools of education in the 1980s and 1990s now lead schools of education today, and remain dedicated to and passionate about whole language ideology.
Whole language was adopted widely in American school systems, including statewide in California, in the late 1980s and early 1990s. The California implementation was spearheaded by Superintendent of Education Bill Honig, who, guided by popular enthusiasm for whole language, mandated whole language instruction state-wide. Unfortunately, there is no empirical evidence that whole language methods are effective in teaching reading, which Honig found out first hand when California’s reading scores plummeted. The percentage of students reading at an above average level in San Diego fell from 51% to 25% after whole language implementation. Similarly, evaluations in Kentucky, Texas, Virginia, and Wisconsin all found that whole language was ineffective in teaching children how to read and echoed the same results. These studies recommended integrating phonics instruction as the most effective method. Although the whole language philosophy— independent of their practice— sound relatively benign, their ineffectuality has caused a great deal of harm to school children who are unable to learn how to read under whole language instruction. “Reading Recovery,” a New Zealand-based, whole language oriented tutoring program for struggling readers, was found to be very expensive and largely ineffective. The largest educational evaluation ever conducted, Project Follow Through, which evaluated multiple methodologies and included 79,000 school children, found that explicit phonetics instruction was the most effective way to teach reading (Bessellieu, Rice, Kozloff, & Seidel, K.2000; Davenport & Jones, 2005; Donat 2006, Lindsey, 2009; Moats, 2000; Ryder, Tunmer, Greaney, 2007; Schug, Tarver & Western, 2001).

Phonetics-based direct instruction, in contrast to whole language, assumes that reading requires decoding a complex system of symbols and sounds, a set of skills that must be taught explicitly. Phonetics teaches individual sounds separately, then teaches students to string together sounds they are familiar with in order to read words. In short, phonetics-based
approaches teach readers the skills needed to “sound out” and decode unfamiliar words, while whole language rejects the need to acquire such skills- in effect requiring children to memorize each word in the English language. Educational researchers Ryder, Tunmer and Greaney (2007) describe the difference between these two approaches in the following passage.

A largely unidimensional constructivist approach to reading instruction …[whole language] may be suitable for most children who possess high levels of reading-related knowledge, skills and experiences … at school entry. However, [we] contend that struggling and at-risk readers will almost always benefit more from reading instruction that involves explicit and systematic teaching in alphabetic coding skills both in isolation from reading connected text and in combination with plenty of opportunities to practice and receive feedback on applying their developing word identification skills and strategies during text reading describes the process of learning to read in children who require a fairly structured and teacher supported introduction to reading as environment-dependent” (p.353).

The empirical evidence clearly points towards utilization of methods grounded in direct instruction of decoding skills, and not whole language- a fact that both state and federal legislators recognized when they mandated scientifically validated teaching methods in schools. The teachers who are dedicated to whole language, and more importantly the teachers of teachers who are dedicated to whole language, are committed to a method that has been found to be harmful to many children and provides disproportional access to educational success for white, economically secure students. Phonetics has been found to be “helpful for all children, harmful for none, and crucial for some” (Snow & Juel, 2005, p.518).
Whole language, with its concentration on heavy exposure to literature and words, clearly favors students whose parents have the education, opportunities, and resources to read to their children. Those parents, who are more likely to be middle to upper-class and more likely to be white, will therefore have children who are more academically successful, while lower class, minority students will continue to be disadvantaged from the first day of their academic career. Relationships with teachers and parents are the primary sources of social capital for young students, but when the human capital of teachers and parents is lacking, children suffer. While we cannot control the relationships between parents and children, we can influence the relationships between teachers and their students, and their ability to pass along substantive human capital in the form of effective reading instruction.

METHODS

Statistical Analysis

In order to investigate the impact of direct instruction phonetics tutoring on the literacy of the children participating in the Hillcrest Reading Program in the 2008-2009 academic year, a paired sample T-test of the children’s pre-, mid-year and post-test reading scores was performed and analyzed. Each participating child was tested three times, at the beginning, middle (at the end of the fall semester) and end of the academic year using the University of Oregon Dynamic Indicators of Basic Early Literacy Skills (DIBELS) measures. These tests have been “demonstrated to be reliable and valid indicators of early literacy development and predictive of later reading proficiency” (University of Oregon, 2009, p.1; Kaminski & Good, 1996). The DIBELS test, which has been in use since the 1980s, measures phonemic awareness, the alphabetic principle, fluency with connected text, vocabulary and comprehension- the five essential components to becoming a fluent reader. The Hillcrest Reading Program, using
appropriate DIBELS tests, focuses on phonemic awareness, the alphabetic principle and fluency measures when testing program participants.

The University of Oregon (2009) has defined the aforementioned concepts as follows. Phonemic awareness can be understood as the “ability of a child to identify and produce initial sounds of a given word [and] …the individual sounds within a given word” (p.1). The alphabetic principle can be understood as “a child’s knowledge of letter-sound correspondences as well as their ability to blend letters together to form unfamiliar ‘nonsense’ words” (p.1). Fluency with connected text can be defined as “a child’s skill at reading connected text in grade-level materials” (p.1). Each child is given the test(s) that corresponds with their grade level. The children in pre-kindergarten, kindergarten and first grade are given the Phoneme Segmentation Fluency (PSF) and Nonsense Word Fluency (NWF) tests. The children in second grade and above are evaluated utilizing the Oral Reading Fluency (ORF) test\(^1\). The tests are designed to be short, one minute, measures that assess a child’s reading abilities, and are available free of charge to any group, teacher or school who wishes to implement the measures (University of Oregon, 2009).

The University of Oregon has established benchmarks that each child should meet by each testing period. The children participating in the reading program are scored and monitored based on their ability to meet designated benchmarks that assess the progress of students relative to their likelihood of meeting the next benchmark requirement. From their scores, a student is determined to be at “low risk,” “some risk,” or “high risk” of missing the next benchmark requirement. By the end the academic year, kindergarten students must score above 25 on the NWF measure to be classified as “low risk”. Measuring PSF, the same group of students is at “low risk” of meeting the next benchmark when they score a 35 or above. By the end of the 1\(^{st}\)

\(^1\) See Appendix A: Methods and Statistical Tables for example testing materials for each measure, p. 55-57
grade, students must score above a 50 on the NWF measure and (as in Kindergarten) above a 35 on the PSF measure to qualify as “low risk”. Students who score above a 90 on the ORF measure at the completion of the second grade and 110 or above by the end of third grade are also categorized as “low risk” of missing the subsequent benchmark (University of Oregon Benchmark, 2009).^2

While the progress of the children in the Hillcrest Reading Program can be measured through DIBELS testing, it is important to note that this test does not take into account the reading instruction the participants are receiving in their schools. In order to gain a better understand of the isolated impact of the Hillcrest Reading Program on its participants’ literacy, data from two control groups of local children were analyzed to provide a comparison. These control groups were found through connections between members of the research team and educators in the region. The participants in the control groups were taken from two local public elementary schools; one traditional (C1) and one charter (C2). Each control group was selected because of their differing levels of involvement in direct instruction in the five essential reading skills.

Control group one consists of participants from a local elementary school that does not utilize direct phonetics instruction to teach reading. Overall, less than 50% of students enrolled at this school are reading at grade level, and only about a quarter of African-American students passed both the reading and math sections of the North Carolina End of Grade test (State Board, 2009). The school is designated as low performing (the lowest state designation), and is self-

^2 See Appendix A: Methods and Statistical Tables Table 1: DIBELS End of Year Benchmarks: Kindergarten-3^rd Grade, p. 58, for a complete table of at risk, some risk and high risk scores.

^3 In order to protect the anonymity of both control groups, no exact percentages will be provided.
identified as “inner city.”

Almost all of the students qualified for free or reduced lunch in the 2008-2009 school year (New Hanover, 2008). This control group allows for a comparison between the literacy of the children in the reading program and their peers who do not receive any explicit phonetics instruction. The low socio-economic status of the overwhelming majority of students provides a salient comparison to the children in the reading program, all of whom qualify for free or reduced lunch in New Hanover County Public Schools.

The second control group (C2) is from a charter school in North Carolina that provides curriculum-wide direct instruction to all children in all grade levels. They are designated as a school of distinction (the third highest level out of seven in the state of North Carolina system), and almost three quarters of all students passed the reading section of the North Carolina End of Grade test. However, only a third of African American students passed the reading section of the exam, and just below half of the students are low-income (State Board, 2009). This control group provides a comparison between children in the reading program that are receiving one-on-one tutoring and children who have received group direct instruction every academic year.

To conduct the analysis, we obtained DIBELS scores from the entire kindergarten through third grade from each school for the 2008-2009 academic year, from which the control groups were selectively chosen. The control group participants were matched based on grade level and pre-test DIBEL scores. Ideally, each case’s pre-test score and grade level would be identical to a case in the experimental group; however, in some instances identical scores were not available. I then selected cases in which scores varied by no more than 5 points, the reasoning being that a five point variation in score would not result in any qualitative difference

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4 In order to protect the anonymity of both control groups, references that included identifying information and websites were excised and/or modified.
in reading ability. Additionally, control group cases were always selected to match the experimental group’s risk level as determined by the University of Oregon. If scores varied by less than 5 points, but spanned two risk levels, a control group match was not made, and another case, in which risk levels were congruent was selected.

In three cases, students were matched by their risk levels and pre-test scores, but not their grade level. For example, T.P.\(^5\) was a learning disabled student in the 3\(^{rd}\) grade who scored an 8 on her ORF pre-test. Because her score was extremely low, there were no comparable grade-level matches in the traditional elementary school control group (C1) or in the charter school control group (C2). A second grade student in C1, who scored an identical 8 on her ORF test, was selected as her control match in C1, and a second grade student in C2 who scored a 7 on her ORF was her second control group match. In the second case, M.W. also in the third grade, scored a 19 on her initial ORF test in September. M.W. was matched with a third grader in C1, but was matched with a second grade student in C2, due to lack of comparable scores in the third grade in the second control group. Her C2 match scored an identical 19 on her ORF test time one. Because the difference between low risk second grade and low risk third grade students was not very large (from 69 in the spring of second grade to 79 in the spring of third grade), and all participants’ scores were significantly lower than the expected benchmark, after consulting with my thesis advisor, we determined that the match was suitable. In the third case, the experimental group participant S.C., a four year old preschooler, was matched with a kindergartener with identical scores. I made this match because there are no benchmarks for pre-Kindergarten, and there could be no grade level match made with elementary school data.

I chose this method of selection in order to determine how students reading at the same level at the beginning of the academic year progressed throughout the year while receiving...

\(^5\) I have referred to program participants only by their initials to protect their anonymity.
different types of reading instruction. While decreasing the sample size and excluding the remainder of the control group cases in order to match the small number of experimental participants (total n=15) has a positive effect on standard error and significance, it was necessary to maintain the integrity of the matched control group. Comparing the entire data set of C1 and C2 to the progress of the reading program would have provided a compelling comparison of the overall school performance. That comparison, however, is beyond the scope of this research. Instead the focus is on the progress of children in the same size experimental and control groups that performed comparably on their initial tests.

The data collected in the experimental group was also largely dependent on the attendance of program participants. There are several missing data points in the experimental data set, which was out of the control of the research team. All efforts were made to collect data for each testing period for every participant, but often times it was not feasible. While some children had consistent attendance, other children would come for a few days and then not attend tutoring for weeks at a time. When participants did not show up, there was no way to collect the data. The missing data are simply a function of attendance and the type of population with which we were working. Additionally, two of the older participants graduated from the reading program before the end of the academic year. These participants, C.F and Z.W., had progressed to the point that they could no longer benefit from the reading program. While this provided a challenge for the data collection, the success of the children is always our ultimate goal.

In order to test the significance of the reading improvement between groups, the change score was calculated for each case between T1 and T3. I then conducted an independent sample T-test on the change score between the experimental group and each control group, as well as between the control groups. Due to the low number of participants in the reading program
it would be difficult to obtain statistical significance using the standard $p=0.05$. We
determined, prior to running the models, that in order to demonstrate the differences in literacy
between the experimental and control groups, that $p=0.10$ would be acceptable for statistical
significance. While the independent T-tests were run for each of the three tests (ORF, PSF and
NWF) between the experimental and C1 groups; comparisons between the experimental group
and C2, as well as C1 to C2 were only conducted for the change scores of the Oral Reading
Fluency test. This was due to differing data collection for the Kindergarteners and 1st graders in
C2 which did not provide the scores needed for the comparison for the Phoneme Segmentation
Fluency and the Nonsense Word Fluency measures.

My research hypothesis was that the change scores for the experimental group, the
Hillcrest Reading Program, will be significantly higher than that of C1; but that C2, with its
thorough direct instruction approach to instruction, will have significantly higher change scores
than both the experimental group and C1. The null hypothesis was that there would be no
statistically significant differences in reading-skill progress between or among experimental and
control groups.

In what follows, I first summarize my findings from the statistical analysis of the reading
scores of the Hillcrest Reading Program participants with the two control groups. I then explore
the policy implications of ensuring that direct instruction methods are used in North Carolina
public schools, as mandated by NC § 115C-81.2. A qualitative exploration is also included in
Appendix C of the final thesis, which details my experiences as the founding program
coordinator of the Hillcrest Reading Program. It provides insight into my experiences working
with not only the program participants, but with parents and university student volunteers that

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6 Sangmoon Kim, personal correspondence, 2010.
7 Page 67.
are involved in supporting the program. Finally, it describes the steps taken by myself and the other members of the research team to create the program; from conception to formalizing procedures in preparation for the transition to the successive program coordinator. These reflections are based on daily field notes, research team emails and experiences over the past two years.

DATA ANALYSIS

The purpose of this analysis was not to create a generalizable result that demonstrates the success of direct instruction phonetic approaches to teaching reading. There have been multiple, large scale studies that have done just that; and as noted earlier, the literature speaks emphatically to the success of the methodology. Instead, these analyses were conducted to measure the success of the participants of the Hillcrest Reading Program beyond simply looking at pre- and post-test scores, in an attempt to determine if their progress was statistically significant. Additionally, it is important to acknowledge that while the comparisons between the experimental and control groups provide some insight to the progress of the program participants and similarly achieving students at other schools, these comparisons may not be generalized. The control groups’ small number of cases makes that difficult, and the progress results of children in the selected control groups cannot be generalized to the progress of the entire school. Although comparisons of overall school progress between the methodologies would further inform the literature on direct instruction and phonetics and their success in schools, it is beyond the scope of this analysis.

The paired sample T-Tests conducted showed statistically significant, consistent progress in all three measures (ORF, PSF, & NWF) for the Hillcrest Reading Program participants. Participants improved by a statistically significant amount between each test that was
administered. Mean scores on the Oral Reading Fluency Test (n=6), which indicates number of words read in one minute, rose from 46.00 at time one to 100.66 at time three (p=.000). Mean scores between test one and test two, test two and test three, and test one and test three, vary slightly due to missing data from program participants, but all indicate significant progress. With such a low number of total cases available, the significant progress is quite remarkable.

Similar progress also occurred among program participants in the Nonsense Word Fluency measures, which were administered to a smaller number of First Grade and Kindergarten students. Again, means vary between test times due to missing data, but the results echoed the same consistent progress. Between time one and time three, mean scores improved from 9.66 to 48.00 (n=3) nonsense words per minute (p=.084). Due to a large number of missing cases for the Phoneme Segmentation Fluency tests at time two and time three, I was only able to compare progress between test time one and two (n=3) for significance. However, the mean scores on PSF consistently increased between testing times. Between time one and time two, the mean score increased from .33 to 25.66 sounds per minute (p=.068).

Both control groups one and two also showed significant improvement within their sample between test time one and three, the majority of tests also indicating consistent and significant progress throughout the academic year. Control group one’s Oral Reading Fluency mean scores (n=7) increased from 59.00 words per minute at time one to 89.00 at time three.

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8 See Appendix A: Methods and Statistical Tables, Table 4: Hillcrest Reading Program, Control Group 1 & 2: Paired Sample T-Test: Oral Reading Fluency, p.59
9 See Appendix A: Methods and Statistical Tables, Table 5: Hillcrest Reading Program, Control Group 1 & 2: Paired Sample T-Test: Nonsense Word Fluency, p. 59
10 See Appendix A: Methods and Statistical Tables, Table 6: Hillcrest Reading Program & Control Group 1: Paired Sample T-Test: Phoneme Segmentation Fluency, p. 60
During the same testing periods, C1’s Nonsense word fluency scores (n=3) improved from an average of 17.33 words per minute at time one, to 59.33 words at time three (p=.027). Finally, C1’s Phoneme Segmentation Fluency score (n=3) rose from 21.33 to 50.00 for the same testing periods (p=.083). C1’s PSF score between T1 and T2 did not show any significant improvement (p =.125) with means increasing from 21.33 to 37.00.

Control group two, for which only ORF scores were analyzed (n=8), had means increasing from 51.87 at time one to 87.00 at time three (p=.001). Although control group one did show significant progress, C2’s progress was demonstrably more significant, with all scores reaching significance below a .05 level.

The paired sample T-test indicated consistent, significant progress throughout the experimental and both control groups. It is expected that scores would increase between testing periods for all cases and groups, because students are receiving some form of daily reading instruction at school. While the highly significant results of the paired test for the experimental group are encouraging, since participants are also in school, it is difficult to discern to what their progress can be attributed. Change scores, therefore, can provide insight as to the level of improvement, and how influential participation in the program was to student success.  

The results, across both control group comparisons, found statistically significant greater improvement for the experimental reading program group in the Oral Reading Fluency measure. The mean ORF change score from time one to time three for the reading program (n=6) was

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11 See Appendix A: Methods and Statistical Tables, Table 7: Hillcrest Reading Program, Control Group 1 & 2 Change Score Means, p. 60
54.66, compared to control group one’s (n=7) mean change score of 30.00. With equal variance not assumed, this was found to be significant below a .05 level (p=.031)\(^\text{12}\). The Nonsense Word Fluency and Phoneme Segmentation Fluency change scores were not significant between the experimental group and control group one. NWF change score comparison found a greater improvement for control group one (n=3; 42.00) than the reading program participants (n=3; 38.33). The difference, however, was not significant (p=.806). Because only one case had complete data for Phoneme Segmentation Fluency in the reading program, I was unable to compare scores for that measure. Mean change scores, however, were similar, with a change score of 30.00 for the experimental group (n=1) and 28.66 (n=3) for control group one.

A more surprising finding was the statistically significant higher improvement of reading program participants when compared to control group two, the charter school that utilizes direct instruction methodology\(^\text{13}\). The change score for the reading program (n=6) for the ORF measure was 54.66, compared to C2’s ORF change score of 35.13. This difference was found to be significant, also below the .05 level (p=.036). While the faintly higher level of significance in this test indicates the progress is slightly less differential than that of C1, it was anticipated that control group two would outperform both the experimental and first control group.

The explanation for the improvement of the experimental group over both of the other control groups may be that the program participants received a total of 24-28 hours of tutoring throughout the academic year, that to the best of our knowledge, the participants in control group

\(^{12}\) See Appendix A: Methods and Statistical Tables, Table 8: Hillcrest Reading Program & Control Group 1: Independent Sample T-Test: ORF, NWF, PSF, p. 61

\(^{13}\) See Appendix A: Methods and Statistical Tables, Table 9: Hillcrest Reading Program & Control Group 2: Independent Sample T-test: ORF, p. 61
one and two did not receive (Rice, 2009). Since all groups showed significant progress in the paired t-tests from time one to time three, the additional improvement seen by the reading program participants may be attributed solely to the additional instructional time. There is reason to believe however, based on previous literature, that the type of phonetics direct instruction the reading program provides to participants is related to level of their success. The additional instructional time in general would be helpful to any student, but it is likely that improvement was so significant because of the program of study utilized. The literature clearly indicates that direct instruction phonetics is the most pragmatic and successful way to approach reading instruction. This is supported by the findings that C2’s progress was more significant than that of C1’s from test one to test three. With such a small number of cases, it is also possible that one individual who failed to make any progress significantly influenced the results of the entire group. One case in C2 did not make any progress from test time one to test time three, which included a change score of 0 in the mean change score of the group. While this match was made because of its suitability according to the experimental group, it certainly contributed to the overall reduction of C2’s mean change score.

The analysis may also suggest that the older children benefit more from the reading program than the younger pre-k, kindergarten and first grade students. Because the experimental group’s number of cases in the younger age range was so small, it is difficult to make any conclusion about the younger participants. Based on the limited analysis and small number of cases, we can infer that the program was successful in significantly raising reading scores for participants, which is at least in part due to the curriculum with which they were taught.
POLICY ANALYSIS

Although it is encouraging to see statistically significant improvement amongst the children in the reading program, it is not entirely clear why a large number of North Carolinian children consistently perform poorly on statewide reading tests. After all, the North Carolina statute § 115C-81.2 states that the State Board of Education mandate a “standard course of study so as to provide school units with guidance in the implementation of balanced, integrated, and effective programs of reading instruction” in phonetics that is designed to close the achievement gap (Comprehensive, 1997, p.1). The statute states that

The General Assembly believes that the first, essential step in the complex process of learning to read is the accurate pronunciation of written words and that phonics, which is the knowledge of relationships of the symbols of the written language and the sounds of the spoken language, is the most reliable approach to arriving at the accurate pronunciation of a printed word” (Comprehensive, 1997, p.1).

While the State Board of Education and Department of Public Instruction have designed a plan in compliance with the statute that requires the inclusion of phonetics, many teachers are not teaching through phonetics (M. Kozloff, Personal Communication, October 2009; Moats, 2000; J. Rice, Personal Communication, October 2009). These methods have been scientifically proven as the most effective method to teach at-risk, low-income students how to read, yet the methods are not being implemented and the achievement gap remains (Schug, Tarver & Western, 2001). If these empirically validated methods were being used consistently, it is reasonable to assume that statewide reading scores would be significantly higher.

14 See Appendix B for full text of Comprehensive Plan for Reading Achievement.§ 115C-81.2.
15 See Appendix B for diagram of the North Carolina Comprehensive Model of Reading.
In addition, the statute also mandates that the University of North Carolina Board of Governors and the North Carolina Association of Independent Colleges and Universities ensure that teaching certification includes training in the empirically validated phonetics methodologies (Comprehensive, 1997, p.1). However many North Carolina pre-service teachers are not being taught to teach reading through phonetics, and state law is not being followed (M. Kozloff, Personal Communication, October 2009; Moats, 2000; J. Rice, Personal Communication, October 2009; L. Montague, Personal Communication, March 2010). Despite legal mandates and the potential harm to students, many North Carolina teachers are not taught to, and therefore do not teach, using phonetics due primarily to the personal pedagogical preferences of instructors.

Justification for Intervention

The failure of the public school system to teach students to learn how to read in school, and the failure of university schools of education to instruct pre-service teachers to effectively teach reading has resulted in a structurally unequal school system that promotes racial inequality (Owens, 2002; Minarik, 2006). Since Thomas Jefferson’s decree that public education should be provided to all American children, it has been the role of the state government to ensure that right. Although Federal mandates like No Child Left Behind have provided expectations and guidelines for state boards of education, it is within the power of the state government to oversee public education (Davenport & Jones, 2005; Donat, 2006) It is the sole obligation of the Department of Public Instruction and the University of North Carolina School System to ensure the right of each child to a public grade school education, an obligation that the state acknowledged with North Carolina statute § 115C-81.2.
Enforcing the previously established mandate is the most feasible way for the effective practices established by the North Carolina General Assembly to be implemented through appropriate reading instruction. Promoting phonetics instruction will enable more children—especially those who are racial minorities or economically disadvantaged—to learn how to read, succeed in school and improve their life chances.

Alternatives

The state of North Carolina has five alternatives to address the problem of the unenforced mandate and the subsequent achievement gap. They can choose to maintain the status quo and do nothing. Teachers will continue to teach as they have in the past, and some teachers will continue receive their teaching certification without having been taught phonetics methodologies; in short, the current situation will persist. The second alternative is to address enforcement by holding individual teachers accountable for their teaching methods. Teachers at priority or low performing schools will be evaluated based on their students’ abilities and their knowledge of teaching methodologies and will absorb all accountability for the results of the evaluation. Those found to be unsatisfactory must take a course in phonetics at cost to them, and if improvement is not made the teacher will lose his or her job.

The third alternative is to hold Local Education Agencies (LEAs), the North Carolina school districts, responsible. The LEAs must perform annual evaluations of their reading methodologies, and LEAs found to be noncompliant will be responsible for raising the performance of the students in their district. LEAs will absorb the cost of interventions for noncompliant teachers, and district superintendents will be held accountable for failure to raise student reading scores. The fourth option is to hold University of North Carolina schools of education accountable. The schools of education will provide a course in phonetics to all pre-
service teachers, which will be required to earn a teaching certification. They will also absorb the cost of creating these courses. The final option is a combination of options three and four. LEAs as well as Schools of Education will be held accountable for enforcing the phonetics mandate.\(^{16}\)

Evaluative Criteria

In order to determine the most plausible approach to fully enforcing the mandate in the North Carolina Plan for Reading Achievement in NC § 115C-81.2, it is important to evaluate the proposed alternatives on four criteria. The recommended alternative must overall effectively enforce the mandate that phonetics instruction is taught by all North Carolina elementary school teachers, in order to close the achievement gap. Each alternative will be evaluated for its effectiveness, whether or not the proposed policy will have its intended effect (Patton & Sawicki, 1993, p.208). Since the problem is one of enforcement of the currently existing statute, alternatives with high effectiveness will reflect the relatively highest number of teachers who will teach using phonetics, and therefore the highest number of students who receive that type of instruction. Effectiveness is the most important evaluative criterion, and therefore if an alternative does not have high effectiveness it will be eliminated.

A cost effectiveness measure will also be used for each alternative, which will calculate an estimate of anticipated costs for each alternative proposed. This will allow legislators to take into consideration a rough approximation of costs to aid in understanding rationales for the recommendations. Costs will be calculated based on expected direct expenses for courses, administration costs of the alternative, and evaluations. Costs to individual teachers, LEAs and the State DPI will all be calculated.

\(^{16}\) See Appendix B for a summary table of alternatives
The equity for teachers as well as the equity for students will be examined. Equity can be defined as the investigation of “whether certain groups or individuals will experience a disproportionate share of the burden “or the benefits” (Patton & Sawicki, 1993, p. 216). Because the needs of the teachers and of the students are not necessarily parallel, the two groups have been separated. Teachers, who are civil servants that work for relatively low pay, should not have to take on any excessive burden. However, teacher accountability is also important, so it is not expected that teachers will not experience any change due to the proposed alternatives. Alternatives that provide current teachers with no financial burdens or time requirements will be rated as highly equitable. Alternatives that require less than 5 hours per week of time and less than 75 hours total, as well as a minimal personal cost (less than $200) will be rated as medium. Alternatives that require more than 75 hours of time as well as more than $200 in personal costs will be rated as low. Equity for students will examine the extent to which students who need to receive help with reading instruction have access to that help. An estimation of students affected by the alternatives will be calculated using sizes of LEAs or school districts, and average class sizes. Each alternative will be ranked from highest number of students affected to the lowest. Alternative One: Maintaining the Status Quo

North Carolina teachers will continue to have no supervision of their methodologies for reading instruction, and Schools of Education will continue to have no supervision of the methods taught to pre-service teachers. The state statute § 115C-81.2, and the federal No Child Left Behind legislation will continue to be violated because empirically based reading instruction is not being uniformly utilized. Effectiveness is non-existent, because taking no action does not enforce the statute. Additional costs are non-existent as well, because no additional action is being taken. Equity for teachers is high because no additional time or money is spent at the
teachers’ expense. Equity for students is extremely low, whole language will continue to be taught in many classrooms and to teachers by those who are dedicated to the approach, resulting in no change in the literacy rate or the dropout rate. The inequality in the education system will remain the same, with no narrowing of the achievement gap.

Alternative Two: Accountability for Individual Teachers

This alternative will address the performance of teachers who work at elementary schools that are designated with the categorization of “priority school or low performing schools” for two consecutive years as designated by the North Carolina ABC score. The ABC Score, which examines “Accountability, teaching the Basics with an emphasis on high educational standards, and maximum local Control, is a rating designated to all North Carolina public schools by the Department of Public Instruction” (NC DPI ABCs, 2009, p. 3). Priority schools “are schools that have less than 60% of their students’ scores at or above [grade level], irrespective of making their expected growth standards, and are not low-performing schools” (p.7). Low-performing schools “are those that failed to meet their expected growth standards and have less than 50% of their students’ scores at or above [grade level]” (p.7). The schools that fall under this distinction would be required to conduct an evaluation of all teachers’ reading instruction abilities and methodologies in grades K-2. This evaluation would be designed and standardized by the North Carolina Department of Public Instruction (NC DPI). The evaluation would be performed by external NC DPI staff and would evaluate teaching methodology and student reading ability.

These evaluative criteria are based upon the curricular expectations that are already established by the NC DPI, which require reliance on scientifically-based research methodologies; phonetics and direct instruction. Teachers found to be breaking statute 115-C-105.35 will be placed on probation. Teachers on probation will be required to attend a semester
long, three hour credit course that teaches them to use phonetics instruction, which they are required to implement in their classroom. Teachers who are placed on probation will assume accountability for noncompliance, and will absorb the cost of the phonetics course. A follow up evaluation will be conducted the school year proceeding the teacher’s probation year. If adequate improvement in teacher’s evaluation is found, the teacher will be removed from probation. The Department of Public Instruction will conduct random 2nd year post-probation evaluations to ensure teachers continue to promote phonetics instruction. The two year time period reflects the ABC evaluation period mandated by State Board of Education (NC DPI ABCs, 2009). Per the ABC evaluation program, schools that are below line may qualify for assistance to subsidize teacher courses according to State Board of Education mandated funds; however if adequate improvement in teacher’s evaluation is not found, the teacher will be fired.

This alternative will ensure that each individual teacher in the state of North Carolina that teaches at a low-performing or priority school will use phonetics instruction methods. There are 259 elementary schools that meet the low-performing or priority school distinction (NC DPI, 2009). The assumption is made based on the national average of teachers per high poverty school, as calculated by the National Center for Education Statistics (2004), and the North Carolina Department of Public Instructions statistics on average class size that there will be approximately 31 teachers per school with 23 students per class (State Board, 2009; Toppo, 2008). This would result in ensuring that 184,667 students at the schools that need the most help were receiving phonetics direct instruction. However, teachers may use phonetics methods while being evaluated, or after a probationary period, but could resume whole language instruction when not being monitored by DPI. Teachers who are not at priority or low performing schools under this alternative are not held accountable at all and low-performing children at those
schools may still be receiving whole language instruction, therefore we cannot be sure that all students are being taught direct instruction methods. This alternative will not address the long term problem of new teachers who are not taught direct instruction methods at school, ensuring that DPI staff and teacher costs will be ongoing year after year.

The North Carolina DPI would have to hire 26 full time staff members to conduct evaluations, based on the assumption that each staff member would be required to evaluate 10 schools per year. Based on current minimum salaries for NC DPI evaluators of $50,940 annually, the cost would be $1,324,440 each year. Based on a worse case assumption that all 80% (25) of teachers at these schools are placed on probation and must pay $450\(^{17}\) to take a phonetics class, total economic costs for all teachers throughout the state would be $11,250. Equity for teachers is low, due to the costs they must absorb for the phonetics class. Teachers who are not using acceptable forms of reading instruction absorb all of the responsibility for low performing students and those who have learned phonetics instruction are at an advantage to those who attended schools of education who did not teach phonetics. The attempt to blame North Carolina teachers solely for low performing students, as well as perceived threats of job loss would most likely generate resistance and political upheaval in the state.

Alternative Three: Accountability for Local Education Agencies

This alternative requires all local school systems to be held responsible for evaluating and monitoring the progress of their teachers and their reading instruction methodologies. An Annual Performance Report of each LEA is currently required by statute\(^{18}\) attesting to the fact that teachers are utilizing appropriate scientifically supported methodologies. DPI will provide a

\(^{17}\) Cost calculated by using UNCW three hour course tuition ($400) and adding an estimated $50 charge for books.

\(^{18}\) Please see Appendix B for text of the Individuals with Disabilities Education Improvement Act which requires annual reports.
standardized format to the LEAs for the evaluation of teachers based on current standards. Specific measures ensuring phonetics-based instruction could be added to the current evaluation with relatively little effort by the NC DPI, using existing staff, at no additional cost. LEAs that report unacceptable levels of direct instruction phonetics will be placed on probation and expected to report to DPI with their anticipated course of action, and will be required to raise reading scores within two years of probationary period at cost to them. This is similar to the reporting process currently used by the DPI, which requires low performing schools to formulate a four year school improvement plan. The methods utilized by the LEA to improve use of phonetics instruction are at the discrepancy of the agency. Costs could be as high as paying for individual teachers to attend a course (based on previous calculations, approximately $11,250) to requiring one, three hour training course with a direct instruction expert, (approximately $300 per hour, for a total of $900\textsuperscript{19}). If reading scores are not raised after two year period, an evaluation will be done to examine the management and leadership of the school administrators in the local education agency.

There are currently 64 LEAs that need assistance based on current standards (NC DPI, ABCS, 2009). Assuming that all students in these LEAs will, after intervention receive phonetics direct instruction, and based on average LEA size according to NC DPI (6,860), approximately 439,040 students will be guaranteed to receive direct instruction. However, students who attend poorly performing schools within overall well performing LEAs will not be affected by this mandate, and there is no way to know if all teachers are teaching with direct instruction. Teachers will absorb less personal responsibility; and while they may have to attend courses, financial responsibility is minimal.

\textsuperscript{19} Based on personal experience working with Direct Instruction experts, Rice, J. Personal Correspondence, 2009.
Alternative Four: Accountability for University of North Carolina Schools of Education

The University of North Carolina is required under law to ensure that all teachers in NC schools of education are taught appropriate phonetics based instruction methods. Per § 115C-81.2 (c) “The University of North Carolina and with the North Carolina Association of Independent Colleges and Universities, shall review, evaluate, and revise current teacher certification standards and teacher education programs within the institutions of higher education that provide coursework in reading instruction”. This is currently not occurring, as whole language instructors continue to teach their preferred methodology at schools of education within the UNC system (M. Kozloff, Personal Communication, October 2009; Moats, 2000; J. Rice, Personal Communication, October 2009; L. Montague, Personal Communication, March 2010).

In order to address the source of the problem, the schools of education, this alternative will conduct thorough evaluations of the schools of education at the 16 UNC campuses to ensure that they are providing thorough, mandatory instruction in phonetics and direct instruction as dictated by DPI requirements. Evaluations will be done by external DPI staff, costs will be absorbed by each individual school of education as they are supposed to be complying to the current mandates. Based on the assumption that each school will have to hire someone to conduct an evaluation, or that the UNC school system will absorb the cost of $10,000 per each school, a $160,000 cost results for the UNC school system. Schools of education that are found to be noncompliant to this law will be placed on probation and will have one academic year to reorganize the curriculum so that direct instruction methods are thoroughly incorporated. Schools that do not require at least one 3 credit semester long class in phonetics and direct instruction for all elementary school teachers will be required to create that class within one academic year of enactment. This course will reinforce the legal mandate to teach phonetics. If
the schools already have faculty trained in direct instruction and phonetics, costs are minimal. If
the schools do not have appropriate faculty, they will have to hire one professor at the
approximate cost of at least $40,000. Assuming that ¾ of the universities already have
appropriate faculty, four additional faculty members will be hired, at a total cost of $160,000 to
the UNC school system each year. Students in schools of education must earn a C or higher in
the phonetics course to graduate and receive their teaching certification. When the policy is
implemented, students in their first or second year of university will be affected by this law.
Deans of Schools of Education will be held responsible for failure to comply with state statute
and their responsibilities will be evaluated should the school not comply with regulations within
the one year probationary period.

This alternative would require no cost to the NC DPI, and no cost to current teachers.
The UNC School system would have to pay, in the worst case scenario, $330,000 in one time
costs for evaluations and hiring new faculty. This cost would be distributed among schools that
are not currently complying with federal and state legislation. The schools that were required to
hire faculty would also absorb the cost of annual salary. Within two years of enactment, all
graduating teachers would receive reinforcement and instruction in phonetics and direct
instruction. All students working with new teachers would be taught with phonetics instruction,
which will raise their reading scores. There are approximately 1,332 new elementary school
teachers that graduate through the UNC school system per year (UNC, 2009). Based on the
national averages for class size, and assuming that an equal number of students in each grade
Kindergarten-5th, 18,381 students in Kindergarten, First and Second grade will be receiving
phonetics instruction each year. This alternative does not address the issue of current teachers in
the school system who do not know how to or choose not to teach reading through phonetics.
Equity for teachers is high because teachers will not be penalized or absorb responsibility for not knowing direct instruction because they will already know it. It is uncertain if teachers who have not been trained in direct instruction and phonetics, or earned their certification before the mandate will be able to teach reading as effectively. As more new teachers graduate into the system, more students are able to learn phonetics, raising reading scores, affecting the achievement gap and the drop-out rate. Students who have teachers who were certified before the mandate will not receive appropriate reading instruction.

Alternative Five: Accountability for Local Education Agencies and University of North Carolina Schools of Education

This alternative is a combination of alternative three and four. All UNC schools will be evaluated at the cost of $170,000, and Local Education Agencies must report the number of K-2 teachers who are not trained in phonetics instruction through the previously established evaluative procedures. LEAs that do not meet evaluative requirements will be required to train their teachers in direct instruction, within the two year probationary period, at the previously established cost of $900-$11,250. This method reaches the highest number of students, with an initial total of 457,421, with an additional 18,381 for every additional year, ranking highest in effectiveness in terms of number of students reached. Equity for students is also high, because it ensures that students in LEAs that need the most help are aided immediately. Additionally, teachers will continue to graduate with the skill set needed to effectively teach reading. This alternative does not take into consideration the students who are at poor-performing schools in high-performing LEAs, but these students may be reached through the new elementary school teachers graduating in subsequent years from UNC schools of education. This method is also highest in equity for teachers, who do not absorb any costs for training in phonetics instruction.
Recommendation

Each alternative, with the exception of Alternative one, addresses, in some form, the problem of the unenforced mandate to teach direct instruction curriculum. Alternative One, with no effectiveness, was immediately eliminated. Alternative two, which places an unwarranted burden on the teachers, was also eliminated. The low equity for teachers places an unnecessary responsibility on the teachers in the state, which would be a politically unpopular mandate. The costs expended by the teachers and the extreme cost of evaluating hundreds of North Carolina teachers for the NC DPI makes the financial cost too high, especially during economically straining times. With the third lowest number of students reached, it also ranks low in effectiveness. The alternative to hold the LEA responsible for enforcing the mandate is the most cost effective option, and also has high teacher equity. The fact that the long term problem is not addressed results in medium equity for students, although it reaches the highest number of students in the short term. With just over 18,000 students being reached each year in alternative five, it on its own is not worth the cost to the UNC school system.

Alternative five, however, meets both long term and short term goals and provides the highest level of effectiveness. Although it is not the most cost effective option, the investment into the change in the UNC school system will ensure that within several years, the majority of teachers will know how to teach reading through phonetics, and the majority of students will be taught through that method. The teachers who are currently not teaching direct instruction will have access to training in the methods at low cost to them. It is for this reason that alternative five is the recommended course of action.

It is essential that action is taken to improve literacy. Twenty-two million people each year join the ranks of the functionally illiterate in the United States according to the U.S.
Department of Education, and 43% of individuals with the lowest literacy skills live in poverty. In data gathered before the economic downturn, 70% of illiterate Americans are not working full time (National Illiteracy, 2007). The United Way has estimated that American illiteracy costs the country $20 billion annually, and $5 billion of tax dollars support individuals “receiving public assistance that are unemployable due to illiteracy” (National Illiteracy, 2007, p.3). The impact of adult illiteracy starts in childhood, and perpetuates itself in further generations. Children who are raised in a home with at least one illiterate parent are twice as likely to grow up to become illiterate themselves, as they do not have the resources at home or the instruction at school to effectively learn to read (National Illiteracy, 2007).

Further, the individual, state and national economic impact of dropping out of high school is contributing to significant financial losses every year in the United States. North Carolina has an annual graduation rate of approximately 66%, with over 41,000 students dropping out of high school. A high school drop out will make $9,634 less annually than their peers with a high school diploma and is more likely to be unemployed, need government assistance, or be imprisoned (Alliance, 2007). The Alliance for Excellent Education has calculated that the lifetime contributions to the national economy would have increased by $390 billion if the American students who dropped in out in 2007 had graduated. The state of North Carolina would have had a $10.79 billion increase in lifetime economic contributions if the same cohort of dropouts had received their diplomas (Alliance, 2007). While the entire high school dropout rate can not be blamed on illiteracy, the inability for students to actively participate in school and read on grade level logically contributes to the attrition in graduation rate. In 1993, The National Adult Literacy Survey found that children who do not develop some basic literacy at the beginning of their school career are three to four times more likely to not obtain their high
school diploma (National Illiteracy, 2007). By improving literacy education in the state, we will increase the life chances of students as well as the state economy.

In a time of economic recession, there should be a great deal of motivation to invest in the economic future of the state and its residents. The intangible benefits of greater literacy and decreased high school drop out rates will provide an economically sound, educated population in the state of North Carolina, and it is in the best interest of the state that this policy is implemented so that phonetics literacy instruction methods are utilized in schools statewide.

CONCLUSION

The research presented in this thesis has clearly demonstrated that the Hillcrest Reading Program has a significant and positive effect on the literacy of its participants, even over that of both control groups compared. While it was expected that reading program participants would have significantly higher progress than control group one, it was surprising to find that program participants also improved more than those in the second control group. This may be largely due to the small number of cases in each group, which makes it difficult to determine if the progress of all of the students in the school is comparable to that of the reading program. It may also reflect the reality that the direct instruction curriculum used at C2 employs group instruction, versus the one-on-one instructional structure used in the Hillcrest Reading Program. Future research should be conducted comparing the DIBELS scores of both control groups in order to more certainly determine if the methodologies lead to significantly different results.

While the results of my statistical analysis do not strongly indicate the success of the control group two over the experimental group or control group one, they do, without question, indicate that the additional phonetics instruction program participants receive provides them with tangible benefits. Testing scores of a different literacy after-school program that utilizes whole
language approaches would also speak to the success of the program and provide further
evidence that direct instruction phonetics is a more effective instructional approach.

The reading program, which is currently in its second year, was created in response to the
academic achievement gap in the county between minority and white school children, which is
not being actively addressed by local policy makers. A longitudinal study of program
participants, their continuing progress in school, their graduation rates and college attendance
rates would be able to demonstrate the ability or inability of the program to affect the long term
life chances of past participants.

The inherent and underlying problem with literacy achievement in North Carolina is the
failure of policy makers to enforce, and stakeholders to obey the state mandate to provide direct
instruction phonetics in schools. Instead, emphatically unsuccessful whole language approaches
are still being used in schools and taught in schools of education, to the detriment of the low-
income at-risk children who need the most help. While the reading program is able to improve
the literacy of a small number of school children, there are hundreds in our city and hundreds of
thousands in our state that are not able to be reached by nonprofit extra-curricular programming.

The answer lies in the state’s ability to influence the actions of instructors at the
University of North Carolina schools of education; whose reliance on whole language
approaches is ethically questionable and in violation of North Carolina state law. Until action is
taken at the state wide level, no improvement will be seen in the vast inequality found in the
state’s education system. The economic and social implications of this inequality are blatant,
and a failure to change policy will ensure that yet another generation of African American
children is not granted an equal opportunity to succeed.
LITERATURE CITED


Lindsay, J. (2009). What the data really show: Direct instruction really works! The dirty little secret from the biggest education study ever. *J*, 1-9.


APPENDIX A: METHODS AND STATISTICAL TABLES

Phoneme Segmentation Fluency Test Instrument

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TOTAL: ______ 


Nonsense Word Fluency Test Instrument

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Total correct letter sounds (CLS): _____
Total words recoded completely and correctly (WRC): ___
Error Pattern:
When I say "begin", start reading aloud at the top of the page (point). Read across the page (point). Try to read each word. If you come to a word you don't know, I'll tell it to you. Be sure to do your best reading. Ready, begin. At the end of 1 minute, place a bracket( ) after the last word read and say "Stop".

Ice Cream

It's so hot. Ice cold ice cream cools me off. I like strawberry the best, but rocky road is good, too. My brother likes bubble gum and vanilla.

The ice cream man comes down our street in the summer. He has drumsticks, ice cream bars, and bonbons. I like bonbons best.

When he gets close he toots his horn. All the kids hear the horn. They get some money and go outside to wait. They sit on the sidewalk until he comes. They want to buy something to eat. His ice cream tastes good.

But the best ice cream of all you can't buy. My mother makes it. She uses our old ice cream freezer. She puts milk, sugar and eggs inside.

I get to turn the handle. She puts lots of ice inside. My hand gets cold. It takes a long time. My arm gets very tired turning the handle. But then it is ready to eat. And my mom lets me lick the dasher. I think the very first taste is the best. Yum! That's the best part of all.

TOTAL:
Table 1. DIBELS End of Year Benchmarks: Kindergarten-3rd Grade

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Table 2. Hillcrest Reading Program, Control Group 1 & 2 Frequencies

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<td>NA</td>
<td>NA</td>
<td>NA</td>
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</table>

Table 3. Hillcrest Reading Program, Control Group 1 & 2 Test Means

<table>
<thead>
<tr>
<th></th>
<th>ORF Mean T1</th>
<th>ORF Mean T2</th>
<th>ORF Mean T3</th>
<th>NWF Mean T1</th>
<th>NWF Mean T2</th>
<th>NWF Mean T3</th>
<th>PSF Mean T1</th>
<th>PSF Mean T2</th>
<th>PSF Mean T3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hillcrest</td>
<td>52.25</td>
<td>79.88</td>
<td>100.66</td>
<td>8.66</td>
<td>28.85</td>
<td>43.50</td>
<td>0.33</td>
<td>25.66</td>
<td>30.00</td>
</tr>
<tr>
<td>C1</td>
<td>52.62</td>
<td>53.27</td>
<td>69.80</td>
<td>34.12</td>
<td>24.14</td>
<td>42.71</td>
<td>26.00</td>
<td>24.85</td>
<td>44.71</td>
</tr>
<tr>
<td>C2</td>
<td>51.87</td>
<td>77.37</td>
<td>87.00</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
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Table 4. Hillcrest Reading Program, Control Group 1 & 2, Paired Samples T-Test: Oral Reading Fluency

<table>
<thead>
<tr>
<th></th>
<th>Oral Reading Fluency T1 to T2</th>
<th>Oral Reading Fluency T2 to T3</th>
<th>Oral Reading Fluency T1 to T3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Std.</td>
</tr>
<tr>
<td>H</td>
<td>52.25</td>
<td>79.87</td>
<td>14.62</td>
</tr>
<tr>
<td>C1</td>
<td>52.63</td>
<td>70.50</td>
<td>21.61</td>
</tr>
<tr>
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<td>77.38</td>
<td>12.52</td>
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*** Significance < .001  ** Significance < .050  * Significance < .1

Table 5. Hillcrest Reading Program & Control Group 1, Paired Sample T-Test: Nonsense Word Fluency

<table>
<thead>
<tr>
<th></th>
<th>Nonsense Word Fluency T1 to T2</th>
<th>Nonsense Word Fluency T2 to T3</th>
<th>Nonsense Word Fluency T1 to T3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Std.</td>
</tr>
<tr>
<td>H</td>
<td>8.66</td>
<td>33.66</td>
<td>19.12</td>
</tr>
<tr>
<td>C1</td>
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*** Significance < .001  ** Significance < .050  * Significance < .1
Table 6. Hillcrest Reading Program & Control Group 1, Paired Sample T-Test: Phoneme Segmentation Fluency

<table>
<thead>
<tr>
<th></th>
<th>Phoneme Segm. Fluency T1 to T2</th>
<th>Phoneme Segm. Fluency T2 to T3</th>
<th>Phoneme Segm. Fluency T1 to T3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Stnd. Dev.</td>
</tr>
<tr>
<td>H</td>
<td>3</td>
<td>0.33</td>
<td>25.66</td>
</tr>
<tr>
<td>C1</td>
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<td>21.33</td>
<td>37.00</td>
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*** Significance ≤ .001  ** Significance ≤ .050   * Significance ≤ .1  
^ Unable to compute because n=1

Table 7. Hillcrest Reading Program, Control Group 1 & 2 Change Score Means

<table>
<thead>
<tr>
<th></th>
<th>ORF Mean Change</th>
<th>NWF Mean Change</th>
<th>PSF Mean Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T1-T3</td>
<td>T1-T3</td>
<td>T1-T3</td>
</tr>
<tr>
<td>Hillcrest</td>
<td>54.66</td>
<td>38.33</td>
<td>30.00</td>
</tr>
<tr>
<td>C1</td>
<td>30.00</td>
<td>42</td>
<td>28.66</td>
</tr>
<tr>
<td>C2</td>
<td>35.13</td>
<td>NA</td>
<td>NA</td>
</tr>
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</table>

59
Table 8. Hillcrest Reading Program & Control Group 1: Independent Sample T-Test: ORF, NWF, PSF

<table>
<thead>
<tr>
<th></th>
<th>Change Score ORF Test 1 to Test 3</th>
<th>Change Score NWF Test 1 to Test 3</th>
<th>Change Score PSF Test 1 to Test 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>Std. Dev</td>
</tr>
<tr>
<td>Hillcrest</td>
<td>6</td>
<td>54.66</td>
<td>13.16</td>
</tr>
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<td>C1</td>
<td>7</td>
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<td>21.86</td>
</tr>
</tbody>
</table>

*** Significance < .001  ** Significance < .050  * Significance < .1
^ Unable to compute because n=1

Table 9. Hillcrest Reading Program & Control Group 2: Independent Sample T-Test: ORF

<table>
<thead>
<tr>
<th></th>
<th>Change Score ORF Test 1 to Test 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Hillcrest</td>
<td>6</td>
</tr>
<tr>
<td>C2</td>
<td>8</td>
</tr>
</tbody>
</table>

*** Significance < .001  ** Significance < .050  * Significance < .1
<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>7</td>
<td>30.00</td>
<td>21.86</td>
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<tr>
<td>C2</td>
<td>8</td>
<td>35.13</td>
<td>17.85</td>
<td>0.631</td>
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</table>

*** Significance ≤ .001  ** Significance ≤ .050   * Significance ≤ .1
§ 115C-81.2. Comprehensive Plan for Reading Achievement.

(a) The State Board of Education shall develop a comprehensive plan to improve reading achievement in the public schools. The plan shall be fully integrated with State Board plans to improve student performance and promote local flexibility and efficiency. The plan shall be based on reading instructional practices for which there is strong evidence of effectiveness in existing empirical scientific research studies on reading development. The plan shall be developed with the active involvement of teachers, college and university educators, parents of students, and other interested parties. The plan shall, if appropriate, include revision of the standard course of study, revision of teacher certification standards, and revision of teacher education program standards.

(b) The State Board of Education shall critically evaluate and revise the standard course of study so as to provide school units with guidance in the implementation of balanced, integrated, and effective programs of reading instruction. The General Assembly believes that the first, essential step in the complex process of learning to read is the accurate pronunciation of written words and that phonics, which is the knowledge of relationships of the symbols of the written language and the sounds of the spoken language, is the most reliable approach to arriving at the accurate pronunciation of a printed word. Therefore, these programs shall include early and systematic phonics instruction. The State Board shall provide opportunities for teachers, parents, and other interested parties to participate in this evaluation and revision.

(c) In order to reflect changes to the standard course of study and to emphasize balanced, integrated, and effective programs of reading instruction that include early and systematic phonics instruction, the State Board of Education, in collaboration with the Board of Governors
of The University of North Carolina and with the North Carolina Association of Independent Colleges and Universities, shall review, evaluate, and revise current teacher certification standards and teacher education programs within the institutions of higher education that provide coursework in reading instruction.

(d) Local boards of education are encouraged to review and revise existing board policies, local curricula, and programs of professional development in order to reflect changes to the standard course of study and to emphasize balanced, integrated, and effective programs of reading instruction that include early and systematic phonics instruction.
Figure 1. The North Carolina Comprehensive Model of Reading

### Table 11. Summary of Policy Alternatives

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Effective Cost for Teachers</th>
<th>Cost for LEA</th>
<th>Cost for NC DPI</th>
<th>Cost for UNC System</th>
<th>Equity for Teachers</th>
<th>Equity for Student</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>N/A</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>184,667 students</td>
<td>$450 per teacher on probation</td>
<td>$0</td>
<td>$1,324,440 per year</td>
<td>$0</td>
<td>Low</td>
</tr>
<tr>
<td>3</td>
<td>439,040 students</td>
<td>$0</td>
<td>$900-$11,250</td>
<td>$0</td>
<td>$0</td>
<td>Medium</td>
</tr>
<tr>
<td>4</td>
<td>18,381 per year</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$330,000</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>439,040 plus 18,381 each additional year</td>
<td>$0</td>
<td>$900-$11,250</td>
<td>$330,000</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

**Individuals with Disabilities Education Improvement Act**

“In accordance with 20 U.S.C. 1416(b)(1) of Part B of the Individuals with Disabilities Education Improvement Act (IDEA or Part B), each State has in place a Part B State performance plan (Part B - SPP) that evaluates the State's efforts to implement the requirements and purposes of Part B and describes how the State will improve such implementation. In accordance with 20 U.S.C. 1416(b)(2)(C)(ii) and 34 CFR §300.602, each State must report annually to the public on the performance of each local educational agency (LEA) located in the State on the targets in its Part B - SPP. The State also must report annually to the Secretary on the State's performance under its Part B - SPP. This report is called the Part B Annual Performance Report (Part B – APR).” (http://www.ncpublicschools.org/ec/plan/)
APPENDIX C: QUALITATIVE OBSERVATIONS

Introduction

Before I set foot in my first graduate school class, I was offered the invaluable opportunity to participate in a research project that allowed me to not only gain hands-on experience in academically rigorous social science methodologies, but to help create a program that provides an important service to community members. As the founding program coordinator of the Hillcrest Reading Program, I was given almost free rein to organize and structure the program as I saw fit. While my colleagues had significant input into the final decisions I made, structuring the program was my responsibility, and I was given the autonomy for which many graduate students often yearn. Other members of the research team handled curricular specificities and acted as the university and community liaison, which allowed us to build a successful program from the ground up. In addition to providing the reading program after school from Monday through Thursday, we were also following university Institutional Review Board regulations and collecting data on our efforts.

As a group of mostly white academics, we came in as outsiders to the Hillcrest neighborhood, a public housing community vastly different from the upper middle class background from which I come. Although I had worked with African American low-income youth for years, and came armed with my sociological knowledge of race and structural inequality, there were still boundaries that needed to be broken down and trust that needed to be built. What followed was a first year pilot program with many challenges and even more successes. Creating and running a program, working with tutors, parents, children and other stakeholders was nothing if not a learning experience. As the Hillcrest Reading Program
continues to grow, we will continue to grow as well; learning from our mistakes and our accomplishments in order to maintain a permanent presence in the community.

Starting Out: Building Community Rapport

My first assignment as the program coordinator of the reading program was to attend the July 2008 neighborhood association meeting with the research team to introduce ourselves to the residents and explain what we wanted to do there. Months before the UNCW-WHA Community Campus was opened, residents knew very little about what the partnership would entail, and as the first after school program at the center we felt obliged to make it a success. While the half dozen senior citizens who attended the neighborhood meeting were enthusiastic and supportive of our goals, we needed to gain access to the parents in the community. Without the consent and acknowledgement of the children’s caretakers, we would not be able to find participants for our program.

During an open house created to raise awareness of the community campus and its programs, we gleefully registered a handful of participants. Knowing that our capacity for the program was 15 children due to space limitations, we sought out additional participants any way we could. While the campus coordinator and I passed out flyers door to door in the neighborhood, another graduate student on the research team paid older kids a dollar to get their younger siblings and cousins enrolled in the program. We were accepting not only Hillcrest residents, but children and grandchildren of residents, and any other child who could find their way to the center during tutoring hours. By our start date, September 22nd, 2008, we had registered 10 children and accounted for all of the particulars for the program. Our tutors were trained, our paperwork was in order, and our after school snacks were served. On the first day,
two of our 10 registered children showed up. Although it was heartbreaking to have prepared for months to find only two children at the center, it only improved from that point on.

As the days continued, more participants that had enrolled came to be tutored, and even more students came in wanting to register for the reading program. Word of the community campus began to spread, and participation in all of the campus programs increased. Once the residents, no doubt skeptical at first, realized that we were there to help their children learn to read, give them a healthy snack and a safe place to be after school, we had a consistent group of children coming to the center Monday through Thursday.

In addition to building rapport and trust with the Hillcrest residents, we also had to establish ourselves at the university, and to convince three to four dozen students that our efforts would be a good investment of their already limited time. Dr. John Rice, as primary researcher, handled the bureaucratic measures needed to establish a university trust fund and website, which was facilitated by the eager support of several enthusiastic faculty and staff members. The Hillcrest Reading Program was able to operate under the University of North Carolina Wilmington’s 501(c)3 nonprofit status, which enabled us to access resources available to local community organizations.

We were unsure, however, how much student interest we would find. The requirements for volunteering were more time consuming than the usual drop in, periodic commitment preferred by most young adults, requiring a consistent two day a week obligation throughout the semester. Prior to beginning tutoring, tutors also needed to complete the one time three-hour training in direct instruction and the program text *Teach Your Child to Read in 100 Easy Lessons* (Engelmann, Haddox, & Brunner, 1986). In addition, the university Institutional Review Board, in an effort to protect the children we were studying, required each student volunteer to take an
extensive online ethics course to become certified to conduct human participant research. (This requirement was later dissolved by the IRB during the following academic year).

In order to ensure that we had enough students to run the reading program, we needed to recruit two tutors for every tutee, each willing to put in the 6-7 hours of training on top of the one hour, bi-weekly commitment. We did not know, however, how many children would be participating, because we were recruiting at Hillcrest simultaneously. Deciding it would be better to over recruit, each member of the research team actively recruited as many UNCW students as possible. Drs. Rice and Kozloff told all of their classes about the tutor training, and I recruited with university student organizations and volunteer forums. I made an effort to reach out especially to minority student groups so that the children in the reading program might have the chance to work with not only college students, but college students who looked like them. We had over 100 people show up on a Friday evening for the opportunity to learn the direct instruction methodology we were using and vie for one of the 30 some spots we had available at Hillcrest.

Conquering “I can’t read” And Other Obstacles: Working With The Children In The Hillcrest Reading Program

Not unlike any other job or program that caters to children, while most days are delightful and fun filled, there are others that are equally difficult and frustrating. We were working with a group of children that had never been given a fair chance, but despite that fact were bright, capable and full of joy. From the beginning of the reading program, tutors would come to us with stories of children, sometimes as young as four or five, who told us they couldn’t read, that they were stupid and they didn’t want to do it. Much to the credit of the volunteers in the
program, these children still continued to complete their lessons, and all of them made significant progress throughout the year.

One child, who is learning disabled, was functionally illiterate when she started in the reading program, though she was in the third grade. One afternoon the little girl was adamant that her father come in to the center to see her read her story. The little girl read a passage to her father with the guidance of her tutor, making no mistakes, beaming the whole time. Her father looked back at her and said “See, now I don’t want to ever hear you say you can’t read again”. He then explained to us that his daughter had been regularly telling people that she was unable to read.

This anecdote, among others, reinforced to us that these children needed consistent encouragement to succeed at a task not many expected them to. Positive reinforcement and daily celebrations of success have always been the norm at Hillcrest. Students were given stickers, and then later a small amount of candy to encourage them to complete their lesson, and a pickle at the end of the day if they were on task and had good behavior. Every small victory—learning a new sound, reading a new word, finishing a whole story—was over celebrated. I took it as my personal responsibility to convey to the children that academic success was important and special. When they know that their hard work is going to be recognized, the children are more likely to perform, but more importantly, to be proud of their achievements. Establishing good behavior, consistent participation and increased literacy as norms in the program creates an environment where success is encouraged by peers and mentors alike.

While student success was—gratefully—the norm, I also had my fair share of problems working with the children. Student attendance, for one, was an especially troubling problem because it was largely out of my control. Even further out of my control was the weather, which
had a direct, negative effect on attendance. After a while I began to tell tutors that rainy days are always ideal days to stay at home to work on a paper or study for their upcoming test.

Although the majority of children came to the community campus of their own volition faithfully after school, some children would show up and then were absent for days or weeks at a time. Beyond contacting parents and guardians, there was little that I could do to improve the poor attendance of some of the children in the program. In addition to children missing instructional time, poor attendance caused some tutors to consistently come down to the center only to find their child was absent, which significantly impaired their experiences in the program. When we were able to test the students with low attendance, it was clear that missing tutoring negatively impacted their reading progress, but often times when children had poor attendance, it meant that we were unable to conduct progress testing at all.

The majority of children in the reading program were consistently well behaved, especially after I issued the “Please and Thank You” mandate for all children in the program. We did, however, run into disciplinary problems with some children that could often be attributed to family issues or simply bad days. We knew that some children had a more difficult home life, and thus were more lenient when it came to making them work with their tutor. My fall 2008 field notes indicate one day that “T. was crying because she missed her mom, who is in jail. She got placed with the older kids who are reading [a novel] so she could listen to the story”. While completion of a lesson was always the goal each day, when it was clear that students were struggling emotionally or physically, they were never forced to participate. Rather, we encouraged reading a story book or listening to a story being read, with the assumption that exposure to some literature was better than no participation at all.
In general the younger children were more apt to refuse to be tutored, become distracted or throw a tantrum, mostly as a function of their age. It often took younger children in the program who were not enrolled in school or pre-school a few weeks to grow accustomed to the norms and practices of the programs, as they were not accustomed to any sort of academic structure. Many children would get upset when I made them stop playing computer games in the center’s computer lab at 4:00, so that they could begin reading with their tutor. One tutor, who was trying to get his or her sulking child to participate in a lesson, asked him what he wanted to be when he grew up. He promptly responded that he “wanted to be a cop, so [he] could arrest Miss Jess for making [him] get off the computer”.

Working with the children in the reading program presented us with the aforementioned and rather predictable behavioral issues; however there were some issues that we did not anticipate being problematic that were caused by our own policies. Each child was placed with the same two tutors each week, with the intended purpose of fostering a positive, healthy relationship with a college-aged mentor. This most usually resulted in a successful match, where volunteers grew to be invested in their child’s progress, and children enjoyed their relationship with their tutors. While this assignment most often served its positive function, some children became too attached to their tutors and unwilling to work with other volunteers. My field notes indicate that one Wednesday, O. “didn’t want to be tutored and wanted to work with his Tuesday/Thursday tutor instead”, who he said he liked better. One or two other children, who are no trouble when their regularly scheduled tutors are available, were reduced to tears or tantrums if they found out that they are unable to work with their usual tutor on a certain day. These rare instances are not detrimental enough to order to abolish the entire policy of matching
tutors with children, but it does shed light on the consequences of unanticipated latent dysfunctions.

The most consistent issue that was brought up at the reading program was that of the relative deprivation of the children. Low income children have been theorized to be especially aware of relative deprivation, or evaluating their relative standing compared to that of their peers or classmates (Duncan, Brooks-Gunn, Klebanov, p.298, 1994). In the reading program, this was observed daily. My early field notes indicate that “we had to cut off kids that are not in the program from snacks because they were complaining that some kids got this and some kids got that.” While we wanted to provided snacks and incentives to the children, I had to be vigilant about the egalitarian distribution of snacks, candy, stickers, rewards, or anything that might be deemed valuable. The slightest excess or perceived deprivation was always brought to my attention, and if one child somehow maneuvered an additional sticker or pickle, fourteen others would somehow find a way to let me know about it. In order to deal with relative deprivation, we made every attempt to keep the distribution of resources (however trivial) equal. We also had to speak to the tutors about giving special gifts or treats to their tutee. While the tutor, acting in good faith just wanted to express her or his affection for their child, every other child in the reading program would make it known that it was not fair that they did not receive that particular treat.

All of the disciplinary issues in the reading program have been benign in nature, with extremely rare cases of physical violence that can largely be attributed to rough play. After one particularly frustrating day of telling countless children to stay out of the campus kitchen, I placed a line of duct tape across the kitchen threshold. Immediately, the children stayed out of the kitchen. The concrete concept of “not crossing the line” was much easier to conceptualize
than staying out of a designated space. Minor infractions like kitchen trespass in the reading program were dealt with by revoking computer privileges and denying children their coveted after-program pickle. However, bad language or physical violence was always dealt with by sending the child home for the day. These problems, both minor and more severe, were few and far between, and for the large majority of the time each child effectively participated in the program and completed their tasks for each day. They are the inspiration for the program, and their good spirits and contagious smiles are the reason why staff and volunteers come to the reading program each day.

Working with Parents

Many of the interactions, both positive and negative, between the staff and the children in the reading program are due, at least in part, to their home environment. Most households in the Hillcrest neighborhood are female-headed, and many children are being raised solely or with the help of their grandmothers and other female relatives. The first thing that I noticed about parents in the Hillcrest Reading Program is that I very rarely noticed them. The majority of children come to the center from the bus or their home without their parents, who I rarely met. Even after working for two years in the neighborhood, there were still parents that I did not know and never met. Coming from an upper middle class background, where parents are a staple at after school activities and weekend events, it was strange at first to witness the perceived lack of parental involvement. In addition, parents were often difficult to contact, and had phone lines that were sporadically in service, often without answering machine or voicemail capabilities.

It was a crucial mistake to initially misunderstand the lack of parental visibility at Hillcrest with a lack of involvement. Often parents are working multiple jobs, and are not home at 4:00 when the program starts, so are unable to walk their children to the center. In other
instances, elderly grandparents are left in charge of multiple children, and cannot leave others to walk some to the community campus.

When I did interact with parents, it was—in all instances but one—an extremely positive experience. Parents are supportive of the work we are doing in the reading program, and appreciate the services we are providing. When disciplinary problems arise, mothers are quick to come to the center to speak to their children when they are able. In one case, a young mother with three boys in the program firmly told her son that he was here to learn, and that we were there to help him, and if he had any intention of playing any basketball that year that he had better participate in the reading program. Another little boy who was having trouble adjusting to his new tutors, had both his grandmother and father come down to discuss his behavior, with the promise that the boy would be back with a better attitude. The following week, the little boy was back, and his behavior was in fact, much improved. One father drove his daughter from the next town over so that she could receive tutoring in the program every day, and others simply expressed a great deal of gratitude for our work. After walking a child home one day, another young mother who usually avoids conversation with me, thanked me enthusiastically for the program. She went on to tell me that her daughter had just received her third quarter report card. While her first quarter report card indicated that her daughter was reading on the lowest level, her most recent report indicated she had improved to the highest level of reading achievement.

Working with University Tutors

Without the student volunteers who give their time to the reading program, the success of the children would have been unattainable. Our volunteer tutors, who are overwhelmingly female, and usually white, overall demonstrate a great deal of commitment to the program and the kids. We have had several tutors that have volunteered with us for three or four out of the
four semesters we have been in operation, and have expressed the desire to continue their work with us while they are in school.

The process through which we recruit tutors has seen a clear evolution from the first recruiting period that has resulted in the increased improvement in overall volunteer quality. The most prominent change has been the attitude of myself and the remainder of the committee towards the tutors and their obligations. The first semester we recruited tutors, we were unsure about how the program would function, and even if we would find enough tutors to participate. In response to that uncertainty, we were quick to downplay the training obligations and had lower expectations of participating tutors. That philosophy was largely responsible for the lack of commitment we saw in some tutors during the fall semester of 2008. Several tutors had dropped out of the program after just one month, and it was not unusual to have multiple absent tutors including no-shows that did not call or otherwise notify me of their absence.

When the committee realized that there was significant student interest in the reading program, we began to expect more of the tutors and state upfront that participation in the program was a privilege and a responsibility. By the second semester of the program, we provided a contract for students to sign at training stating that they understood their obligations, and absences should be infrequent, excused, and reported to me. The following year, I created a one page application for all potential tutors to fill out, which I used to select who would be placed on the Hillcrest schedule. The combination of the tutor application and subsequent contract has significantly decreased absences and virtually eliminated the problem of unreported absences amongst tutors.

Another important factor contributing to tutor quality is the motivation behind a tutor’s participation in the reading program. Our first semester, almost all of our volunteers were
motivated by the intrinsic desire to help the children in the reading program, save a half dozen who participated in the program as part of a overall commitment to an internship at the community campus. While we had a higher level of dropouts that semester, those who stayed were extremely committed, and several continued to volunteer in subsequent semesters. These tutors would volunteer additional hours to help with other community campus activities, including physical education and chaperoning the Martin Luther King Jr. Parade. The overall attitude of the tutors demonstrated the desire to give time and effort above and beyond the minimum expectations.

The second semester of the reading program, I began to notice a general decline in new tutor attitude. Many of the new tutors from that semester were giving the bare minimum of their time and resources, which was puzzling to me. None were willing to come in during vacation days or for additional activities, and their overall dedication to the program was qualitatively different than those who were returning for their second semester. After discussing this with the research team, we identified the most significant change in the tutor population- almost half of our tutors were receiving course credit for tutoring that semester. With the intention of helping with recruitment, a group of Introduction to Education instructors had given their students the option of committing to the two hour a week reading program, or writing a series of response papers. Instead of finding dedicated tutors that were primarily interested in helping the program participants, we had effectively recruited a group of tutors who were primarily interested in avoiding writing assignments. By emphasizing extrinsic rewards for service, we had “crowded out” any intrinsic motivation these volunteers had for participating in the program (Frey & Jegen, 2001). This prediction was confirmed when none of the students in question returned for a second semester at Hillcrest.
Running a Pilot Program: Lessons Learned

The first year of the reading program was an extremely important learning experience, as it provided the foundation for effective practices in the program. I, the committee, the tutors and children had to be extremely flexible as we went through a series of trials and errors necessary to determine what works and what doesn’t. No amount of research or preparation could provide the type of wisdom that trial by fire provided for the reading program. It became clear to me during the first semester that my obligations as program coordinator are largely front heavy; scheduling and training tutors, introducing children and tutors to the norms and practices of the program all took place within the first two months of the semester. The majority of improvement in my work came from improving my organization, both physically and in terms of electronic files kept. My ability to determine what is important versus irrelevant information for tutors and children, and the method for recruiting and scheduling tutors significantly improved over my tenure as program coordinator.

While we began the program in order to teach children aged 4-7 how to read using *100 Easy Lessons*, the committee almost immediately experienced mission creep- the desire to expand the program and services beyond the initial intended purpose (Moore, 2000). We had kids coming in who were older than 7, but still needed reading help and wanted to participate. We were unable, as a committee, to turn away young children that wanted to read, especially when their other options were playing on the computers or not coming to the community campus at all. We began to expand on the curricula we used, bringing in other more advanced direct instruction texts. The SRA McGraw Hill Corrective Reading and Horizons series were utilized for the older kids that lacked comprehension and decoding skills but were too advanced to participate in *100 Easy Lessons*. Other attempts to engage elementary school readers who had
surpassed *100 Easy Lessons* included creating a book club where a group of older students read with one or two tutors and discussed themes, and improving vocabulary by creating lists of grade appropriate words and concepts to review with the children. Further ideas that have been suggested but not utilized included purchasing reading software for the computer lab computers and having older kids read and perform young adult plays. The discussion of mission creep has been brought up multiple times, especially as returning participants continue to improve and advance through the curricula. Students generally work through the first two levels of the Corrective Reading or Horizons series, then move to a novel study with their tutor. At the point of the novel study, the student has essentially improved to the point where they are established readers. These students are continually admitted into the reading program as space permits, but we have decided that the available slots in the program must be prioritized for younger, struggling readers.

Beyond the growth of our participants’ reading ability, the physical growth of the program has also been the topic of much discussion and deliberation. Being able to maximize utilization of the limited space we have available has become imperative, as space was an issue just months into the first semester of the program. Learning which children need to be isolated in small study rooms, and which children can tolerate tutoring in an open common area is essential to tutee success. We early on began to use an additional common room across the street from the center, which significantly improved the noise level and environment in the community campus. With fifteen tutors and participants, three to four committee members, the program coordinator and other older neighborhood children, there are often times upwards of forty people in a building that is approximately 1600 square feet. As the program and the community campus became more popular, the space and noise problems grew. Additional programs for older
children, while much needed, further reduced space for the reading program. More students and community members began to take advantage of services, which provided less space and quiet for the participants in the reading program. For a program that requires the focus and attention of young children, this was a crucial issue to address. The first two years of the program were run at the community campus from 4:00 to 5:00 in the afternoon, but when faced with the choice between carrying on through the noise at the community center and reluctantly moving to a more conducive space, we determined that the program should be held from 3:00 to 4:00 at the center instead. While this will not address the lack of space, it will ensure that older kids, who are released from school later, will not be there at that time. The decision will also allow for a greater programming capacity, once the reading program is through, the entire community campus will be available for other after school activities.

Shifting the program time forward was not the only temporal issues addressed throughout the year, as we were able to evaluate the best semester schedule for tutoring days. It was decided early on that tutoring would not be held on days that the university did not have class, largely because most tutors would not be able to attend on those days. While we attempted, at first, to hold tutoring during fall and spring breaks, many tutors were out of town, and in addition deserved the break. Teacher work days and public school holidays were more difficult to maneuver, because while we knew that some children would show up for the program, we also knew that many would not. As a rule of thumb, we tutor on singular days off, but cancel or limit tutoring during long public school breaks. The reading program largely follows a university schedule, which concludes several days before public school winter vacation, and over a month before schools finish for the summer. In order to ensure that we have the volunteers available to successfully run the program, we will generally operate through exams, and conclude the
semester by the beginning of May. We witnessed and felt a noticeable burn-out among children and ourselves, and came to the realization that an early May conclusion to the program would be better for everyone involved.

As the program has continued to expand and develop, we have received increased recognition from the university and the surrounding community. While student affairs offers service learning experiences and acts as a liaison for students interested in volunteering, the WHA-UNCW Community Campus is the first collaborative of its kind- with university staff and students providing direct services in conjunction with course loads and academic research. The upper administration, including the Chancellor and members of the board of trustees and University of North Carolina Board of Governors, have visited and supported the reading program through its tenure. We have been recognized by the local newspaper, as well as several local donors and foundations. The recognition of the program has engendered donations that will ensure not only its existence, but progress for years to come. We look forward to many cohorts of young successful readers, and program graduates who return to us in the future as volunteers. As we continue in the coming years to work out the fine details of the program and formalize norms and procedures, it is our hope that the Hillcrest Reading Program will become a permanent fixture in the lives of the residents at Hillcrest.