Winter 2008

The Impact of the “Universal Voyager Literacy” Reading Program on Reading Achievement and Instructional Practices in an Urban School District

Shanika L. Hope
Old Dominion University

Follow this and additional works at: https://digitalcommons.odu.edu/urbanstudies_etds

Part of the Curriculum and Instruction Commons, Elementary Education Commons, and the Language and Literacy Education Commons

Recommended Citation
Hope, Shanika L. "The Impact of the "Universal Voyager Literacy" Reading Program on Reading Achievement and Instructional Practices in an Urban School District" (2008). Doctor of Philosophy (PhD), dissertation, Old Dominion University, DOI: 10.25777/cga3-pk95
https://digitalcommons.odu.edu/urbanstudies_etds/13

This Dissertation is brought to you for free and open access by the School of Public Service at ODU Digital Commons. It has been accepted for inclusion in Theses and Dissertations in Urban Studies by an authorized administrator of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.
THE IMPACT OF THE "UNIVERSAL VOYAGER LITERACY" READING
PROGRAM ON READING ACHIEVEMENT AND INSTRUCTIONAL
PRACTICES IN AN URBAN SCHOOL DISTRICT

by

Shanika L. Hope
B.S. August 1999, Old Dominion University
M.S. May 2000, Old Dominion University

A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirement for the Degree of

DOCTOR OF PHILOSOPHY

URBAN STUDIES

OLD DOMINION UNIVERSITY
December 2008

Approved by:

[Signatures]

inda Bol, Ph.D. (Chair)
Charlene Fleener, Ph.D. (Member)
Alice Wakefield, Ph.D. (Member)
ABSTRACT

Founded in 1994, Voyager Expanded Learning is a provider of K-3 in-school reading programs, as well as K-8 reading intervention programs for school districts throughout the United States. Voyager Universal Literacy’s systematic, precise framework fully addresses the five elements of reading instruction, through an explicit succession of ability growth. Voyager Universal Literacy was developed to be a comprehensive program encompassing the subsequent requisites: in-school broad reading program, progress monitoring methods, extensive-day and summer activities, home learning syllabus, implementation monitoring, and on-going professional development. Voyager Universal Literacy Program activities are organized to provide a thorough range and progression for reading instruction.

The purpose of this study was to analyze the impact of the Universal Voyager Literacy Program on reading achievement and teacher instructional practices in an urban school district, and to determine the extent to which this impact varies across Title I and non-Title I schools and student gender.

Results indicated that students in the Universal Voyager Literacy Program performed similarly compared to students in non-Voyager programs in terms of reading test scores. Although the main effect was not significant, there was a significant interaction between program and Title I status. Title I students performed better in Voyager schools; whereas, students in non-Title I schools performed better in non-Voyager schools.

Observations occurred during the reading block and lasted approximately 40 minutes. The observation focused on classroom environment and teacher instructional
strategies. The literacy environment in the classrooms of the Voyager Program teachers and the non-Voyager Program teachers were very similar. During informal classroom observations, the researcher witnessed varying levels of student/teacher interaction and student engagement. Additionally, teachers’ instructional behaviors differ from classroom to classroom. For instance, several teachers utilized strategies that required student conversation – such as “turn and talk”; “think-pair and share”; student/teacher reading conferences. Whereas, in two other classrooms the “direct instruction” practice was utilized – where the teacher was the primary voice in the room. The teacher lectured and then released students to practice independently at their desks. Very little student/teacher interaction occurred during the observation.

Future research studies which focus on the relationship between program implementation and student outcomes are recommended. Additionally, an examination of student performance on a wider range of assessment instruments should be used to help researchers determine which of the five key areas of reading acquisition are most impacted by the Voyager program.
COPYRIGHT NOTICE

©2008 Shanika L. Hope. All rights reserved.
DEDICATION
To the teacher that saw greatness in me ~ Mr. Gilkey.
ACKNOWLEDGEMENTS

First giving honor to God, for giving me the strength and providing the support to help me complete this challenging process.

Thanks to my committee chairperson and advisor, Linda Bol, who encouraged me, critiqued my work, and supported me through this endeavor. Thanks to my other committee members, Charlene Fleener and Alice Wakefield, for cheering me on throughout this journey and encouraging me to complete. A special thanks to Marcia for listening and encouraging me to stay the course --- and Sue McKinney for first encouraging me to pursue this dream.

Last, but definitely not least, to my family—thank you and much love. First, to my husband, Drake, whom I love and respect immensely, your love, support and straight talk spur me on. Your belief in my ability carried me through. Thank you for all the big and little things. You, Mnason and Hannah made this endeavor worthwhile. To all those who I may have forgotten to mention – THANK YOU!
TABLE OF CONTENTS

Page

ABSTRACT ................................................................. Error! Bookmark not defined.

COPYRIGHT NOTICE .................................................. iv

DEDICATION ................................................................... v

ACKNOWLEDGEMENTS ................................................ vi

CHAPTER I: INTRODUCTION ........................................... 1
  Organization of the Study ........................................... 1
  Background of the Study ........................................... 1
    Literacy Instruction ................................................. 1
  Brief History of Reading Instruction ......................... 4
  District of Columbia’s Reading Program ...................... 10
  Voyager in the District of Columbia Public Schools ...... 12
  Rationale for the Study ............................................. 15
  Purpose of the Study ............................................... 19
    Conceptual Model .................................................. 20
  Research Questions ................................................. 20
  Overview of Methodology ........................................ 21

CHAPTER II: LITERATURE REVIEW .............................. 23
  Introduction ............................................................ 23
  Theoretical Models of Literacy Acquisition .................. 23
  Overview of the Five Core Essentials of a Reading Program 27
    Phonemic Awareness .............................................. 29
    Phonics ............................................................... 32
    Fluency .............................................................. 34
    Vocabulary ........................................................ 37
    Reading Comprehension ......................................... 39
  Review of Voyager Universal Literacy Reading Research 42
  Summary ................................................................... 46

CHAPTER III: METHODOLOGY ....................................... 49
  Research Questions/Hypotheses .................................. 49
  Setting and Population ............................................ 50
    Sample .................................................................... 51
  Instruments ................................................................ 55
    District of Columbia Criterion Assessment System (DCCAS) 55
    Literacy Environment Checklist ............................... 56
    Classroom Observation and Teacher Interview Form ... 56
    Literacy Activities Rating Scale ............................... 57
CHAPTER IV: RESULTS .................................................. 62
  Descriptive Statistics for Student Sample .................................. 62
  Inferential Analyses .......................................................... 63
    Research Question 1 ...................................................... 63
    Research Question 2 ...................................................... 65
    Research Question 3 ...................................................... 68
    Research Question 4 ...................................................... 70
  Classroom Observations .................................................... 71
  Classroom Literacy Activities .............................................. 73
  Teacher Interviews .......................................................... 76
    Interview Question One: Planning ...................................... 76
    Interview Question Two: Technology ................................... 77
    Interview Question Three: Language and Literacy Development .. 78
    Interview Question Four: Diversity .................................... 79
    Interview Question Five: Parental Interaction/Communication .. 80
    Interview Question Six: Evaluate Learning ................................ 81

CHAPTER V: CONCLUSIONS AND DISCUSSION ......................... 83
  Discussion of Findings .................................................... 84
  Conclusions ................................................................. 91
  Children who have poor instruction year after year are seriously harmed by ineffective learning experiences. As they progress through the grades, the deficits accumulate, leaving them further and further behind other students. Sound curricular programs are important ........................................... 93
  Methodological Limitations ................................................. 93
  Implications for Future Research ........................................... 95

REFERENCES ......................................................................... 98

APPENDIX A: LITERACY ENVIRONMENT CHECKLIST .................. 112

APPENDIX B: LITERACY ACTIVITIES RATING SCALE ................. 113

APPENDIX C: CLASSROOM OBSERVATION AND TEACHER INTERVIEW FORM ......................................................... 114

APPENDIX D: DISTRICT PERMISSION LETTER TO CONDUCT STUDY .... 115

APPENDIX E: INFORMATION LETTER TO DISTRICT ADMINISTRATOR 117

APPENDIX F: TEACHER PERMISSION AND CONSENT LETTER .......... 120
CHAPTER I: INTRODUCTION

Organization of the Study

This study is divided into five chapters. The introductory chapter presents the background information on literacy, the rationale for the study, and a brief history of the Universal Voyager Literacy Program in the District of Columbia. It continues with the purpose of the study, questions investigated, significance, definitions, and limitations.

A review of pertinent literature is presented in Chapter II. Theoretical models of literacy acquisition, a brief history of reading instruction, an overview of the five core essentials of a reading program – as identified by No Child Left Behind (NCLB) Act – and a review of the Universal Voyager Literacy Program. The methodology used in the study is described in Chapter III. The populations, measurement instruments, data collection procedures, and data analyses are delineated. The results of the study are reported in Chapter IV. Data are analyzed, summarized and illustrated with tables. Chapter V offers a summary of findings, draws conclusions related to the questions investigated, discusses results and provides implications for practice and recommendations for future research.

Background of the Study

Literacy Instruction

Lyon (1997) stated, after studying approximately 10,000 children for almost two decades with the National Institute of Child Health and Human Development (NICHD), that “no single method, approach, or philosophy for teaching reading is equally effective for all children” (p. 13). In recent years, scientific research has provided tremendous
insight into exactly how children learn to read and the essential components for effective reading instruction. In 2004, Failure Free Reading organization published a report entitled *Failure Free: Reading’s Continuum of Effectiveness*. This report stated: “the literature is replete with examples of programs citing 85 percent success rates with groups of at-risk or special education students. There is, however, no large-scale educational research study demonstrating a 100 percent success rate. It does not exist” (p. 20). The report goes on to say that “programs that attempt to be all things to all students are doomed to failure” (p. 20).

Improving the reading skills of children is a top priority for leaders at all levels of government and business, as well as for parents and teachers across the nation. On January 23, 2001, President George W. Bush sent the NCLB plan for comprehensive education reform to Congress. NCLB, however, was not a new concept – it was introduced into federal law in the 2001 reauthorization of the Elementary and Secondary Education Act of 1965. This reform redefines the federal government’s role in K-12 education to help improve the academic achievement of all American students. Under NCLB, schools, districts, and states must demonstrate that they are making continuous and consistent progress toward meeting the goal of all students, in public elementary and secondary schools, achieving 100 percent proficiency\(^1\) in reading, mathematics and science by the year 2014. These requirements have placed greater responsibility upon administrators and teachers to use evidence-based practices.

\(^1\) The law requires that all students reach a “proficient” level of achievement, as measured by performance on state tests, by the spring of 2014. States create benchmarks for how students will progress each year to meet the goal of 100 percent proficiency by the spring of 2014. States must set a baseline for measuring students’ performance toward the goal of 100 percent proficiency by the spring of 2014. The baseline is based on data from the 2001-02 school year.
Under NCLB, school districts must implement instructional practices and materials supported by scientific evidence to enhance children’s reading skills. In recent years, scientific research has provided tremendous insight into exactly how children learn to read and the essential components for effective reading instruction. In 1997, the United States Congress charged the director of the National Institute of Child Health and Human Development, who was to consult with the Secretary of Education, to appoint a national panel to assess research-based knowledge about teaching children to read. Pressley (2001) summarized the findings of the National Reading Panel (2000) as follows: “the [National Reading] Panel found much support for skills-based instruction - instructional development of phonemic awareness, phonics competencies, knowledge of vocabulary, and comprehension strategies” (p. 8).

In 1998, the New York State Education Department sponsored the New York State Reading Symposium. This panel addressed the question ‘What are the main features of effective primary-grade reading programs?’ Pearson (1998) summarized the panel’s responses to this question as follows: “Effective programs provide instruction that allows students to develop skills and strategies that support reading and writing including: word identification, fluency, comprehension, writing and spelling, monitoring for understanding” (p. 2).

With more than 20 percent of adults reading at or below a fifth-grade level, curriculum developers are faced with the challenge of developing high-quality programs grounded in scientifically based research designed to improve reading achievement; thereby integrating the five skills found critical to early reading success – phonemic awareness, phonics, reading fluency, vocabulary and comprehension. Sedite (2001)
stated: “For the first time throughout the country, there is significant pressure, as well as federal and state support, for school administrators and teachers to adopt research-based reading instruction in kindergarten through third grade for all children” (p. 2).

**Brief History of Reading Instruction**

Few topics have sparked such public debate as the teaching of reading. Reading scholars will agree that producing independent readers is the goal of reading instruction. Because reading is at the heart of every child's learning, it has been a principal educational focus for more than a century (Johnson, 1999). During the 20th century, an enormous amount of scientific research was conducted on the subject of reading instruction. The advent of the scientific movement in education in the 1920’s introduced a rational system to the studies of instructional technique and classroom management, which filtered into reading practice (Feret, 2001).

Pearson (2001) pointed out the developments in reading pedagogy over the last century. From 1900 to 1935 many new ideas emerged in the psychology and pedagogy of reading. In the shadow of the learner receiving the curriculum provided by the teacher and dutifully completing provided drills; and, where being able to read meant being able to pronounce the words on the page accurately and fluently – practitioners attempt to reform early reading practices. Pearson (2001) identified two dominant reading reforms for this period: words to letters and words to reading. The words to letters approach, developed by Mitford Mathews, introduced words in the very earliest stages and, for each word introduced, immediately asked children to decompose it into component letters. The goal of this approach is to ensure that children learn the sound correspondences for each letter. Today this is known as analytic (whole to part) phonics. The words to reading
approach, also developed by Mitford Mathews, came to be known as the look-say or whole word method of teaching reading. Pearson describes this reform as no attempt being made to analyze words into letter-sounds until a sizeable corpus of words was learned as sight words. Some form of analytic phonics (a modified version of words-to-letters) usually manifested after a corpus of a hundred or so sight words had been learned. Thus, under this approach a teacher might group several words that start with the letter f (e.g., farm, fun, family, fine, and first) and ask students to note the similarity between the initial sounds and letters in each word. Synthetic phonics, another approach, as reported by Johnston and Watson (1999) rapidly teaches all the 40+ sounds in the English language. Small groups of vowel and consonant letter sounds (i.e., a, s, t, p, n) are taught over a short period of time. Children are directly told the sounds of individual letters and then given the opportunity to practice what they have learned in text that systematically reinforce the sounds and words that they have been taught (also known as decodable text) (Wrench, 2002). Additionally, the National Reading Panel findings confirm that synthetic phonics instruction produces the greatest gains in reading skills for learning disabled and low achieving students.

Throughout the nineteenth century, basal programs consisted almost entirely of a set of student books. Teachers relied on experience, or perhaps normal school education, to supply the pedagogy used to teach lessons with the materials. In the early 1900s, publishers of basals began to include supplementary teaching suggestions, typically a separate section at the front or back of each book with a page or two of suggestions to accompany each selection. By the 1930s, the teachers' manuals had expanded to several
pages per selection and student workbooks were commonly included in curricular programs (Pearson, 2001).

As an aside, the onset of scientific examination and systematic testing entered the scene during this period. William S. Gray created the first published oral reading assessment, circa 1914 (Pearson, 2001). Readiness skills such as alphabet knowledge, auditory discrimination, visual discrimination and color and shape discrimination, were explored.

The second period, 1935 to 1970, marked periods of direct instruction, planned curriculum and a view of students as the recipients and teachers as the mediators, of the delivered curriculum. Jeanne Chall’s book and the First Grade Studies, conducted by the United States Office of Education, had an enormous impact on beginning reading instruction and indirectly on reading pedagogy more generally. Chall (1967), author of Learning to Read: The Great Debate and proponent of the letter-sound approach, claimed research demonstrated “earlier, more systematic phonics produced better word recognition and reading comprehension…through third grade...than did later, less systematic instruction” (p. 1539). The ultimate legacy of Chall’s book is that early attention to “the code” in some way, shape, or form must be re-infused into early reading instruction (Pearson, 2001).

Little fundamental change in the underlying assumptions about the role of the teacher and learner or the nature of reading and writing occurred during this period. Reading was still a fundamentally perceptual process of translating letters into sounds. Publishers of basal programs began to create and implement what came to be called skills management systems. Thus, the basals of this period were comprised of two parallel
systems: (a) the graded series of anthologies filled with stories and short non-fiction pieces for oral and silent reading and discussion, and (b) an embedded skills management system to guide the development of phonics, comprehension, vocabulary, and study skills (Pearson, 2001).

In 1965, Lyndon Johnson created the Elementary and Secondary Education Act, which brought new resources for compensatory education to schools through a program called Title I. Additionally, the Commissioner of Education James Allen would, establish the national Right to Read program as a way of guaranteeing that right to each child in America. Both pieces of legislature set the stage for the present state of accountability facing our schools today.

In the early 1980’s whole language became the latest greatest instructional approach. Teachers were facilitators not lecturers. They observe what children do, decide what they need, and arranged conditions to allow students to discover insights about reading, writing, and learning for themselves. Children are the center of this approach. Children in whole language classrooms seem to develop vocabulary, spelling, grammar, and punctuation skills as well as or better than children in more traditional classrooms (Calkins, 1980; Clarke, 1988; Elley, 1991; Gunderson & Shapiro, 1988; Smith & Elley, 1995; Stice & Bertrand, 1990).

Opponents of whole language noted the absence of skills instruction, strategy instruction, an emphasis on text structure, and reading in the content areas as major hindrances to the effectiveness of reading instruction. In light of the missing pieces of vital reading instruction – whole language lost steam (Pearson, 2001). Chall (1967, 1983, 1996) surveyed the entire body of reading research available up to 1996. The first of
these studies was commissioned by the Carnegie Corporation and conducted at Harvard University. Chall concluded that comprehensive, systematic, phonics-first instruction was overwhelmingly supported by the vast majority of the research. Her final conclusion of the third edition was:

The research ... indicates that a code-emphasis method – i.e., one that views beginning reading as essentially different from mature reading and emphasizes learning of the printed code for the spoken language – produces better results ... The results are better, not only in terms of the mechanical aspects of literacy alone, as was once supposed, but also in terms of the ultimate goals of reading instruction – comprehension and possibly even speed of reading. The long-existing fear that an initial code emphasis produces readers who do not read for meaning or with enjoyment is unfounded. On the contrary, the evidence indicates that better results in terms of reading for meaning are achieved with the programs that emphasize code at the start than with the programs that stress meaning at the beginning. (p. 307)

The ultimate legacy of Chall’s book is that early attention to “the code” in some way, shape, or form must be re-infused into early reading instruction (Pearson, 2001). In 1985 the Center for the Study of Reading published Becoming a Nation of Readers promoted a literature-based reading approach. Thus, beyond basals, children’s literature played an important supplementary role in the classrooms of teachers who believed that they must engage their students in a strong parallel independent reading program. Additionally, comprehension questions were replaced by more interpretive, impressionistic response to literature activities in an attempt to provide children with authentic literature and authentic activities. Writing also began to come on the scene in the elementary language arts curriculum.

Elements from the various instructional philosophies continue to shape reading practices. Foremost among emergent literacy behaviors is phonemic awareness and reading comprehension. Research by van Kleekck (cited by Feret, 2001) reiterates the
importance of direct instruction in the letter-sound relationship to expedite word recognition. The inclusion of phonics in child-centered instruction is currently spreading, even as authentic assessment practices continue to increase. In 2000, the National Reading Panel issued the following statement in its April 13, 2000 press release:

The panel determined that effective reading instruction includes teaching children to break apart and manipulate the sounds in words (phonemic awareness), teaching them that these sounds are represented by letters of the alphabet which can then be blended together to form words (phonics), having them practice what they've learned by reading aloud with guidance and feedback (guided oral reading), and applying reading comprehension strategies to guide and improve reading comprehension. (p. 1)

Although the philosophy of the day continually changes, the fundamental gaps between teacher and student directed learning persist (Feret, 2001). With increased understanding of the factors which influence reading performance including knowledge of textual constraints and the effect of the reader's previous experiences on inference behaviors, it is evident that as teachers we need to adjust instructional strategies and opportunities so that students' efforts to read to learn are facilitated at all levels (Rumptz, 2003).

The third period, 1970 to 2000, became an international scholarly commodity; embraced by scholars from many different fields of inquiry. Linguists, sociologist, anthropologists, neuroscientists and psychologist, just to name a few, have investigated the reading process continually.

Bond and Dykstra (1967) conducted a study to examine the effectiveness of various reading programs in instructing students with high or low readiness for reading. The instructional approaches evaluated included Basal, Basal plus Phonics, Linguistic, Language Experience, and Phonic/Linguistic. Data used in the study were compiled from
the 27 individual studies. Results of the correlation analysis revealed that the ability to recognize letters of the alphabet prior to the beginning of reading instruction was the single best predictor of first-grade reading achievement. The analysis of methodology indicated that the various non-basal instructional programs tended to be superior to basal programs as measured by word recognition skills of pupils after 1 year of reading instruction. The analysis of treatments according to level of readiness for reading revealed that no method was especially effective or ineffective for pupils of high or low readiness as measured by tests of intelligence, auditory discrimination, and letter knowledge.

Despite new perspectives, reading comprehension emerges onto center stage. Many of new strategies (KWL graphic organizers, questioning the author, etc.) found their way into the basals of the 1980s, which demonstrated substantially more emphasis on comprehension at all levels, including grade one. Literature-based reading, process writing, and integrated instruction and the whole language approach, are significant movements in reading curriculum in the last thirty years.

District of Columbia’s Reading Program

The NCLB Act of 2001 authorizes significant federal funding to improve reading achievement. In 2003, almost $994 million was dedicated to helping states and local school districts establish high-quality, comprehensive reading instruction for all children in kindergarten through third grade. Yet, for school year 2004-2005, the District of Columbia Public Schools were classified as one of the school districts most in need of improvement, having failed to achieve AYP in reading and mathematics for three consecutive years at both the elementary and secondary level. During the late 1990’s, the
District of Columbia Public Schools adopted a new reading/language arts policy in which teachers were required to spend at least 90 minutes on reading/language arts every day in grades K-6. In September 1999, the District of Columbia Public Schools adopted the Houghton Mifflin Reading program for elementary schools. Additionally in September 1999, Universal Voyager Literacy System was implemented in sixteen percent of the elementary schools in an effort to improve students' reading achievement and enhance the instructional capacity of teachers. The initial programs focused on providing extended learning opportunities – after school and summer school – to accelerate the performance of students who were not meeting grade level standards. In 2002, the Congress of the United States appropriated funding for the Universal Voyager Literacy System to be implemented in the District of Columbia Public Schools.

The Universal Voyager Literacy System offers instruction in the five key areas identified by the National Reading Panel (2000): phonemic awareness, phonics, reading fluency, vocabulary and comprehension (as mandated by the NCLB Act). In September 2004, the district revised the master schedule policy requiring teachers to spend at least 120 minutes on reading/language arts every day in grades K-6. Thus, allowing teachers ample instruction time to focus on the above five components of literacy. Although the schools use the programs in K-6, this study focuses on third grade due to the emphasis on all children becoming proficient readers by the end of third grade, as mandated by the NCLB Act.

High-quality programs are grounded in scientifically based research. In such programs, students are systematically and explicitly taught the following five skills identified by research as critical to early reading success (National Reading Panel, 2000):
1. Phonemic awareness: the ability to hear and identify sounds in spoken words.
2. Phonics: the relationship between the letters of written language and the sounds of spoken language.
3. Fluency: the capacity to read text accurately and quickly and with proper expression.
4. Vocabulary: the words students must know to communicate effectively.
5. Comprehension: the ability to understand and gain meaning from what has been read.

According to the National Research Council's research-based report Preventing Reading Difficulties in Young Children (Snow et al., 1998), the characteristics demonstrated by accomplished third-grade readers include their ability to:

1. Summarize major points from fiction and nonfiction texts;
2. Read longer fictional selections and chapter books independently;
3. Discuss underlying themes or messages when interpreting fiction;
4. Distinguish cause and effect, fact and opinion, main idea, and supporting details when interpreting nonfiction.

With more than 20 percent of adults reading at or below a fifth-grade level, curriculum developers are faced with the challenge of not only developing a product that fosters the five skills found critical to early reading success – phonemic awareness, phonics, reading fluency, vocabulary and comprehension but also the four abilities above.

Voyager in the District of Columbia Public Schools

In September 1999, Universal Voyager Literacy System was implemented in sixteen percent of the elementary schools in an effort to improve students' reading
achievement and enhance the instructional capacity of teachers. The initial program
focused on providing extended learning opportunities – after school and summer school –
to accelerate the performance of students who were not meeting grade level standards. In
2002, the Congress of the United States appropriated funding for the Voyager Universal
Literacy System to be implemented during the regular school day as the core reading
curriculum in District of Columbia Public Schools.

According to developers of Universal Voyager Literacy System, “explicit,
systematic instruction in each of these components (phonemic awareness, phonics,
vocabulary, fluency, and reading comprehension) is most effective for ensuring the
highest percentage of students succeed in the reading process” (Voyager Pamphlet, p. 2).
Universal Voyager Literacy System is divided into a two-hour or two and half hour daily
instructional blocks. The focus includes explicit daily lessons and systematic assessment
of student reading progress. Activities such as Learning Stations engage students as they
work cooperatively to complete activities that reinforce prior learning as the teacher
focuses on the instructional needs of a small group.

Universal Voyager Literacy focuses on alphabets, reading fluency, and
comprehension skills and strategies. The program develops core-reading skills in:
phonemic awareness, phonics/alphabetic principle, fluency vocabulary and
comprehension. Universal Voyager Literacy includes a DIBELS-equivalent measurement
system, called VIP (Vital Indicators of Progress), for assessing skill development and
establishing goal scores for key points during the school year. Using Universal Voyager
Literacy measures, core skill development can be mapped for achieving successful
reading performance skills. Performance results vary by schools within the district and
are available for different reporting levels online (school, grade, class, and student).
These reports are accessible to administrators, principals, and teachers.

In kindergarten a strong emphasis is placed on phonemic awareness. Phonemic awareness is measured using the initial sound fluency (ISF) measure. In Universal Voyager Literacy, instruction during the second half of the year stresses advanced phonemic awareness skills and phonics skills. To track progress, phonemic segmentation fluency (PSF), a more sophisticated phonemic awareness measure than ISF, is administered and is the focus for this grade level. By the end of first grade, students need to be reading 40 words per minute. The reading connected text (RCT) measure is administered throughout the year to assess students’ progress on this skill. Reading Connected Text is measured by having students read grade-level text aloud for one minute. This measure assesses fluency (accuracy and speed) in oral reading. Phonics skills are stressed in Universal Voyager Literacy throughout the first grade. Nonsense word fluency (NWF) measure is administered throughout the year to assess students’ phonics skills. The NWF measure assesses students’ ability to link letters to sounds and use that knowledge to sound out words. By using non-words, teachers can accurately assess students’ ability to match letters to sounds and their ability to decode an unknown word. The goal in second grade is for students to read 90 words per minute by end of year. The RCT measure is administered throughout the year. RCT is measured by having students read grade-level text aloud for one minute. This measure assesses fluency (accuracy and speed) in oral reading. The goal in third grade is for students to read 110 words per minute by end of year. The RCT measure is administered throughout the year. To help students achieve their reading goals by year-end, Voyager has a six-week fluency
campaign called Blast Off to Reading. The campaign is designed to improve reading fluency in grades 1-3 through partner practice and motivation charts for students to record their progress. Blast Off to Reading focuses on critical fluency goals by providing supplementary texts and suggested exercises for grades 1-3.

Universal Voyager Literacy curriculum includes an intervention component that, through additional daily systematic instruction, helps struggling readers. Intervention materials focuses on key literacy skills, such as letter-sound correspondence, word reading, spelling, reading connected text, fluency, and comprehension. Administered regularly, and in combination with progress monitoring, intervention can help struggling readers gain the skills they need to read. Additionally, an 80-hour summer reading intervention program is a component of the Universal Voyager Literacy System. Students demonstrating deficiencies in the various reading components at the end of the school year are automatically enrolled in the summer intervention program. This summer program acts as a remediation tool to assist students in mastering each reading component.

Rationale for the Study

Grossen (1997) asserted that "treatment intervention [for reading difficulties] research has shown that appropriate early direct instruction seems to be the best medicine for reading problems. Reading is not developmental or natural, but is learned" (p. 4). Pianta (1990) maintains that children who have poor instruction in the first year are more seriously harmed by the ineffective or insufficient early learning experience and tend to do poorly in school across the years. Carroll (1963) noted more than four decades ago, if the instruction provided by a school is ineffective or insufficient, many children will have
difficulty learning to read – unless additional instruction is provided in the home or elsewhere.

Reading is a crucial element for students to be successful in school, yet the National Assessment of Educational Progress (NAEP) shows serious deficiencies in children's ability to read, particularly in high-poverty schools. The Commission on Behavioral and Social Sciences and Education (CBSSE) (1998) states, "differences in literacy achievement among children as a result of socioeconomic status are pronounced" (p. 30). Stanovich's (1986) 'Matthew-effect' echoes NAEP's and CBSSE's assertion that "the earlier low-income children start to slip, the faster they fall and the farther behind in each succeeding grade..." (p. 381). Feret (2001) stated that "These distinct possibilities for struggling students can trigger a sequence of consequences with lasting personal and economical effects" (p. 4).

Since the publication of *A Nation at Risk* in 1983, virtually every effort to improve the quality of education has focused on overcoming deficits in student knowledge; especially in reading and mathematics. In response to public concerns about public education, many states and school districts have implemented systemic reform efforts to raise standards of performance for all children, including those from diverse backgrounds who have traditionally performed poorly in school. Foorman et al. (1997) concluded that in order to avoid reading failure, the focus must be on prevention, not intervention.

Pearson (1998) found the two most significant features of a good literacy curriculum is that it promotes a strong link between effective programs that provide (a) instruction that allows students to develop skills and strategies that support reading and
writing (i.e., reading fluency, vocabulary and comprehension); and (b) many opportunities to read and write. McCormick (1994) reinforces these findings in citing the need for at-risk readers to have pronounced practice, in word learning, with new material within a consistent and systematic environment.

Converging evidence from reading research centers reveals that deficits in phonemic awareness reflect the core deficit in reading disabilities. Lack of phonemic awareness, in any language, tends to be a major obstacle for learning to read (Vellutino & Scanlon, 1987a; Wagner & Torgeson, 1987). Grossen (1997) found that “the best predictor in K or 1st grade of a future reading disability in grade 3 is a combination of performance on measures of phonemic awareness, rapid naming of letters, numbers, and objects, and print awareness” (p. 4).

For urban schools, where on average 50% of the children perform below grade level, selecting effective instructional materials for urban learners is essential. Lemlech (1977) states that in selecting curriculum materials, educators must consider the following guidelines: materials that involve real life application and problems; materials that include a variety of cultural, linguistic, and religious viewpoints; and materials that accommodate the various interests, abilities, and learning modalities in the classroom. Educators working with urban learners must identify and select instructional materials, print and non-print, that elaborates on instructional goals and objectives; and effectively engages and instructs their students.

According to developers of Voyager Universal Literacy System, “explicit, systematic instruction in each of these components (phonemic awareness, phonics, vocabulary, fluency, and reading comprehension) is most effective for ensuring the
highest percentage of students succeed in the reading process” (Voyager Pamphlet, p. 1).
The system includes explicit daily lessons and systematic assessment of student reading progress. Activities such as Learning Stations engage students as they work cooperatively to complete activities that reinforce prior learning as the teacher focuses on the instructional needs of a small group. Voyager Universal Literacy includes a DIBELS-equivalent measurement system, called VIP (Vital Indicators of Progress), for assessing skill development and establishing goal scores for key points during the school year. Using Voyager Universal Literacy instructional components and measures, core skill development can be mapped for achieving successful reading performance skills.

This study explored the impact of implementing the Universal Voyager reading program in one of the largest urban school districts in the country. It provides an opportunity to contribute to the growing body of research regarding Universal Voyager Literacy Program. Various reading programs have claimed to cause significant gains in the reading achievement of urban learners, yet the Learning Alliance, an organization of 12 leading national education associations, reported the following in Every Child

Reading: An Action Plan of the Learning First Alliance report:

Although overall reading performance has been more or less unchanged since 1972, 40 percent of all nine-year-olds score below the basic level on the National Assessment of Educational Progress (NAEP). There is a continuing gap between white students and African-American and Hispanic students. While 69 percent of African-American and 64 percent of Hispanic student scored below basic in 1994, only 31 percent of white fourth graders did. (1998, p. xi)

In 2003, the average NAEP reading score for fourth graders in the District of Columbia was 188, compared to the average score of 216 for the entire nation. The District of Columbia scored below all 50 states, but scored higher than Virgin Islands. In 2005, only 31% of fourth grade students scored at or above grade level in reading.
Purpose of the Study

Thus, the purpose of this study was to analyze the impact of the Universal Voyager Literacy Program on reading achievement and teacher instructional practices in an urban school district, and to determine the extent to which this impact varies across Title I and non-Title I schools and student gender. Much effort on the part of stakeholders (central office administrators, reading directors, principals, reading specialists, teachers, parents, community members and education advocates) has contributed to the five-year implementation of Universal Voyager Literacy Program. This study examined data that could prove useful to school and district leaders as they reflect upon the various reading programs available to school districts claiming to deliver dramatic gains among early grade school readers.

The researcher gathered data on children who participate in Universal Voyager Literacy in 2006, who also had District of Columbia Criterion Assessment System (DCCAS) test scores in 2007. Eligible students formed four samples:

1. Those who had Universal Voyager Literacy only and attended a Title I School;
2. Those who had Universal Voyager Literacy only and did not attend a Title I School;
3. Those who did not have Universal Voyager Literacy and attended a Title I School;
4. Those who did not have Universal Voyager Literacy and did not attend a Title I School.
Conceptual Model

The conceptual model to support this study is displayed in Figure 1. The model depicts the hypothesized effects of the Universal Voyager Literacy Program on DCCAS test scores for reading achievement, classroom observations, and instructional practice interview results.

Figure 1. Conceptual model to support study.

Research Questions

1. How have students who participated in Universal Voyager Literacy performed on the DCCAS compared to students who participated in non-Voyager Literacy Programs?

2. Is the Universal Voyager Literacy Program equally effective for students in Title I schools versus students in non-Title I schools?

3. Is the Universal Voyager Literacy Program equally effective for male and female students?

4. What are the instructional practices of teachers in the Universal Voyager Literacy Program and other programs?
Overview of Methodology

The methodology employed to address the research questions in this ex-post facto study consisted of an examination of student test scores and teacher instructional effectiveness. Students and teachers in the Voyager Program and students and teachers in non-Voyager programs were assessed and compared. Students in the Voyager Program and not in the Voyager Program were compared in terms of reading test scores from a standardized reading achievement test (the DCCAS). In addition, comparisons were made on test scores between students differing in terms of school status (Title I or not), student gender in order to examine the difference between the Voyager Program and other programs. Teachers were compared in terms of three measures of instructional effectiveness (the Literacy Environment Checklist, The Literacy Activities Rating Scale, and the Classroom Observation and Teacher Interview Form) which provide both quantitative scores and qualitative data. Approximately 700 students and 42 teachers were included in the sample.

Data collection includes the following procedures: (a) DCCAS data was analyzed during the summer of 2007, (b) a letter was sent to the administrators of both Voyager and non-Voyager schools, informing them of the study and the fact that observations and interviews are scheduled for fall 2007, and (c) observations were conducted during the reading block will last approximately 40 minutes.

Descriptive, inferential, and qualitative methods of data analysis were employed to address the four quantitative research questions presented. An analysis of variance (ANOVA) was conducted comparing students in the Voyager Program and students in non-Voyager Programs (the independent variable) on the DCCAS reading assessment
(the dependent variable). The statistical model will then be extended to include the
demographic variables or Title I status and gender. A two-factor ANOVA was also
conducted in order to compare indices of instructional effectiveness between Voyager
and non-voyager classrooms.
CHAPTER II: LITERATURE REVIEW

Introduction

A review of pertinent literature is outlined in Chapter 2. The literature review is organized to include: theoretical models of literacy acquisition, review of several empirical research studies of the Voyager Universal Literacy Program, an overview of the five core essentials of a reading program (phonemic awareness, phonics, fluency, vocabulary and comprehension) – as identified by NCLB Act.

Theoretical Models of Literacy Acquisition

Reading is an involved and complex process and many factors interact to inhibit and prevent reading success. Factors, which influence and affect reading acquisition, include the orthographical, lexical and syntactical demands of text in relation to either the cultural experiences or semantic knowledge of students. Snow, Burns and Griffin (1998) state learning to read begins long before the school years, as the biological, cognitive, and social precursors are put into place. Rumptz (2003) stated: “the reading process remains hard to explore using completely empirical methods because of its reliance on the metacognitive and psycholinguistic strategies” (p. 1). Linguists, sociologists, anthropologists, neuroscientists and psychologists, just to name a few, have investigated the reading process in depth. The ambiguity of the reading acquisition process has lead to multiple theoretical models. For the purposes of this research, the three dominant models of literacy acquisition were examined: the bottom-up, top-down and interactive/psycholinguistic models.

The first and perhaps oldest reading theory known is bottom-up, phonics, or code-emphasis approach to reading (Simnor, 1993). Gough (1972) proposes what may be
classified as a phonics-based or "bottom-up" model of the reading process which portrays processing in reading as proceeding in serial fashion, from letters to sounds, to words, to meaning. This process is also referred to as "data-driven" (Bobrow & Norman, 1975).

Zakaluk (1982) stated under this perspective, "the implications for reading instruction are that students need to begin reading by learning the letter names, associating the letter names with their sounds, and then be shown how to blend these sounds together into words" (p. 3). Gough's technical sequencing of the "bottom-up" reading system model is as follows: (a) the graphemic information enters through the visual system and is transformed at the first level from a letter character to a sound, which is from a graphemic representation to a phonemic representation; (b) the phonemic representation is converted, at level two, into a word. The meaning units or words then pass on to the third level and meaning is assimilated into the knowledge system. Thus, "bottom-up" processes are those that take in stimuli from the outside world and deal with information with little recourse to higher-level knowledge (Treiman, 2001).

Opponents of the "bottom-up" model contend that this model does not give a full account of the process of reading, as it gives no account of a reader's prior knowledge. Goodman (1967) explored the top-down model; which emphasizes "the reader's active participation in the reconstruction of the meaning in the text" (Rumptz, 2003, p. 3). Goodman (1967) identifies the elements of language employed by readers, as they constructed meaning from encountered text, as semantic cues (meaning), and syntactic cues (grammatical or sentence sense), and grapho-phonemic cues. As Zakaluk (1982) stated: "readers are not, confined only to one source of information - the letters before their eyes" (p. 4). Pearson stated that "by attending to these cuing sources, readers could
reduce their uncertainty about unknown words or meanings, thus rendering both the word identification and comprehension processes more manageable” (2001, p. 11). Theories that stress top-down processing hold that readers form hypotheses about which words they will encounter and take in enough visual information to test their hypothesis (Goodman, 1967). The top-down or meaning-emphasis, is found today mostly in whole-language programs and procedures (Simnor, 1993). According to Smith (1971) the efficient reader looks at the text through the lens of expectations from prior knowledge of the subject area. The reader then adjusts the lens based on outcomes of the reading, and in so doing, confirms or denies expectations. The top-down model of reading stresses the higher order skills inherent in reading. These higher order skills are primarily the use of predictions and inferences in the process of constructing meaning from past experiences, and the reconstruction of these predictions based on new information incongruent with past knowledge. Lisson and Wixson (1991) stated: “the reader has the use of the printed text only to confirm and/or generate new hypotheses” in the top-down model. Maintaining what readers bring to the text separately in terms of both their prior knowledge of the topic and their knowledge about language, assists them in predicting what the upcoming words will be.

In this model it is evident that the flow of information proceeds from the top downward so that the process of word identification is dependent upon meaning first. Thus, the higher level processes embodied in past experience (semantics) and the reader’s knowledge of the language pattern (syntax) interact with and direct the flow of information (Stanovich, 1980), just as listeners may anticipate what the upcoming words
of speakers might be. Treiman (2001) provides an example to clarify the distinction between the theories:

Suppose that a reader has just read, ‘Daylight savings time ends tomorrow, and so people should remember to change their …’ According to the top-down view, the reader guesses that the next word in the sentence will be ‘clocks.’ The reader checks that the word begins with a ‘c’ and, because the hypothesis has been supported, does not take in the remaining letters of the word. Theories of reading that stress bottom-up processing claim that the reader processes all of the letters in the last word of the sentence, regardless of its predictability. (p. 3)

In the end, neither the top-down nor the bottom-up model of reading gives a complete picture in and of itself. It seems that the reading process is a conglomeration of the bottom-up and top-down models (Rumptz, 2003). Rumelhart (1977) suggests that the processing of text is an interaction between the different forms of information available to the reader in the text and within the reader’s own higher order thinking skills (i.e., inferences, and long term memory). The culmination of the lower order thinking and decoding skills (as seen in the bottom-up model) and the higher order thinking skills (as seen in the top-down model) are called the interaction/psycholinguistic model. The interaction/psycholinguistic perspective gave reading scholars a means (miscue analysis) and a theory (reading as a constructive process) that was remarkably distinct from previous ideas about reading. The perspective made explicit links between oral and written language acquisition and helped us view reading as language rather than simply perception or behavior (Pearson, 2001). Reading comprehension, in accordance with the interactive model, involves the use of the reader’s linguistic decoding processes to tap into his or her psycholinguistic strategies and schematic knowledge (Rumptz, 2003).

Studies of readers’ eye movement provide some insight into the roles of bottom-up and top-down process in reading (Treiman et al. 2001; Upton, 2003). Researchers
have found that skilled readers fixate at least once on the majority of words in a text. They do not skip a large number of words, as the top-down view predicts, but instead process the letters and words rather thoroughly. In practice, effective readers continually adopt a top-down approach to predict the probable theme and then move to the bottom-up approach to check their assumption by reading details (Nuttall, 1996). This implies that in teaching reading, teachers should instruct students to start their reading by using a top-down approach and later switch between the two approaches, as each kind of interpretation supports the other (Chia, 2001) – in essence an interactive approach.

Overview of the Five Core Essentials of a Reading Program

In guiding the reading of beginning readers, the goal is to raise the reader’s level of consciousness about which cues or knowledge sources - orthographic, lexical, syntactic or meaning they are employing to predict and confirm word identity. The overall goal of reading, however, is comprehension. We must ensure, therefore, that we activate prior knowledge or build topic familiarity before we actually assign reading. Developing schemata for the text not only facilitates word recognition but also comprehension and recall (Rumptz, 2003).

Early literacy acquisition is receiving increased emphasis due to the mandates in NCLB requiring grade-level proficiency for all students by the end of third grade. The Reading First program under NCLB defines the standards for successful early reading programs. All curriculum and supplemental materials funded under Reading First must be based on scientific research and offer instruction in the five key areas identified by the National Reading Panel (2000): phonemic awareness, phonics, fluency, vocabulary and reading comprehension. Additionally, all curriculum and supplemental materials must
include screening, diagnostic, and classroom-based instructional assessments for all reading instruction.

As an aside, it is not the intention of this research to discount the importance of the associations connecting reading and writing. Snow, Dickinson, and Tabors (2001) alleged that longitudinal gains in reading explained by the fundamental position of verbal language progress, asserting that: “If reading success is so dependent on oral language skills, should we not be placing more emphasis on vocabulary and rich language environments in preschool and the primary grades, rather than assuming that teaching word reading skills alone will suffice?” (Slide 18). The interconnectedness of reading and writing (e.g., Nelson & Calfee, 1998) and ways children go about reading and writing must also be emphasized (e.g., Calkins, 1986, 2001; Clay, 1979, 1993a, 1998; Graves, 1983, 1994), along with other significant features of literacy. For the purposes of this research, the five essential components of effective reading instruction as identified by the National Reading Panel (2000) are briefly examined.

One additional aside, some researchers question the results of the panel and assert that there is research to support the effectiveness of other instructional practices that were identified by the panel as ineffective (i.e., sustained silent reading). Stephen Krashen says that some studies were excluded because they weren’t published in refereed journals, or were studies of students reading in Spanish rather than English (2001, 2005). Krashen also noted that the NRP did not include any studies lasting longer than one year. He also points out that long-term studies are more likely to show positive results for in-classroom reading and that the findings of “no difference” in many studies could mean that reading component was not studied for a long enough period of time.
Phonemic Awareness

Phonemic awareness is the understanding that spoken words are made up of separate units of sounds that are blended together when words are pronounced. Additionally, phonemic awareness can also be thought of as the skill of hearing and producing the separate sounds in words, and recognizing words that sound alike or different. Moreover, the National Institute of Child Health and Human Development (2000) defined phonemic awareness as the “ability to focus on and manipulate phonemes in spoken words” (p. 2-1). An essential element of phonemic awareness is phonemes. Phonemes are the sounds that make up spoken words. Phonemic awareness tasks include the ability to (a) isolate phonemes; (b) blend onset-rimes; (c) add/delete phonemes; (d) segment words into phonemes; and (e) substitute phonemes (Schatzschneider, Francis, Foorman, Fletcher & Mehta, 1999). Phonemic awareness helps children use more advanced ways of learning new words; forming a connection between visual information about the word in print and its meaning, pronunciation, and other information stored in the child’s memory. The National Reading Panel (2000) report stated that “the extent of phonemic awareness need to contribute maximally to children’s reading development does not arise from incidental learning or instruction that is not focused” (NICHD, 2000, p. 2-33). Explicit and systematic instruction greatly benefits nonreaders or children with little phonemic awareness. The National Reading Panel also stated that “Systematic phonics instruction is a way of teaching reading that stresses the acquisition of letter-sound correspondences and their use to read and spell words” (p. 2-89), a characterization borrowed from Harris and Hodges (1995). Teachers need to be aware of effective phonemic awareness instruction (i.e., use spelling to teach phonemes, use manipulatives
to help students acquire phonemic awareness, emphasize segmenting words into phonemes, etc.) to adequately provide instruction to children and to choose effective instructional materials and practices.

Direct phonemic awareness instruction should begin in kindergarten and continue through first and second grades. Phonemic awareness instruction teaches children to notice, think about, and work with sounds in spoken language. Phonemic awareness instruction improves children's ability to read words. It also improves their reading comprehension because rapid and accurate reading of words enables students to focus on understanding. It also improves spelling because it helps children understand that sounds and letters are related in a predictable way. Phonemic awareness instruction is most effective when children are taught to manipulate sounds by using the letters of the alphabet; children should therefore be taught letter names and shapes along with phonemic awareness (Sedita, 2001).

Several correlational studies report a significant relationship between phonemic awareness and learning to read (Ehri et aux, 2001; Snow, Burns & Griffin, 1998; Wagner & Torgesen, 1987). Gaskins, Ehri, Cress, O'Hara, and Donnelly (1997) presented methods used by students to become “word detectives” (p. 319) i.e., to logically examine and learn words. Invernizzi, Juel, and Rosemary (1996/1997) align the teaching of alphabet, phonics, word detection, and spelling rooted on expansion of word familiarity of every student, as exposed from the students' made-up spellings. They utilized instruction that comprises of “(a) rereading familiar story books, (b) phonemic awareness/phonics, (c) writing, and (d) reading a new book” (p. 306).
Numerous studies support the importance of phonemic awareness and phonics instruction. Many also provide methods to perform phonemic awareness and phonics instruction inside the classroom. For instance, Cunningham and Cunningham's (1992) approach for constructing expressions in an improved phonemic awareness, phonics, and spelling methodology -- students are taught how the alphabetic arrangement operates as they deal with sound-symbol associations, spelling configurations, and word relations. Cunningham and Hall (1994) revealed that the construction of words has three practical back ups. Primarily, Treiman's (1985) study recommended readers find a simpler way to divide expressions into their inceptions (i.e., letters that are placed earlier than the vowel) and times (i.e., the vowel and letters subsequent to it). For example, it is simpler to divide "Dan" into "D-an" as opposed to dividing it into "Da-n" or "D-a-n." Additionally, it is easier to construct "pan" or "fan" from the word Dan than from the words "dab" or "dash." Practically, the work of Wylie and Durrell (1970) recognized 37 elevated functioning phonograms that can be acknowledged in nearly 500 chief words. The efforts of Goswami and Bryant (1990) support the above body of evidence in that they examined spelling by similarity. This study illustrates that if children are able to read and spell some expressions, they can utilize their existing expressions to assist them in cracking unidentified terms (e.g., employing the recognized words like "lake" and "make" to identify "snake").

Share et al. (1984) found phonemic awareness as one of the best predictors of how well children will learn to read. Castle et al. (1994) found that phonemic training increased the raw scores of students in a test of written spelling, comprehension and writing fluency. Griffith et al. (1992) examined the effects of phonemic awareness on the
literacy development of first grade students. They found that children experiencing early
exposures to phonemic awareness strategies out performed other children in spelling and
writing. Additionally, the National Reading Panel (2000) reports of the subgroups
(NRPRS; National Institute of Child Health and Human Development, 2000) suggested
that phonemic awareness teaching would be mainly valuable when it was “focused on
one or two types of phoneme manipulations rather than multiple types, and when students
are taught in small groups” (p. 2-6). NRPRS observed that phonemic awareness
instruction is merely one area of reading instruction. Both phonemic awareness and
phonics instruction are often described as “an active decision-making process [that] uses
comparing and contrasting; attends to sounds, spelling, and meaning; anchors letter-
sound correspondence [in writing and meaning]; promotes fluency through automaticity;
is aimed at the goal of comprehension; and systematically targets developmental needs”

Phonics

Phonics is a set of rules that specify the relationship between letters in the spelling
of words and the sounds of spoken language. Phonics instruction teaches children the
relationships between the letters (graphemes) of written language and the individual
sounds (phonemes) of spoken language. The goal of phonics instruction is to help
children learn and use the alphabetic principle – the understanding that there are
systematic and predictable relationships between written letters and spoken sounds.
Recognizing and understanding these relationships will help children identify familiar
words accurately and automatically, and “decode” new words. Phonics can be taught
effectively to the whole class, to small groups, or to individual students, depending on the
needs of each student. Approximately two years of phonics instruction is sufficient for most students, and should begin in kindergarten or first grade.

Critics of phonics instruction argue that English spellings are too irregular for phonics instruction to really help children learn to read words. However, key findings from scientific research on phonics instruction conclude that systematic and explicit phonics instruction is more effective than non-systematic or no phonics instruction (NICHD, 2000). The difference between systematic and non-systematic phonics programs is that systematic phonics teaches a set of letter-sound relationships (both consonants and vowels) in a clearly defined sequence. A systematic phonics program also provides materials that give children substantial practice in applying knowledge of these relationships as they read and write. These materials include books or stories that contain a large number of words that children can decode by using the letter-sound relationships they have learned (controlled text). Phonics programs that are not systematic do not teach consonant and vowel letter-sound relationships in a prescribed sequence. Rather, they encourage informal phonics instruction based on the teacher’s perceptions of what students need to learn and when they need to learn it.

Explicit instruction in letter-sound relationship is crucial (Adams, 1990; Ball & Blachman, 1991; Byrne & Fielding-Barnsley, 1990; Foorman et al., 1997; Mann, 1993; Rack, Snowling & Olson, 1992; Snowling, 1991; Spector, 1995; Stanovich, 1986; Torgesen et al., 1997; Vellutino, 1991; Vellutino & Scanlon, 1987a). Foorman et al. (1997) found that explicit instruction in letter-sound relationships was more effective than whole language instruction. Torgesen et al. (1997) also found that explicitly teaching
the letter-sound relationships was superior to teaching explicitly at the onset-rime level and superior to an implicit approach.

An enormous amount of research effort has gone into evaluating whether instruction in specific letter-sound correspondences was important for reading acquisition. Two well known reading research reviews by the Commission on Reading (Anderson, Hiebert, Scott & Wilkinson, 1985) and Adams (1990) both concluded that the research supported an explicit phonics approach. The majority of studies find that explicit phonics instruction achieves better results than implicit phonics (Carnine, 1977; Gettinger, 1986; Haddock, 1976, 1978; Hayes & Wuerst, 1967, 1969; Jeffrey & Samuels, 1976; Jenkins, Bausell & Jenkins, 1972; Lynn, 1973; Yawkey, 1973).

Another group of studies found no differences (Fox & Routh, 1976; Muller, 1973). Several studies found explicit phonics more effective for low-performing, at-risk or special education students of varying ages (Biggins & Uhler, 1979; Enfield, 1976; Richardson, Winsberg & Binler, 1973; Williams, 1980). Taken together these findings indicate that although explicit instruction in letter-sound correspondences does not seem necessary for every group of children, it is for others (Grossen & Miller, 2003).

**Fluency**

Fluency is the ability to read a text accurately and quickly and with expression prosody. Fluent readers read aloud effortlessly and with expression. When fluent readers read silently, they recognize words automatically. Readers who have not yet developed fluency read slowly, word by word. Their oral reading is choppy and disjointed. Fluency is important because it provides a bridge between word recognition and comprehension. In a large-scale study of fluency (Pinnell et al., 1995) the National Assessment of
Education Progress reported that almost half of the fourth graders tested were unable to read fluently. Additionally, this study identified a close relationship between fluency and comprehension. Fluent readers do not have to concentrate on decoding the words, they can focus their attention on what the text means.

Fluency develops gradually over considerable time and through substantial practice. Fluency can change, depending on what readers are reading, their familiarity with the words, and the amount of practice with the reading text. Research on effective fluency instruction has found that repeated and monitored oral reading improves fluency and overall reading achievement. Students who read and reread passages orally as they receive guidance and/or feedback become better readers. Repeated oral reading substantially improves word recognition, speed and accuracy, as well as fluency.

Despite a number of advocates who affirm that sustained silent reading (SSR) works, there are studies which show that SSR makes no significant difference on reading comprehension or it has a negative effect (Chow & Chou, 2000). A dearth of research is available to confirm that instructional time spent on silent, independent reading with minimal guidance and feedback improves reading fluency or overall reading achievement. After examining 14 studies, the National Reading Panel could not recommend that "schools should adopt programs to encourage more reading if the intended goal is to improve reading achievement. It is not that the studies have proven that this cannot work, only that it is yet unproven" (NRP, pp. 3–27). Many practitioners and researchers suggest that the primary purpose of sustained silent reading is to encourage students to read more and to increase their enjoyment of reading rather than to have a direct effect on reading achievement (Gardiner, 2001; Yoon, 2002).
Students can become more fluent readers when teachers provide them with models of fluent reading, and by having students repeatedly read passages as they offer guidance. Teachers should read aloud daily to their students to model how a fluent reader sounds during reading. Teachers develop reading fluency by providing students with many opportunities to read the same passage orally several times (Sedita, 2001).

Fluency is a prerequisite if learners are to succeed at constructing meaning from text (Allington, 1983; Kuhn & Stahl, 2003; Samuels, 1988; Schreiber, 1980). One of the first researchers who contributed to our understanding of fluency was William MacKeen Cattell (1886), a 19th century psychologist who became intrigued by the discovery that readers can read a word faster than they can name a picture of the object. Cattell was the first to emphasize that humans become almost “automatic” when they read, much more so than speaking.

LaBerge and Samuels (1974) were the first psychologists to construct a model of what it means to acquire “automaticity” in reading. They stressed that reading fluency is based on the rapidity of micro-level sub-skills (e.g., knowing letter-sound rules, letter combinations, and the meaning of words and their connections). Further, they argued that only when these lower-level micro-skills become automatic can time be allocated by the reader to more sophisticated comprehension skills. Bowers and Wolf (2005) have studied a way to detect children who will develop reading fluency problems before they learn to read. They found that children who have early slowed naming speed problems (Denckla & Rudel, 1976; Wolf, 1986) often go on to become children with later fluency and comprehension problems (Wolf & Bowers, 1999).
Kuhn and Stahl (2003) concluded after reviewing over 150 fluency studies that fluency instruction is generally effective; repetitive approaches do not hold a clear advantage over non-repetitive approaches; and effective fluency instruction includes automatic word recognition and rhythm and expression. However, according to the automaticity theorists, the best way to ensure the transition from deliberate decoding to automatic decoding is through extensive practice (NICHD, 2000). Repetitive approaches, practice and skills allows learners to gain comfort with print, thereby enabling the transition from learning to read to reading to learn (Challs, Jacobs & Baldwin, 1990; Kuhn & Stahl, 2003) to proceed smoothly.

**Vocabulary**

The term vocabulary refers to words we need to know to communicate with others. In general, vocabulary can be described as oral vocabulary or reading vocabulary. Oral vocabulary refers to words that we use in speaking or recognize in listening. Reading vocabulary refers to words we recognize or use in print. Vocabulary plays an important role in learning to read, and it is very important to reading comprehension. Vocabulary growth is closely linked to school progress (Penno, Moore & Wilkinson, 2002; Walker, Greenwood, Hart & Carta, 1994; Wells, 1987) and competency in reading (Carnine, Kameenui & Coyle, 1984; Huttenlocher, Haight, Bryk, Seltzer & Lyons, 1991; Jenkins, Stein & Wysocki, 1984; Mezynski, 1983; Penno, Moore & Wilkinson, 2002). Additionally, Hart and Risley’s (1995) study revealed the impact of poverty in vocabulary development. Children in economically disadvantage homes were exposed to fewer words, which impacted their own vocabulary use and rate of vocabulary growth.
Blachowicz and Fisher (2005) state, "the overall goal of a comprehensive vocabulary program is to expand both receptive and expressive vocabularies, and to continually move words from the receptive level to the expressive level" (p. 3). There are three instructional approaches found to contribute to vocabulary growth: direct instruction, incidental learning from verbal contexts and a combination of direct instruction in word meanings and learning from context (Penno, Moore & Wilkinson, 2002). Research findings establish support for two instructional practices that improve comprehension: ongoing, long-term vocabulary instruction (Beck, Perfett & McKeown, 1982) and teaching vocabulary words prior to making reading assignments (Brett, Rothlein & Hurley, 1996; Wixson, 1986). Indirect vocabulary learning happens when students hear and see words used in different contexts. Conversations, listening to adults read aloud, and reading on their own facilitates vocabulary development.

Direct vocabulary learning happens when students are explicitly taught both individual words and word-learning strategies. Specific word instruction includes reviewing new vocabulary words before reading and by providing time when students can work actively with new words. Additionally, students need to be taught strategies for determining a new word independently. This includes learning how to use dictionaries and other reference aids; how to use information about word parts to figure out the meanings of new words (i.e., roots, suffixes and prefixes); and how to use context clues to determine word meanings.

Research has reported conflicting evidence where students consistently derive meaning through incidental exposure (Elley, 1989; Nicholson & Whyte, 1992; Schatz & Baldwin, 1986). Reporting substantial gains were not demonstrated amongst students.
Penno, Moore, and Wilkinson (2002) instructional recommendations included: children in their early years of school can learn vocabulary from listening to stories, through repeated story presentations and through teacher explanation. Beck and McKeown (1991) stated, “any question on vocabulary, be it how readily words are learned ... or what kind of instruction works best, must be answered by it's conditional; it depends on the situation” (p. 808). Their premise is extensive reading develops vocabulary and language. Beck and McKeown also established that vocabulary is more readily acquired by motivated students as opposed to those students who demonstrate no true interest in reading. They propose direct instruction on the more practical elements of vocabulary instruction. Beck and McKeown (2002) encourage educators to incorporate “listening and speaking competencies [which are usually ahead of children's competence in reading and writing] to enhance their vocabulary development” (p. 48).

Vocabulary growth is a product of extensive reading, particularly factual reading; study and dialogue; and open and attentive teaching. Students develop vast vocabulary in the course of constant daily concentration to—and conversation in—words.

*Reading Comprehension*

Reading comprehension is the final goal of reading instruction. Comprehension is the ability to determine meaning from text. It is a complicated, interactive process, where readers construct meaning based on the information they get from the text combined with their own knowledge (Sedita, 2001). Research also shows that comprehension strategies can and should be taught explicitly and directly to students (NICHD, 2000). This means explaining why and when strategies should be used, and how to apply them. Explicit
instruction includes direct explanation, modeling, guided practice, and application of a strategy.

Research has revealed important sources of influence on children’s reading comprehension, including the instruction and support children receive both within and outside the classroom (Snow, 2001). Explicitly teaching children strategies has proven effective in improving reading comprehension specifically and reading proficiency generally (NICHD, 2000; Pressley & Wharton-McDonald, 1997; Rosenshine & Meister, 1994; Snow, 2001). There are six strategies that demonstrate the most scientific basis for improving text comprehension: (a) monitoring comprehension (students monitor their comprehension and know when they do or do not understand what they are reading); (b) using graphic and semantic organizers (graphic organizers (e.g., maps, webs, charts, graphs) help readers focus on the main concepts and how they are related to other concepts; graphic organizers help students focus on text structure as they read, provide tools to visually represent the ideas they are learning, and help students write summaries of the text); (c) answering questions (teacher questioning supports comprehension because it gives students a purpose for reading, focuses their attention on what they are to learn, helps them think actively as they read, encourages them to monitor their comprehension, and helps them relate what they already know to the content); (d) generating questions (teaching students to ask their own questions improves their active processing of the text); (e) recognizing story structure (story structure refers to the way the content and events of a story are organized into a plot; students learn categories of content such as setting, initiating events, attempts, outcomes, etc. and how this content is organized into a plot); and (f) summarizing (a summary is a synthesis of the important
ideas in the text; teaching summarizing helps students identify main ideas, connect ideas, eliminate irrelevant information, and remember what they read).

Pearson and Duke (2002) indicate that teaching strategies such as story grammar analysis and text structure analysis positively affect the comprehension of primary grade and at-risk populations. Approaches should use “a combination of explicit instruction, modeling, and discussion to teach comprehension strategies” (p. 254). Eldredge, Reutzel, and Hollingsworth (1996) asserted that teachers must involve pupils frequently in mutual book encounters so as to augment the student’s comprehension progress, verbal reading, fluency, and vocabulary development, plus amplify their aspiration to read for themselves. The objective of teachers should be to allow pupils cultivate into and continue to be self-inspired readers who prefer to read (Gambrell, 1996; Guthrie & Anderson, 1999). Self-inspired readers persist to read long past their classrooms and schools.

Connor, Morrison, and Petrella (2004) suggests not enough is known about how effective reading comprehension instruction is implemented in the classroom and to the extent teachers teach children effective strategies. In a study conducted by Pressley and his colleagues (Pressley, Wharton-McDonald, Mistretta-Hapston & Echevarria, 1998) it was found that children were offered opportunities to practice reading comprehension strategies but given little instruction about how to use them and why they might be helpful. Additionally, it has been cited that quasi-experimental and quantitative studies have been less successful in expounding on the interplay between classroom instruction and reading comprehension (NICHD, 2000).
Despite the conflicting evidence regarding effective reading practices, recent initiatives, at the federal and state level, continue to focus on reading instruction in an effort to improve the reading performance of our nation’s children. Thus, school districts are requiring publishers to show evidence that the approach and materials in their reading programs will support districts in achieving the NCLB goal – 100 percent proficiency for all children in the areas of reading and mathematics by the year 2014. The impact of the Voyager Universal Literacy System is the focus of this study.

Review of Voyager Universal Literacy Reading Research

While there are no easy answers or quick solutions for optimizing reading achievement, extensive research exists on the kinds of instruction that need to be given to children so they can learn to read well. Educators must understand how instruction in phonemic awareness, phonics, fluency, vocabulary and text comprehension can help ensure the reading success of every child. All curriculum and supplemental materials funded under Reading First, federal grant, must be based on scientific research and offer instruction in the five key areas identified by the National Reading Panel. Roberts (2002) asserted that the Voyager Universal Literacy System contains the five decisive elements of reading education (phonemic awareness, phonics, fluency, vocabulary, and comprehension). The remaining paragraphs summarize research pertaining to Voyager Universal Literacy Program.

Founded in 1994, Voyager Expanded Learning is a provider of K-3 in-school reading programs, as well as K-8 reading intervention programs for school districts throughout the United States. Voyager Universal Literacy’s systematic, precise framework fully addresses the five elements of reading instruction, through an explicit
succession of ability growth. Voyager Universal Literacy was developed to be a comprehensive program encompassing the subsequent requisites: in-school broad reading program, progress monitoring methods, extensive-day and summer activities, home learning syllabus, implementation monitoring, and on-going professional development. Voyager Universal Literacy Program activities are organized to provide a thorough range and progression for reading instruction.

There is some research on the efficacy of Voyager Universal Literacy System. Voyager has participated in more than a dozen studies to evaluate the effectiveness of its reading program in helping students learn to read and the outcomes vary from effective to marginal change. Roberts (2002) conducted a longitudinal study of the effects of Voyager Universal Literacy. This study examined data for 16,443 students enrolled in Voyager’s Universal Literacy System in 291 schools across the United States. This report relied on Vitals Indicators of Progress system (VIP), an alternative form of Dynamic Indicators of Basic Early Literacy Skills (DIBELS), data to evaluate program impact. The researcher found that Voyager’s first grade students “made considerable progress over the course of the school year” (p. 2). Additionally, Roberts found that children with prior Voyager exposure were more likely to perform on grade level than non-Voyager children.

Drayton et al. (2002) examined the efficacy of the Voyager Universal Literacy Program in a Florida school district. This study focused on the following four areas: (a) group differences in posttest performance; (b) Voyager Universal Literacy consistently improve reading related skills; (c) group differences on measures of classroom reading-related behaviors for children and teachers; and (d) group differences on timed reading related tasks. For questions one and two, Voyager Universal Literacy children showed a
statistically significant advantage over non-Voyager children specifically in letter naming, sound knowledge and phoneme segmentation. The researchers concluded that "Voyager Universal Literacy System consistently fosters substantial growth in reading related skills in kindergarten children, enhances the frequency of reading related classroom behaviors and enhances children's rate of access to reading related knowledge" (p. 15).

Several studies assess the relationship between program implementation and student outcomes (Frechtiling, Silverstein & Zhang, 2003; Frechtiling, Zhang & Wang, 2004; Roberts, 2002). Each study conducted an annual evaluation of Voyager Universal Literacy System implemented in the District of Columbia Public Schools, Cleveland Public Schools, and Birmingham Public Schools. These studies found "high levels of implementation" (p. 13) versus "inadequate implementation fidelity" (p. 13) were linked to significantly higher scores on state assessments and other standardize assessments (i.e., DIBELS, Woodcock Johnson). Frechting, Zhang and Wang (2004) examined student outcomes through the lens of implementation groupings (high, medium and inadequate). Students in high implementation classes had significantly larger gains than those of low implementation classes in the areas of word attack and identification. Additionally, the program and its level of implementation were found to have stronger effects on student achievement than student and teacher characteristics.

Roberts (2002) conducted an implementation study of Voyager Universal Literacy in Birmingham City Schools. Six schools participated in the study. One hundred seventy-seven students were included in this study – some 91 kindergartens and 86 first graders. Those students with both pre and post-test scores were included in the study's
analysis. The Vital Indicators of Progress (VIP) and the Woodcock Diagnostic Reading Battery (WDRB) instruments were administered as both the pre and post-tests.

Instructional practices in each participating classrooms were monitored on at least two occurrences, once by a Voyager delegate and once by a Birmingham regional executive.

This study examined the students’ percentile rank (PR) on both the VIP and WDRB instruments. WDRB percentile rank indicated that Voyager students demonstrated greater gains than non-Voyager students in the same age group. When those classrooms that were unsuccessful in implementing the program components with fidelity ($n=2$ kindergarten classrooms) were disqualified from the study, the conclusions were even more striking. The standard percentile rank increased by 20 points. After spring posttest marks (April/May 2002) for Voyager kindergarten students in “high implementing” classrooms were contrasted to pretest scores (November 2001) for first graders before Universal Literacy System implementation, kindergarten students performance was considerably higher — 66 PR to 39 PR for kindergartners and first grade students respectively (Roberts, 2002).

This research supports greater efficiency for the Voyager Program over the “traditional” reading strategies. Strong evidence supports the presence of best practice reading activities were more customary in the Voyager classrooms as opposed to the “control” classrooms. The results also imply that students in the Voyager Program seem to have been more efficiently trained to quickly identify relevant text information for comprehension than those in the “control” class settings. Specifically, sufficient evidence points increased fluency letter recognition, recognition of sounds in words, and phonemic
awareness for Voyager students as opposed to "control" students as demonstrated on the DIBELS assessment.

Roberts (2002) incorporated a selection of assessment surveys and the outcomes portrayed a convincing situation in support of Universal Voyager Literacy Program’s efficiency in teaching young students how to read. Kindergartners, first and second-graders in Universal Voyager Literacy were cautiously assessed in 25 school localities for the period of the 2002–2003 school years. More than 90 percent of these students were reading at grade level or materialized as emerging readers with less than 10 percent of the students identified as at-risk.

Roberts’ (2002) analysis also reinforced that reliability of execution is an imperative component of Universal Voyager Literacy. The study asserts, the greater the fidelity of the implemented curriculum to the Voyager components, the greater the student performance on reading assessments.

Summary

As noted above, the ultimate goal of reading is comprehension. However, in order to achieve adequate comprehension, five key components of reading were identified by the National Reading Panel (2000): phonemic awareness, phonics, fluency, vocabulary and reading comprehension. Phonemic awareness is the understanding that spoken words are made up of separate units of sounds that are blended together when words are pronounced, and helps children use more advanced ways of learning new words; correlational research studies have demonstrated a strong relationship between phonemic awareness and learning to read (e.g., Ehri et al., 2001). Phonics is a set of rules that specify the relationship between letters in the spelling of words and the sounds of spoken
language, and teaches children the relationships between the letters (graphemes) of written language and the individual sounds (phonemes) of spoken language. While critics of phonics instruction argue that English spellings are too irregular for phonics instruction to really help children learn to read words, findings from scientific research on phonics instruction conclude that systematic and explicit phonics instruction is more effective than non-systematic or no phonics instruction (NICHD, 2000). Fluency is the ability to read a text accurately and quickly, and is important because it provides a bridge between word recognition and comprehension. Fluency is a prerequisite if learners are to succeed at constructing meaning from text (e.g., Kuhn & Stahl, 2003). Vocabulary refers to words we need to know to communicate with others, and can be either oral or written. Numerous studies have shown that vocabulary growth is closely linked to school progress and competency in reading (e.g., Penno, Moore & Wilkinson, 2002). Finally, reading comprehension is the ability to determine meaning from text. It is a complicated, interactive process, and as noted, is the ultimate goal of reading.

The Voyager Universal Literacy System contains the five decisive elements of reading education identified by the National Reading Panel (2000) and is therefore a viable method of literacy instruction. More than a dozen studies have examined the program, and the results have generally been positive (e.g., Frechtling et al., 2003; Roberts, 2002). Although past research has demonstrated that the program has the potential to be effective, further study is needed to determine the extent to which the program is effective with different types of students, that is, to examine the effectiveness of the program across various student groups. It may be the case that the program is more beneficial to male students as opposed to female students. Thus, the purpose of this study
is to analyze the impact of the Universal Voyager Literacy Program on reading achievement and teacher instructional practices in an urban school district, and to determine the extent to which this impact generalizes across Title I and non-Title I schools and student gender. The next chapter presents the methodology employed to examine the following three research hypotheses:

1. Participants in Universal Voyager Literacy Program perform better than participants in non-Voyager literacy programs.

2. The Universal Voyager Literacy Program is equally effective for students in Title I versus students in non-Title I schools.

3. The Universal Voyager Literacy Program is equally effective for male and female students.

Along with the above hypotheses, instructional practices of teachers in both the Universal Voyager Literacy Program and non-Voyager literacy programs were examined and reported.
CHAPTER III: METHODOLOGY

The purpose of this study is to explore and describe the impact of the Voyager Universal Literacy Program on reading achievement and teacher instructional practices in an urban school district. The type of non-experimental research design used for this study is ex-post facto. The intent of an ex-post facto design is the uncovering of possible cause and effect relationships among already existing phenomena (Leedy, 1997) through careful matching of groups in order to rule out plausible rival hypotheses. This chapter describes the setting, sample population, measurement instruments and data collection procedures followed to address the questions posited in Chapter I.

Research Questions/Hypotheses

The study addressed four research questions. The first question is: How have students who participated in the Universal Voyager Literacy Program performed on the DCCAS compared to students who participated in non-Voyager literacy programs? The hypothesis associated with this question is:

1. Participants in Universal Voyager Literacy Program perform better than participants in non-Voyager literacy programs.

The second question is: Is the Universal Voyager Literacy Program equally effective for students in Title I schools versus students in non-Title I schools? From this question the hypothesis is:

2. The Universal Voyager Literacy Program is equally effective for students in Title I versus students in non-Title I schools.
The third research question is: *Is the Universal Voyager Literacy Program equally effective for male and female students?* The corresponding hypothesis is that:

3. The Universal Voyager Literacy Program is equally effective for male and female students.

In addition to the above stated quantitative hypotheses, mixed method data collection strategies were employed to explore in-depth differences in instructional practices for a small sample of teachers. Due to the qualitative nature of the data collection methodology a hypothesis is not necessary. Thus, the fourth research question is: *What were the instructional practices of among four teachers in the Universal Voyager Literacy Program and four teachers in non-Voyager programs?*

**Setting and Population**

This study was conducted using data collected from thirteen elementary schools located within the large urban school district of the District of Columbia. The sampling of students from this district was convenience sampling (Patton, 2002, p. 45). This school district of 148 schools, 114 of which are elementary schools, is comprised of approximately 65,000 students in grades Pre-School thru grade 12. Eighty-three percent of the student population is African American; ten percent Hispanic; five percent Caucasian and two percent other.

The thirteen district schools, designated School A thru School M for purposes of this study, have average enrollments of 325 students and served grades Kindergarten thru grade six. Most of the schools are located in an economically depressed area of the city as reflected by the percent of children living below poverty level. School A thru School M had an average of 40% of its childhood population below the poverty level. Each
school was classified as a Title I – a school receiving additional federal dollars due to high percentage of low-income families, non-Title I school.

Sample

The student sample consisted of 852 third grade students from the classes of 45 teachers at 13 schools. Table 1 shows a description of the schools in this study. Of the 13 schools, seven were Title I schools and six were not, and there were five schools who participated in the Voyager Program and eight that did not. Table 2 provides descriptive statistics for the students. Of the 852 students, 630 (73.9%) were not in the Voyager Program, while 222 (26.1%) were in the Voyager Program. Descriptive statistics for the sample background characteristics are presented in Table 2 for the total sample and for students in the Voyager Program and not in the Voyager program.

Overall, 54.1% of the students were at a Title I school, and the sample was approximately evenly split between males (52.0%) and females (48.0%). In terms of ethnicity, the total sample consisted of 695 Black students (81.6%), 133 White students (15.6%), 17 Asian students (2.0%), and seven Hispanic students (0.8%). Among those students in the Voyager Program, 48.6% were at a Title I school while 51.4% were not. For those not in the Voyager program, 56.0% were at a Title I school and 44.0% were not. The gender distribution among Voyager Program students (49.5% female and 50.5% male) and non-Voyager Program students (47.5% female and 52.5% male) was similar. Ethnically, nearly all of the students in the Voyager program (99.5%) were Black, compared to 75.2% of those not in the Voyager program.
Table 1

*School Characteristics*

<table>
<thead>
<tr>
<th>School</th>
<th>Number of 3rd Graders</th>
<th>Number of Teachers</th>
<th>Title I Status</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>126</td>
<td>6</td>
<td>Title I</td>
<td>Non-Voyager</td>
</tr>
<tr>
<td>B</td>
<td>57</td>
<td>2</td>
<td>Title I</td>
<td>Non-Voyager</td>
</tr>
<tr>
<td>C</td>
<td>64</td>
<td>4</td>
<td>Not Title I</td>
<td>Voyager</td>
</tr>
<tr>
<td>D</td>
<td>21</td>
<td>2</td>
<td>Title I</td>
<td>Voyager</td>
</tr>
<tr>
<td>E</td>
<td>50</td>
<td>4</td>
<td>Not Title I</td>
<td>Voyager</td>
</tr>
<tr>
<td>F</td>
<td>51</td>
<td>3</td>
<td>Title I</td>
<td>Non-Voyager</td>
</tr>
<tr>
<td>G</td>
<td>119</td>
<td>7</td>
<td>Title I</td>
<td>Non-Voyager</td>
</tr>
<tr>
<td>H</td>
<td>44</td>
<td>2</td>
<td>Title I</td>
<td>Voyager</td>
</tr>
<tr>
<td>I</td>
<td>43</td>
<td>2</td>
<td>Title I</td>
<td>Voyager</td>
</tr>
<tr>
<td>J</td>
<td>41</td>
<td>2</td>
<td>Not Title I</td>
<td>Non-Voyager</td>
</tr>
<tr>
<td>K</td>
<td>36</td>
<td>2</td>
<td>Not Title I</td>
<td>Non-Voyager</td>
</tr>
<tr>
<td>L</td>
<td>87</td>
<td>4</td>
<td>Not Title I</td>
<td>Non-Voyager</td>
</tr>
<tr>
<td>M</td>
<td>113</td>
<td>5</td>
<td>Not Title I</td>
<td>Non-Voyager</td>
</tr>
<tr>
<td>Total</td>
<td>852</td>
<td>45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2

Sample Characteristics (N = 852)

<table>
<thead>
<tr>
<th></th>
<th>Non-Voyager (n = 630)</th>
<th>Voyager (n = 222)</th>
<th>Total Sample (N = 852)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Title 1 School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>277</td>
<td>44.0</td>
<td>114</td>
</tr>
<tr>
<td>Yes</td>
<td>353</td>
<td>56.0</td>
<td>108</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>299</td>
<td>47.5</td>
<td>110</td>
</tr>
<tr>
<td>Male</td>
<td>331</td>
<td>52.5</td>
<td>112</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>17</td>
<td>2.7</td>
<td>0</td>
</tr>
<tr>
<td>Black</td>
<td>474</td>
<td>75.2</td>
<td>221</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6</td>
<td>1.0</td>
<td>1</td>
</tr>
<tr>
<td>White</td>
<td>133</td>
<td>21.1</td>
<td>0</td>
</tr>
</tbody>
</table>

Eight teacher participants were selected based on their students’ achievement data; thus, the teacher sample was a purposeful sample (Patton, 2002, p. 46). More specifically extreme (i.e., selecting cases that have notably successful students and notably unsuccessful students) and typical sampling (i.e., selecting cases that are the most average) was employed. Table 3 provides descriptive statistics for the teachers. That is,
three teachers with a small number (less than 25% of the class) of proficient and/or advanced students as measured on the DCCAS, three teachers with a high number (greater than 60% of the class) of proficient and/or advanced students as measured on the DCCAS, and two teachers where one-third of the class scored proficient and/or advanced students as measured on the DCCAS.

Table 3

Teacher Characteristics

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Number of Years Taught</th>
<th>Achievement Level of Students</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5+</td>
<td>Medium</td>
<td>Voyager</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Low</td>
<td>Voyager</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Low</td>
<td>Voyager</td>
</tr>
<tr>
<td>4</td>
<td>5+</td>
<td>High</td>
<td>Non-Voyager</td>
</tr>
<tr>
<td>5</td>
<td>5+</td>
<td>Medium</td>
<td>Non-Voyager</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>High</td>
<td>Non-Voyager</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>Low</td>
<td>Non-Voyager</td>
</tr>
<tr>
<td>8</td>
<td>5+</td>
<td>High</td>
<td>Voyager</td>
</tr>
</tbody>
</table>

The thirteen schools chosen to participate in the study were selected based on demographic similarities, Title I status and their implementation or non-implementation of the Voyager Universal Literacy Program. For purposes of this study, all DCCAS data collected reflect 2006-2007 third grade classes. A strategy for exploring others' perspectives, is through "here and now constructions" and "reconstructions" of "persons, events, activities, organizations, feelings, motivations, claims, concerns, and other entities" (Lincoln and Guba, 1985, p. 268). Teacher observations and interviews were
administered during fall of 2007, to teachers implementing the Voyager Universal Literacy Program and/or non-Voyager programs – to gain additional insight into the achievement data findings. Because of the ex-post facto nature of this study, no attempt was made to evaluate the fidelity of program implementation among schools.

Instruments

The research data consisted of published DCCAS test scores, classroom observations and teacher interviews. The researcher used the Early Language and Literacy Classroom Observation (ELLCO) research instruments – developed by a team of veteran educators and education policy developers. Each tool was piloted and used in several research studies conducted in more than 150 classrooms. Below is a brief description of each data instrument.

District of Columbia Criterion Assessment System (DCCAS)

The District of Columbia Comprehensive Assessment System (DCCAS) is the state assessment for the District of Columbia developed by McGraw-Hill (2007). DCCAS is designed to measure students’ achievement of grade level content standards. It is comprised of multiple choice and brief constructed response questions. The DCCAS is a criterion-referenced assessment, also known as a standards-based assessment. The items on the DCCAS cover a broad range of reading and math content. The DCCAS provides four scores: a total reading scale score and three reading subtest scores (Literary Text, Vocabulary, and Informational Text). Total Reading scale scores were analyzed as they relate to reading achievement. In addition, the following reading subtest scores (Literary Text, Vocabulary, and Informational Text) were analyzed for trends.
The DCCAS reading and mathematics subtests contain 40 to 50 multiple choice items and 3 open-ended response items. During test construction, each of these items underwent intense review by content and curriculum specialists to ascertain that they were well constructed, adhered to the test blueprint, and were seemingly free from cultural, ethnic, and gender biases with regard to content, style, and vocabulary. Many items incorporate visual aids, several require students to apply knowledge, and others ask them to draw parallels between two different sets of variables. Cronbach’s alpha of .72 for the reading score demonstrates moderate internal consistency. Composite scale scores are available for reading, mathematics, and writing.

**Literacy Environment Checklist**

The Literacy Environment Checklist developed by Early Language and Literacy Classroom Observation (ELLCO) is composed of 25 indicators or items categorized in three scales: Books, Writing, and Total score. The Literacy Environment Checklist guides observers in examining classrooms’ layout and content with items that target availability, content, and diversity of reading, writing, and listening materials. Cronbach’s alpha of .84 for the Total score demonstrates strong internal consistency. The average interrater reliability for the Literacy Environment Checklist was 88%. A copy of this instrument is contained in Appendix A.

**Classroom Observation and Teacher Interview Form**

The Classroom Observation and Teacher Interview Form developed by Early Language and Literacy Classroom Observation (ELLCO) is composed of 14 indicators or items categorized in three scales: the General Classroom Environment; the Language, Literacy, and Curriculum; and the Total score. Interview questions were asked in an
open-ended fashion to "minimize the imposition of predetermined responses when gathering data" (Patton, 1990, p. 295). The Classroom Observation and Teacher Interview Form guided the researcher in examining teachers' interactions with children and the classroom environment, facilitated a brief interview with the teacher, and rated the quality of classroom supports for literacy through 14 age-specific observation elements. These items covered two areas: general classroom environment (including organization, contents, technology, and classroom climate and management) and language, literacy, and curriculum (including reading and writing instruction, oral language use, cultural sensitivity, and assessment approaches). After the completed observation, brief Teacher Interviews helped the researcher clarify aspects of the observation. Cronbach’s alpha of .83 for the Classroom Observation and Teacher Interview Form demonstrates strong internal consistency. The average inter-rater reliability for the Classroom Observation and Teacher Interview Form was 90%. A copy of this instrument is located in Appendix B.

**Literacy Activities Rating Scale**

The Literacy Activities Checklist developed by Early Language and Literacy Classroom Observation (ELLCO) is composed of nine indicators or items categorized in three scales: the Full-Group Book Reading, the Writing, and the Total score. The Literacy Activities Rating Scale is an instrument that asks observers to record how many times and for how long nine literacy behaviors occur in two categories, Book Reading and Writing. Cronbach’s alpha of .66 for the Literacy Activities Rating Scale demonstrates moderate internal consistency. The average interrater reliability for the Literacy Activities Checklist was 81%. A copy of this instrument located in Appendix C.
Data Collection Procedures

Achievement Data

During the summer of 2007, the researcher contacted the Director of Reading for the District of Columbia Public Schools, the coordinator for Voyager Universal Literacy and the reading coordinator for each school to obtain permission to conduct the research. Additionally, the researcher obtained access to student DCCAS itemized data through the Office of Accountability for the District of Columbia Public Schools. DCCAS data was analyzed during the summer of 2007.

Observations

From the DCCAS data findings, a purposeful sample of eight teachers, our Voyager Program teachers and four non-Voyager Program teachers, were selected for observations and interviews. Table 3 provides descriptive statistics for the teachers. The purposeful sampling inquiry was selected “because they are information rich and illuminative, that is, they offer useful manifestations of the phenomenon of interest” (Patton, 2002, p.40). This paradigm allows for and appreciates the study of phenomena within its natural setting, insisting that "the research interaction should take place with the entity-in-context for fullest understanding" (Lincoln and Guba, 1985). It recognizes the researcher as the instrument, taking into account the experiences and perspectives of the researcher as valuable and meaningful to the study (Lincoln and Guba, 1985). The purpose was to obtain additional insight into the achievement data. Two teachers with low-performing students and two teachers with high-performing students were selected to fulfill the extreme portion of the purposeful sampling design, and four teachers with
students performing at an average level were selected to fulfill the typical portion of the purposeful sampling design.

A letter was sent to the administrators of each school informing them of the study and the fact that observations were scheduled for the fall 2007. Letters of endorsement by the Director of Reading for the District of Columbia Public Schools were sent with the introductory letter to urge the administrator of the school to participate in the study. After mailing of the letters, the researcher telephoned the school and made an appointment with the administrator. At the time of the appointment, the following procedures were followed: DCCAS data was reviewed by the researcher with the administrator and the teacher who was observed and interviewed. After reviewing the DCCAS data, the researcher scheduled a day and time to conduct the observation and interview. Observations occurred during the reading block and lasted approximately 40 minutes. The observation focused on classroom environment and teacher instructional strategies. The researcher took notes during the observational sessions.

Interviews

One-on-one teacher interviews were held after school with the same teachers selected for observation within three days of the observational sessions at the school site. Interviews lasted approximately 30 minutes. The primary purpose of the interviews was to ask seven to ten open-ended follow-up questions to clarify observed teacher practices. All interviews were tape recorded and transcribed by an independent external reviewer for analysis. Participants received copies of all transcriptions by email for further verification and revision. As an incentive for teacher participation, each teacher was
given a $25 gift card. Interview responses were analyzed to determine common themes and trends.

Data Analysis

Initially, descriptive statistics for DCCAS scores were presented by program, Title I status, and gender. Inferential analyses were performed to address the three quantitative research questions. All inferential analyses were performed using two-tailed tests and an α level of .05. Descriptive and qualitative findings from teacher observations are then presented.

The first question is: How have students who participated in Universal Voyager Literacy Program performed on the DCCAS compared to students who participated in non-Voyager literacy programs? To address this question, an independent samples t test was performed between the Voyager Program students and the non-Voyager Program students in terms of the scores on the DCCAS reading test.

The second research question is: Is the Universal Voyager Literacy Program equally effective for students in Title I schools versus students in non-Title I schools? To address this question, a two-factor ANOVA was performed with program status (Voyager or not) and school status (Title I or not) as the independent variables and reading test scores from the DCCAS as the dependent variable. The third research question is: Is the Universal Voyager Literacy Program equally effective for male and female students? Again, a two-factor ANOVA was performed with reading test scores from the DCCAS as the dependent variable and program status and school status as the independent variables.

The fourth research question (What were the instructional practices of teachers in the Universal Voyager Literacy Program and other programs?) was addressed both
quantitatively and qualitatively. The three measures of instructional practices described above provide descriptive quantitative data. Given the small sample size for the observations and interviews, descriptive statistics (means and standard deviations for each group) are presented. Interview data from the Classroom Observation and Teacher Interview form were coded and examined for the presence of common themes related to teacher practice. The analysis involved organizing coded data units into categories identified through similar characteristics (Lincoln & Guba, 1985).
CHAPTER IV: RESULTS

This chapter presents the results of the analyses performed to address the four research questions of this study. Initially, descriptive statistics for the student sample was presented. Then, the inferential analyses were described. The final analysis section consists of the qualitative results of the classroom observations. The chapter ends with a summary of findings.

Descriptive Statistics for Student Sample

DCCAS Scores

Table 4 shows descriptive statistics for the overall reading scores from the DCCAS as a function of school status (Title I versus non-Title I), gender, and program status (Voyager or non-Voyager). Potential differences between these subgroups are explored further in the next section.
### Table 4

*DCCAS Reading Scores as a Function of School Status, Gender, and Program Status (N = 852)*

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Title I</td>
<td>391</td>
<td>355.86</td>
<td>11.33</td>
</tr>
<tr>
<td>Title I</td>
<td>461</td>
<td>350.44</td>
<td>13.02</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>409</td>
<td>353.92</td>
<td>12.23</td>
</tr>
<tr>
<td>Male</td>
<td>443</td>
<td>352.01</td>
<td>12.80</td>
</tr>
<tr>
<td><strong>Program Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Voyager</td>
<td>630</td>
<td>352.80</td>
<td>12.87</td>
</tr>
<tr>
<td>Voyager</td>
<td>222</td>
<td>353.31</td>
<td>11.65</td>
</tr>
</tbody>
</table>

*NOTE: Reading scores range from 0 to 399.*

### Inferential Analyses

**Research Question 1**

Three quantitative research questions were described in Chapter I. The first question was: *How have students who participated in Universal Voyager Literacy Program performed on the DCCAS compared to students who participated in non-Voyager literacy programs?* As described in Chapter III, an independent samples *t* test was performed comparing the DCCAS reading scores for students in the Voyager...
Program to students not in the Voyager Program. The difference between these two groups was not statistically significant, $t(850) = -.52, p < .602$. This indicates that students in the Voyager Program did not differ from students who were not in the Voyager Program in terms of reading scores (as seen in the means presented in Table 4). Cohen’s $d$ effect size for this difference was .04, and the point bi-serial correlation between Voyager status and reading scores was -.02, indicating that very little variance in reading scores was explained by whether or not the student was in the Voyager program.

A supplemental analysis was performed in which the DCCAS subscales were compared between the Voyager and Non-Voyager schools (individual student scores were unavailable for the subscales, and therefore inferential analyses were not performed). The percentage of correct responses for the subscales were weighted by the number of 3rd grade students (shown in Table 1 in Chapter 3), and averaged across the Voyager and Non-Voyager schools. Figure 2 shows the results. Students at the Voyager schools averaged 74.4% correct on the language development subscale compared to 69.1% correct at Non-Voyager schools. For the informational text subscale, students at the Voyager schools averaged 65.0% correct compared to 59.3% correct at Non-Voyager schools. Finally, for the literary text subscale, students at Voyager schools averaged 72.7% correct at Voyager schools while students at Non-Voyager schools averaged 66.6% correct.
In examining the targeted subscales within the DCCAS there appears to be an advantage for Voyager schools – but it is difficult to tease out the specific reading acquisition areas of phonemic awareness, phonics, fluency, vocabulary and reading comprehension. Thus, while no inferential tests were performed on this data, there is a clear trend toward a better performance for students at Voyager schools.

Research Question 2

The second research question was: *Is the Universal Voyager Literacy Program equally effective for students in Title I schools versus students in non-Title I schools?* To address this question, a two-factor ANOVA was performed with Voyager Program (yes
or no) and Title I (yes or no) as the independent variables and scores on the DCCAS as the dependent variable.

The results of this analysis are shown in Table 5, and the mean DCCAS scores as a function of both program status and school status are shown in Table 6.

Table 5

Results of ANOVA on DCCAS Reading Scores with School Status and Program Status as the Independent Variables (N = 852)

<table>
<thead>
<tr>
<th>Effect</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
<th>Partial (\eta^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Status (Title I versus non-Title I)</td>
<td>1090.46</td>
<td>1</td>
<td>1090.46</td>
<td>7.57</td>
<td>.006</td>
<td>.009</td>
</tr>
<tr>
<td>Program Status (Voyager versus non-Voyager)</td>
<td>.27</td>
<td>1</td>
<td>.27</td>
<td>.00</td>
<td>.965</td>
<td>.000</td>
</tr>
<tr>
<td>School Status X Program Status</td>
<td>5827.85</td>
<td>1</td>
<td>5827.85</td>
<td>40.45</td>
<td>&lt;.001</td>
<td>.046</td>
</tr>
<tr>
<td>Error</td>
<td>122175.10</td>
<td>848</td>
<td>144.07</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6

DCCAS Reading Scores as a Function of School Status and Program Status (N = 852)

<table>
<thead>
<tr>
<th></th>
<th>Non-Voyager</th>
<th>Voyager</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>Non-Title I</td>
<td>277</td>
<td>357.59</td>
</tr>
<tr>
<td>Title I</td>
<td>353</td>
<td>349.03</td>
</tr>
</tbody>
</table>
The ANOVA results indicated that the main effect for program status was not statistically significant, $F(1, 848) = 0.00, p = .965$, replicating the results of the independent samples $t$ test presented above. The partial $\eta^2$ effect size for this effect was .000, indicating that essentially none of the variance in reading scores was explained by program status. The main effect for school status, however was statistically significant, $F(1, 848) = 7.57, p = .006$, partial $\eta^2 = .009$. This indicated that students at non-Title I schools performed better than students at Title I schools (as seen in Table 6).

In addition, the interaction between school status and program status was statistically significant, $F(1, 848) = 40.45, p < .001$. This indicated that the difference between students at Title I schools and non-Title I schools was greater for students in the Voyager Program as it was for students in non-Voyager programs. The partial $\eta^2$ effect size for this interaction was .046, indicating that 4.6% of the variance in reading scores was explained by the interaction between program status and Title I status.

![Graph](image)

*Figure 3.* Group mean reading scores as a function of program status and Title I status
In order to explore the nature of this interaction in more detail, a line graph of group means is presented in Figure 3. This figure shows that the Voyager program seemed less effective for students at non-Title I schools, $t(389) = 4.84, p < .001$, with those in the Voyager program having a lower mean ($M = 351.66, SD = 10.48$) compared to those not in the Voyager program ($M = 357.59, SD = 11.23$). Cohen’s $d$ for this difference was $.55$, and the point bi-serial correlation between program status and reading scores was $-.263$, indicating that $6.9\%$ of the variance in reading test scores was explained by program status at non-Title I schools. However, there was a bigger effect of the voyager program for students at Title I schools, $t(459) = -4.28, p < .001$, with those in the Voyager program having a higher mean ($M = 355.05, SD = 12.58$) compared to students not in the Voyager program ($M = 349.03, SD = 12.84$). Cohen’s $d$ for this difference was $.47$, and the point bi-serial correlation between program status and reading scores was $.230$, indicating that $5.3\%$ of the variance in reading test scores was explained by program status at Title I schools. Thus, the answer to the second research question is that the effectiveness of Voyager differs depending on Title I status. Voyager students in Title I schools score significantly higher than non-Voyager students in Title I schools. Conversely, non-Voyager students in non-Title I schools score significantly higher than do Voyager students in non-Title I schools.

Research Question 3

The third research question was: Is the Universal Voyager Literacy Program equally effective for male and female students? Again, a two-factor ANOVA was performed with Voyager Program (yes or no) and gender (male or female) as the
independent variables and scores on the DCCAS as the dependent variable, with results shown in Table 7.

The interaction between gender and program status was not statistically significant, $F(1, 848) = 2.54, p = .112$, indicating that each of the main effects (for program status and for gender) can be interpreted separately. Regardless of program membership females score higher on the DCCAS, $F(1,848) = 7.33, p = .007$. Therefore, the answer to the third research question is that the Voyager Program is equally effective for male and female students.

Table 7

Results of ANOVA on DCCAS Reading Scores with Gender and Program Status as the Independent Variables ($N = 852$)

<table>
<thead>
<tr>
<th>Effect</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>P</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1149.33</td>
<td>1</td>
<td>1149.33</td>
<td>7.33</td>
<td>.007</td>
<td>.009</td>
</tr>
<tr>
<td>Program Status (Voyager versus non-Voyager)</td>
<td>41.39</td>
<td>1</td>
<td>41.39</td>
<td>.26</td>
<td>.608</td>
<td>.000</td>
</tr>
<tr>
<td>Gender X Program Status</td>
<td>397.69</td>
<td>1</td>
<td>397.69</td>
<td>2.54</td>
<td>.112</td>
<td>.003</td>
</tr>
<tr>
<td>Error</td>
<td>133002.30</td>
<td>848</td>
<td>156.84</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8 shows the means by gender and program status. There appears to be a slight advantage for females over males in terms of the effectiveness of the Voyager Program (with females in the Voyager Program having an average score of 355.43 ($SD = 11.31$). Females not in the Voyager Program had a mean of 353.37 ($SD = 12.53$).
compared to males in the Voyager Program having a mean of 351.22 ($SD = 11.65$) while males not in the Voyager Program had a mean of 352.28 ($SD = 13.17$), but again this interaction was not statistically significant.

Table 8

*DCCAS Reading Scores as a Function of Gender and Program Status (N = 852)*

<table>
<thead>
<tr>
<th></th>
<th>Non-Voyager</th>
<th></th>
<th>Voyager</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Female</td>
<td>299</td>
<td>353.37</td>
<td>12.53</td>
</tr>
<tr>
<td>Male</td>
<td>331</td>
<td>352.28</td>
<td>13.17</td>
</tr>
</tbody>
</table>

*Research Question 4*

The fourth research question (What were the instructional practices of teachers in the Universal Voyager Literacy Program and other programs?) was addressed both quantitatively and qualitatively. The teacher sample consisted of eight teachers, four of whom were Voyager Program teachers and four of whom were not. All teachers were female. Three had one year of teaching experience, one had three years of experience, and four had five or more years. Seven of the teachers were teaching 3rd grade and one was a literacy coach. Six of the eight teachers had been in their current position for one year, and two had been in her current position for three years.
Classroom Observations

After reviewing the DCCAS data, eight classroom observations occurred during the months of October and November. Observations occurred during the reading block and lasted approximately 40 minutes. The observation focused on classroom environment and teacher instructional strategies.

Each classroom appeared to have a life of its own; yet, possessed a few commonalities. Each classroom had distinct learning centers – ranging from math to science to a listening center. Every room had a reading center. Two classrooms arranged the reading center to include a bean bag and throw rugs. Another classroom’s reading center contained rocking chairs. Six of the classroom reading centers had leveled the books according to the readability level of the text. Each reading area was comfortable and organized.

The purpose of the classroom observations was to obtain additional insight into the achievement data. Two teachers with low-performing students and two teachers with high-performing students were selected to fulfill the extreme portion of the purposeful sampling design, and four teachers with students performing at an average level were selected to be observed. The Classroom Observation and Teacher Interview Form guided the researcher in examining teachers’ interactions with children and the classroom environment.

During the informal classroom lesson observations, the researcher witnessed varying levels of student/teacher interaction and student engagement. Additionally, teachers’ instructional behaviors differ from classroom to classroom. For instance, teachers one, five, six and eight consistently encouraged students to interact with each
other and with the teacher directly. Students in these classrooms rotated through centers and the classroom library. These teachers utilized strategies that required student conversation – such as “turn and talk”; “think-pair and share”; student/teacher reading conferences.

During a classroom observation of a teacher with several years of classroom experience, the researcher noted that, “Students seem to own their learning. The students appear to know the routine and rotate through the classroom stations with little or no guidance from the teacher. Students assist each other while at the math learning station. The teacher is able to focus her attention on the small group she is facilitating.”

In two other classrooms the “direct instruction” practice was utilized – where the teacher was the primary voice in the room. The teacher lectured and then released students to practice independently at their desks. Very little student/teacher interaction occurred during the observation. One of these teachers walked around to ensure students remained on task. If students had questions they typically raised their hands to signal their need for assistance.

During a classroom observation of a teacher with less than three years of experience, the researcher noted, “Students appeared to not understand the activity. Several students were out of their seat, distracting others. Teacher would redirect off task students by asking the student to take a seat. Teacher later threaten student with a demerit. Lots of chatter unrelated to the lesson.”

Table 9 presents descriptive statistics for the five scores from the Literacy Environment Checklist for the two groups. In general, the scores for the two groups were very similar. In fact, the mean score was identical for the two groups on the book area,
book selection, and writing materials scales. For book use, the non-Voyager Program teachers had a higher mean (4.17) than the Voyager Program teachers (3.33), while for the writing around the room scale, the Voyager program teachers had a slightly higher mean (12.25) than the non-Voyager Program teachers (11.67). Thus, it appears that the literacy environment in the classrooms of the Voyager Program teachers and the non-Voyager Program teachers were very similar.

Table 9

*Descriptive Statistics for Literacy Environment Checklist Scores (N = 8)*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of Items</th>
<th>Non-Voyager Teachers (n = 4)</th>
<th>Voyager Teachers (n = 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Book Area</td>
<td>3</td>
<td>3.00</td>
<td>.00</td>
</tr>
<tr>
<td>Book Selection</td>
<td>4</td>
<td>7.00</td>
<td>.00</td>
</tr>
<tr>
<td>Book Use</td>
<td>5</td>
<td>4.17</td>
<td>1.67</td>
</tr>
<tr>
<td>Writing Materials</td>
<td>6</td>
<td>6.00</td>
<td>.00</td>
</tr>
<tr>
<td>Writing around the Room</td>
<td>7</td>
<td>11.67</td>
<td>.00</td>
</tr>
</tbody>
</table>

Classroom Literacy Activities

Table 10 shows descriptive statistics for the Literacy Activities Rating Scale scores for the two groups. Scores for this scale range from 1 (deficient) to 5 (exemplary). The
highest scores for each group were for the facilitating home support for literacy and approaches to assessment scales (with means of 4.00 on both scales in both groups). The next highest scores were for the presence and use of technology and opportunities for child choice and initiative scales (with means of 3.50 on both scales in both groups). The lowest scores for both groups were on the oral language facilitation, approaches to book reading, approaches to curriculum integration, and recognizing diversity in the classroom scales (with means of 2.50 on each of these scales in the non-Voyager Program group and means of 2.25 for recognizing diversity in the classroom, 2.75 for approaches to curriculum integration, and 2.50 for the oral language facilitation and approaches to book reading scales in the Voyager group). Overall, the differences between the two groups were very small, and it appears that the teachers were adequate in terms of facilitating home support for literacy, approaches to assessment, the presence and use of technology, and opportunities for child choice and initiative, but struggled with oral language facilitation, approaches to book reading, approaches to curriculum integration, and recognizing diversity in the classroom.
Table 10

*Descriptive Statistics for Literacy Activities Rating Scale Scores (N = 8)*

<table>
<thead>
<tr>
<th>Scale</th>
<th>No. of Items</th>
<th>Non-Voyager Teachers (n = 4)</th>
<th>Voyager Teachers (n = 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Organization of the Classroom</td>
<td>1</td>
<td>3.00</td>
<td>.00</td>
</tr>
<tr>
<td>Contents of the Classroom</td>
<td>1</td>
<td>2.75</td>
<td>.50</td>
</tr>
<tr>
<td>Presence and Use of Technology</td>
<td>1</td>
<td>3.50</td>
<td>1.00</td>
</tr>
<tr>
<td>Opportunities for Child Choice and Initiative</td>
<td>1</td>
<td>3.50</td>
<td>1.00</td>
</tr>
<tr>
<td>Classroom Management Strategies</td>
<td>1</td>
<td>2.75</td>
<td>.50</td>
</tr>
<tr>
<td>Classroom Climate</td>
<td>1</td>
<td>3.00</td>
<td>.00</td>
</tr>
<tr>
<td>Oral Language Facilitation</td>
<td>1</td>
<td>2.50</td>
<td>.58</td>
</tr>
<tr>
<td>Presence of Books</td>
<td>1</td>
<td>3.00</td>
<td>.00</td>
</tr>
<tr>
<td>Approaches to Book Reading</td>
<td>1</td>
<td>2.50</td>
<td>.58</td>
</tr>
<tr>
<td>Reading Instruction</td>
<td>1</td>
<td>2.75</td>
<td>.50</td>
</tr>
<tr>
<td>Approaches to Children's Writing</td>
<td>1</td>
<td>2.75</td>
<td>.50</td>
</tr>
<tr>
<td>Writing Opportunities and Instruction</td>
<td>1</td>
<td>2.75</td>
<td>.50</td>
</tr>
<tr>
<td>Approaches to Curriculum Integration</td>
<td>1</td>
<td>2.50</td>
<td>.58</td>
</tr>
<tr>
<td>Recognizing Diversity in the Classroom</td>
<td>1</td>
<td>2.50</td>
<td>.58</td>
</tr>
<tr>
<td>Facilitating Home Support for Literacy</td>
<td>1</td>
<td>4.00</td>
<td>.00</td>
</tr>
<tr>
<td>Approaches to Assessment</td>
<td>1</td>
<td>4.00</td>
<td>.00</td>
</tr>
</tbody>
</table>
Teacher Interviews

The Teacher Interview Form developed by Early Language and Literacy Classroom Observation posed six open-ended follow-up questions to clarify observed teacher practices. An informal classroom lesson observation provided an initial context for the follow-up structured interview format with four Voyager teachers and four non-Voyager teachers. The eight interviews were conducted separately and in isolation from other teachers. The audio taped interviews served as data for the study.

After examining the interview responses for common themes, comparisons were made between the Voyager Program teachers and the non-Voyager Program teachers. Across programs the several themes extracted from teacher interview data were: (a) pace and sequence of instruction, (b) teacher collaboration and (c) parental involvement. These themes are addressed in greater detail after the findings section for each of the interview questions discussed below.

Interview Question One: Planning

The first interview question was: How do you plan your instruction and activities?

The most common response for the Voyager Program teachers was that the pace and sequence of instruction was determined by curriculum maps.

The curriculum is scripted in such a way that every third grade teacher in the program [is] teaching the same unit and the same lesson, which makes it easy to plan together and share ideas (T1, interview, October 2007).

I’m never confused about what I should be teaching my students because the curriculum guides spell it out week by week (T2, interview, October 2007).
Among non-Voyager Program teachers, the most common response was that instructional activities were planned as a grade-level team and that the pace and sequence was determined by the curriculum map.

During the summer teachers all across the district came together to map out what concepts and skills we should teach students based on the learning standards. Then over the course of the school year we plan as a grade-level and we work together to modify or revise the curriculum maps based on student mastery (T7, interview, October 2007).

Our school uses curriculum maps based on standards. It’s good to know we are all teaching the same thing but it is hard to figure out what to do if the students don’t learn the material as fast as the curriculum map specifies. That’s when I ask for help from other teachers (T5, interview, October 2007).

Thus, while both groups indicated that the pace and sequence of instruction was determined by curriculum maps, the non-Voyager Program teachers also indicated that instructional activities were planned as a grade-level team.

Interview Question Two: Technology

The second interview question was: In what ways do you use technology in your classroom? One of the Voyager Program teachers reported not using technology in the classroom at all. The other two reported using a tape recorder to listen to stories and using basal curriculum reading tapes/cds and computer software games and programs.

I don’t use the computers a lot because our internet access is sporadic. One time I planned an entire day around accessing a specific website and the internet was down for two weeks. So I’ve learned to use computer [programs] to supplement my lessons. (T1, interview, October 2007).

I use the audio stories that come with the curriculum. Some of my students’ vocabulary are not very strong so using the audio tapes helps them make it through the story. I also have some of my students use some of the spelling games loaded on our computers but I only have 2 computers in my classroom so I try to work that in during center time. (T3, interview, October 2007).
Among the non-Voyager Program teachers, two reported using tape recorders to listen to stories, two reported using a computer phonics program, and two reported using basal curriculum reading tapes/cds and computer software games and programs. It appears, therefore, that the non-Voyager Program teachers had a higher level of use of technology in the classroom.

Technology is one of my school’s priorities. All of our classrooms have at least 5 computers connected to the internet. Our building is wireless. Our grade book and lesson planning materials are web-based. So because we have all these resources given to us we are required to have every student create an electronic portfolio (T6, interview, October 2007).

My students use HeadSprout, a web-based reading program, three times a week. I also have a listening center in the room that students circulate through at least twice a week to reinforce concepts in our theme story (T5, interview, October 2007).

Interview Question Three: Language and Literacy Development

The third interview question was: How do you plan for children’s language and literacy development when you are thinking about curriculum? Among the Voyager Program teachers, two teachers indicted using hands-on or repetitive activities.

I have a word wall in my room where I post our vocabulary words. We also play vocabulary bingo and various vocabulary games found in the curriculum (T1, interview, October 2007).

The curriculum gives me a lot of game ideas and activities to use with the kids. (T3, interview, October 2007).

Among non-Voyager Program teachers, two individuals mentioned using modeling to help students become fluent readers and two indicating using the writers/readers workshop model.

I try to build the words into other subjects like science and social studies. Also the writers/readers workshop model requires students to publish pieces of writing
so I build writing prompts to incorporate focus words (T6, interview, October 2007).

I model reading strategies when I read aloud. I also hold one-on-one conferences with students to listen to them practice reading and to model specific strategies to students, depending on their needs (T7, interview, October 2007).

Thus, the Voyager Program teachers appeared to emphasize hands-on and repetitive activities, while the non-Voyager Program teacher appeared to use more modeling and the writers/readers workshop techniques.

*Interview Question Four: Diversity*

The fourth interview question was: How is diversity reflected in your classroom? How is it reflected in instruction? Two of the Voyager Program teachers gave responses related to the differentiation of students based on ability.

The curriculum gives specific instruction on how to differentiate the lessons based on student ability (T8, interview, October 2007).

The curriculum gives me a lot of ideas and activities to use with the kids, even for ELL students and special needs students, to make sure I meet all the needs in my class (T3, interview, October 2007).

Among the non-Voyager Program teachers, three of the four teachers indicated that diversity was reflected through group projects and classroom discussions.

The curriculum maps have built-in projects. Students can choose between two or three ideas that way they do something they like and are good at (T4, interview, October 2007).

The writers/readers workshop model encourages lots of student talk so kids share out their ideas and experiences that are relevant to our topic. And because student discussions are organic lots of interesting personal sharing occurs (T6, interview, October 2007).
Thus, Voyager Program teachers tended to address the diversity of ability through
differentiated instruction, while the non-Voyager Program teachers tended to address
diversity through discussion and choice.

*Interview Question Five: Parental Interaction/Communication*

The fifth interview question was: In what ways do you interact or communicate
with children’s families? Voyager Program teachers and non-Voyager teachers tended to
use similar methods of communication with parents. Several teachers used newsletters
(three teachers) and spoke directly with parents (five teachers).

The curriculum has a home connection section with homework tips and activities.
I include them in my newsletter and notes home (T8, interview, October 2007).

I typically call parents at home and work when things come [up] (T2, interview,
October 2007).

In addition, two of the three non-Voyager Program teachers who provided a response
indicated that they used parent/teacher conferences to communicate with parents.

My parents typically come to the parent conferences. I also email parents (T5,
interview, October 2007).

I have a good rapport with the parents. My school has four parent/teacher
conferences a year and most of my parents attend the conferences. In between the
conferences I call parents in the evening or send a note home with students to
have their parents call me (T6, interview, October 2007).

It appears to be little or no difference between Voyager Program teachers and non-
Voyager Program teachers in their communication and interaction with parents. This
emerged as a theme in both programs.
Interview Question Six: Evaluate Learning

The sixth and final interview question was: How do you evaluate children’s individual learning? All three of the Voyager Program teachers indicated that they used quizzes and tests and all three indicated that they used the advice and counsel from the literacy specialist to aid in evaluating student learning.

The curriculum has unit tests and quizzes. I also have daily warm up quizzes that are the review of the homework or the previous day’s lesson (T1, interview, October 2007).

I mostly use the curriculum’s tests and quizzes (T2, interview, October 2007).

Among the non-Voyager Program teachers, all four individuals indicated that they used the advice of the literacy specialist, and three of the four individuals used quizzes and tests.

My school uses DIBELS and we have six-week interim assessments in reading. My grade level team meets regularly with the literacy specialist to use the test data to adjust our curriculum maps (T7, interview, October 2007).

I develop quizzes and tests to reflect what I’ve taught for the week or the unit. We have a reading coach that reviews the unit tests to determine how the grade-level may need to change the curriculum maps. But mostly I develop the assessments to match what I’ve covered in class (T4, interview, October 2007).

Thus, it appears that teachers in both groups emphasized quizzes, tests, and advice from the literacy specialist.

Based on the qualitative data, some trends were observed: (a) While both groups indicated that the pace and sequence of instruction was determined by curriculum maps, the non-Voyager Program teachers also indicated that instructional activities were planned as a grade-level team; (b) the non-Voyager Program teachers had a higher level of use of technology in the classroom; (c) the Voyager Program teachers appeared to emphasize hands-on and repetitive activities, while the non-Voyager Program teacher
appeared to use more modeling and the writers/readers workshop techniques; (d) Voyager Program teachers tended to address the diversity of ability through differentiated instruction, while the non-Voyager Program teachers tended to address diversity through discussion and choice; (e) teachers in both groups used newsletters and direct parent contact (i.e., phone calls and parent/teacher conferences) as their primary methods of communication with parents; and (f) teachers in both groups emphasized quizzes, tests, and advice from the literacy specialist to evaluate student progress.

Overall qualitative results suggested more similarities than differences. Several themes extracted from teacher interview data – (a) pace and sequence of instruction, (b) teacher collaboration and (c) parental involvement – were not drastically different between Voyager teachers versus non-Voyager teachers. Additionally, student achievement results showed that there was no statistically significant difference between the Voyager Program and non-Voyager Program. Therefore, it was concluded that students in the Voyager Program performed similarly compared to students not in the Voyager program in terms of reading test scores.
CHAPTER V: CONCLUSIONS AND DISCUSSION

Since the publication of *A Nation at Risk* in 1983, virtually every effort to improve the quality of education has focused on overcoming deficits in student knowledge; especially in reading and mathematics. Under NCLB, school districts must implement instructional practices and materials supported by scientific evidence to enhance children’s reading skills. Pearson (1998) indicates the two most significant features of a good literacy curriculum are that it promotes a strong link between effective programs that provide (a) instruction that allows students to develop skills and strategies that support reading and writing (i.e., reading fluency, vocabulary and comprehension); and (b) many opportunities to read and write.

Thus, the purpose of this study was to analyze the impact of the Universal Voyager Literacy Program on reading achievement and teacher instructional efficacy in an urban school district, and to determine the extent to which this impact varies across Title I and non-Title I schools and student gender. Four questions guided the research: (1) How have students who participated in Universal Voyager Literacy performed on the DCCAS compared to students who participated in non-Voyager Literacy Programs?; (2) Is the Universal Voyager Literacy Program equally effective for students in Title I schools versus students in non-Title I schools?; (3) Is the Universal Voyager Literacy Program equally effective for male and female students?; and (4) What were the instructional practices of teachers in the Universal Voyager Literacy Program and other programs?
Discussion of Findings

A growing body of research suggests that reading difficulties are preventable for the vast majority of students who experience difficulty in learning to read, if these students receive additional support (Goldenberg, 1994; Hiebert & Taylor, 1994; Reynolds, 1991). Several reading programs have proven effective when compared to conventional reading programs. For example, Hiebert, Colt, Catto, and Gury (1992) report that while 77 percent of students in their control group were reading at a primer level at the end of first grade, while only 18 percent of a comparison group who participated in a traditional Title I program achieved that level of reading proficiency (Pikulski, 1994). While almost half (47 percent) of the students in the conventional Title I program remained nonreaders at the end of first grade, only 7 percent of the control group students were nonreaders (Pikulski, 1994).

The results of this study clearly showed the difference between students in the Voyager Program and students not in the Voyager Program were not statistically significant overall, but there was an overall difference based on whether the school was a Title I school or not, with students at non-Title I schools performing significantly better than students at Title I schools. In general, students in the Universal Voyager Literacy Program performed similarly compared to students in non-Voyager programs in terms of reading test scores.

Additionally, there was a statistically significant interaction between program status and Title I status, and follow up tests indicated that the Voyager Program had a higher effect for students at Title I schools versus students at non-Title I schools. Thus, the Voyager Program has a significant impact for students at Title I schools but a less
significant for students at non-Title I schools. Moreover, it was shown that females tended to have higher reading scores than males. However, there was no interaction between gender and program status, and therefore there was no difference in the effectiveness of the Voyager Program based on gender.

Voyager has participated in more than a dozen studies to evaluate the effectiveness of its reading program in helping students learn to read and the outcomes vary from effective to marginal change (Frechting, Silverstein & Zhang, 2003; Frechting, Zhang & Wang, 2004; Roberts, 2002). Each study conducted an annual evaluation of Voyager Universal Literacy System implemented in the District of Columbia Public Schools, Cleveland Public Schools, and Birmingham Public Schools. These studies found “high levels of implementation” (p. 13) versus “inadequate implementation fidelity” (p. 13) were linked to significantly higher scores on state assessments and other standardize assessments (i.e., DIBELS, Woodcock Johnson).

This research runs counter to reported outcomes regarding greater efficiency for the Voyager Program over non-Voyager Programs. The overall difference in reading scores was not significantly different for Voyager versus non-Voyager students. As noted by Roberts (2002) first grade Voyager students “made considerable progress over the course of the school year” (p. 2). Drayton et al. (2002) also examined the efficacy of the Voyager Universal Literacy Program and concluded that “Voyager Universal Literacy System consistently fosters substantial growth in reading related skills in kindergarten children, enhances the frequency of reading related classroom behaviors and enhances children’s rate of access to reading related knowledge” (p. 15).
Accelerated Reader, another reading intervention program, has had several studies conducted regarding the effectiveness of the program and its effects on student achievement. The findings were also divided. Some concluded that the program helped in improving the academic performance of students (Anderson, 2001; Ganter, 2000; Lawson, 2000; Facemire, 2000; and Scott, 1999) while others claimed that there was no significant statistical increase in the reading comprehension of students enrolled in the program (Mathis, 1996; Rosenheck, et al., 1996; Price & Barron, 1998; and Carter, 1996). Ross, Nunnery, & Goldfeder (2004) and Bullock (2005), examined the Accelerated Reader program to determine the program’s effects on reading fluency, comprehension, and reading achievement.

Ross, Nunnery, & Goldfeder conducted a randomized controlled trial that included 45 teachers and 572 students in grades K–3. The study took place in 11 schools in Memphis, Tennessee. Within each school, a minimum of two teachers within one grade volunteered to be randomly assigned to implement either the intervention, Accelerated Reader, or the comparison, a commercially available basal reading program used across all schools. The study examined student outcomes during the first year of implementation.

Ross, Nunnery, & Goldfeder (2004) showed that Accelerated Reader had positive and statistically significant effects on a measure of general reading achievement (STAR Early Literacy test) when results are combined across kindergarten, first, and second grade students. When analyzed separately for each grade level, the effects were not statistically significant.
Bullock (2005) conducted a randomized controlled trial that included 32 students from two third-grade classrooms in Oregon state schools. The students were randomly assigned to the intervention group or the control group. The intervention group implemented Accelerated Reader for 10 weeks, spending at least 90 minutes a week independently reading trade books in the classroom and taking Accelerated Reader quizzes on each book. The control group also spent at least 90 minutes a week reading independently, choosing any book available in the school library, and not using the Accelerated Reader software. Bullock reported no significant effect of Accelerated Reader on third-graders when measured using the Oral Reading Fluency subtest of the Dynamic Indicators of Basic Early Literacy Skills (DIBELS).

The above two studies and several others found Accelerated Reader to have no discernible effects for reading fluency, mixed effects for comprehension, and potentially positive effects for general reading achievement. These results are somewhat consistent with the overall comparison of Voyager versus non-Voyager schools. However, the present findings suggest that Voyager was particularly effective for Title 1 students.

Similar programs, have demonstrated sustained gains for at-risk students. Researchers at Texas Woman’s University found that 1789 students who successfully completed the Reading Recovery program performed at an average or better level on three measures of reading and writing ability at the end of their first grade year (Askew, Frasier, & Griffin, 1993). Such programs use similar methods and materials that help students to recognize words accurately and rapidly, and to group words into meaningful phrases. There is clear evidence that unless students become fluent in their ability to identify words, they will have difficulty concentrating their attention on comprehending
and responding to the texts they read (LaBerge & Samuels, 1974; Nathan & Stanovich, 1991).

Granted, there were no overall (main effect) differences between students in the Voyager Program and students in non-Voyager Programs. There was, however, a statistically significant interaction between program status and Title I status. Therefore, it appears that in those schools where a significant number of third grade students were emerging readers or just beginning to master the rudiments of reading acquisition, the Voyager Program resulted in a higher significant effect for third grade students in Title I schools. Roberts (2002) study highlighted similar results for emerging readers.

Kindergartners, first and second-graders in Universal Voyager Literacy were cautiously assessed in 25 school localities for the period of the 2002–2003 school years. More than 90 percent of these students were reading at grade level or materialized as emerging readers with less than 10 percent of the students identified as at-risk according to the DIBELS assessment.

There was no interaction between gender and program status, and therefore the answer to the third research question is that there was no difference in the effectiveness of the Voyager Program based on gender. Although studies suggest that females generally score higher than males on reading assessments in this grade level the Voyager program does not seem to mitigate the advantages for females. Studies that further examine gender differences and the Voyager Program do not exist. Completed Voyager studies provided data by gender category, but inferential analysis of gender differences were not conducted.
Scott Foresman's Reading Street, a reading program similar to the Voyager program reported similar gender results. Herman, Shannon & Wilkerson (2006) evaluated teachers’ implementation of the Reading Street program and assessed its effectiveness in helping students attain critical reading skills. “Those students who participated in the Reading Street program results revealed no significant differences in student performance by gender or special education status, which indicates that these subgroups showed similar learning gains while participating in the program” (pg. 32). The further examination of outcomes for both Voyager and non-Voyager students on the three DCCAS subscales (language development, informational text and literary text) showed that students at the Voyager schools on average outperformed non-Voyager schools in all three DCCAS subscales. Roberts (2002) supports these findings implying that students in the Voyager Program seem to have been more efficiently trained to quickly identify relevant text information for comprehension than those in the “control” class settings.

The qualitative data of this study found only small differences in Voyager and non-Voyager classrooms’ use of materials and staff activities to meet the needs of struggling readers. In general, teachers reported relying heavily on the core reading program’s pace and sequence and supplementary materials. In addition teachers in both Voyager and non-Voyager classrooms provided extra practice opportunities to meet the needs of struggling readers through various instructional activities such as computer games, classroom centers, and teacher read alouds.

Newman-Thomas & Wexler (2007) noted careful selection of reading materials by teachers and students alike is critical in providing access to the curriculum and
encouraging students to read for school and pleasure. Voyager and non-Voyager classrooms were similar with respect to planning and coordinating instruction for struggling readers; in general, teachers in both types of classrooms reported that the pace and sequence of instruction was determined by curriculum maps, the non-Voyager Program teachers also indicated that instructional activities were planned as a grade-level team. As noted by a Voyager teacher and a non-Voyager teacher, respectively:

The curriculum is scripted in such a way that every third grade teacher in the program [is] teaching the same unit and the same lesson, which makes it easy to plan together and share ideas (T1, interview, October 2007).

It’s good to know we are all teaching the same thing but it is hard to figure out what to do if the students don’t learn the material as fast as the curriculum map specifies. That’s when I ask for help from other teachers (T5, interview, October 2007).

This finding is consistent with researched based best instructional practices. Taylor (2007) stated a teacher needs to plan for and coordinate many different components of her lessons and students’ learning activities during a 90 to 120 minute reading block. Consultation and collaboration with other teachers, a reading specialist, special education teacher, and speech and language pathologist can provide information and teaching strategies to differentiate instruction for students with varied reading skills (Dieker & Little, 2005).

Research has revealed that explicit, teacher-directed strategy instruction which includes direct explanation, modeling, and guided student practice is used students make significant gains in their reading comprehension (Manset-Williamson & Nelson, 2005). Likewise, the Voyager program is comprised of sequenced lessons and classroom activities that include read-alouds, whole group, small group, and independent learning
settings. Students are more likely to apply these strategies, increase their comprehension, and become more independent, efficient learners (Alfassi, 2004; Frank, Grossi, & Standfield, 2006; Gersten et al., 2001).

Moreover, this research confirms the necessity to build on prior knowledge. Content learning becomes more relevant if it is connected to what the student already knows and if it allows the student to make connections to their existing knowledge (Heilman, Blair, & Rupley, 2002). As one non-Voyager teacher indicated:

My students use HeadSprout, a web-based reading program, three times a week. I also have a listening center in the room that students circulate through at least twice a week to reinforce concepts in our theme story (T5, interview, October 2007).

The best instruction for at-risk readers is long-term excellent instruction that monitors and meets their needs (Pressley, 1998). While, the overall impact of the Voyager Program was significant for students at Title I schools, but not significant for students at non-Title I schools; the diminished effect noted for students at non-Title I schools suggests the notion that the Voyager program is effective in developing and improving the fundamental skills of “learning to read”. Those students possessing the basics of reading appeared not to benefit from the Voyager program.

Conclusions

This research has crystallized the interplay between sound curriculum and skillful teachers. The findings of this research have allowed me to witness, first-hand, several dynamic Voyager teachers and several excellent non-Voyager teachers. Master teachers pulled from the curriculum and their strengths to ensure the needs of their students were
Students in these classrooms were actively engaged, owned their learning and supported the learning of their classmates.

Allington and Walmsley (2007) claimed that poor readers experience a curriculum quite different than more capable peers. As indicated in this study, the Voyager Program had a significant effect for students at Title I schools, but no significant impact for students at non-Title I schools. This suggests that the Voyager program is effective in developing and improving basic reading skills.

For novice teachers, the scripted nature of the Voyager program set the pace and provides structure. This study hinted at a potential downside to a prescribed environment — the lack of flexibility in the curriculum and student centeredness afforded to teachers in the non-Voyager program where teachers relied on student inquiry, other teachers and various curricular materials to inform their instructional decisions.

As confirmed by several teachers during their interviews, there are several benefits to the Voyager program — sequenced lessons that provide teachers with tools and directions for instruction and assessment; specified classroom activities aligned to the instructional theme; computer-based practice in phonological skills, comprehension, fluency, writing, and language development; and the supplemental practice activities. The important matter of supporting children to transition from “learning to read” to “reading to learn” is where this study exposes a potential limitation of the Voyager program.

There was no overall (main effect) differences between students in the Voyager Program and students in non-Voyager Programs. But this study identifies the Voyager program’s ability to help Title I students succeed in mastering basic reading skills. Given
This finding more research and development of reading programs for at-risk students is clearly needed.

This study has challenged and confirmed several principles that have guided me as a teacher, principal and principal coach. The words of Richard Allington, internationally acclaimed reading expert, capture my thoughts.

“In the end it will become clearer that there are no ‘proven programs,’ just schools in which we find expert teachers—teachers who need no script to tell them what to do. The question for the education profession—teachers, principals, professors, and policy makers—is, Are we creating schools in which every year every teacher becomes more expert?” (Allington, 2002, p.747).

Children who have poor instruction year after year are seriously harmed by ineffective learning experiences. As they progress through the grades, the deficits accumulate, leaving them further and further behind other students. Sound curricular programs are important.

Methodological Limitations

The interpretation of the results from this study may be limited in several ways. The major limitation of the study was not being able to randomly assign students to groups; therefore, the subjects (both students and teachers) may not be representative of the broader population. Specifically, due to the sampling techniques employed, the samples of students and teachers were not random samples from the population and therefore may differ from the general population in important ways. To the extent that this is true, the results of the study may not generalize to the broader population.
A second limitation relates to how the classrooms are assigned to either employ or not employ the Universal Voyager Literacy Program. Ideally, students would be randomly assigned to either the Universal Voyager Literacy Program or the non-Voyager program, so that pre-existing differences between students would be minimized. The use of intact classrooms in the study precludes the random assignment of students to condition. Principals determined classroom rosters and curricular program(s). Additionally, not having the individual student data for subtests prevented the researcher from performing inferential analyses. Therefore, it is possible that pre-existing differences between the students may have affected the results.

Third, due to the transient nature of the student and teacher population, the samples used suffered from attrition. Student attrition affected population size in the following ways: DCCAS test results were unavailable for students who had moved out of the district by 2007 or who had enrolled in private or charter schools; and some children who began Universal Voyager Literacy were later identified as special education students. The above students’ DCCAS scores were either unavailable for analysis or were not administered under standard conditions.

Fourth, not all teachers may have implemented the Universal Voyager Literacy Program with equal vigor. This is problematic because studies have found “high levels of implementation” versus “inadequate implementation fidelity” were linked to significantly higher scores on state assessments and other standardize assessments (i.e., DIBELS, Woodcock Johnson) (Frechtiling, Silverstein & Zhang, 2003; Frechtiling, Zhang & Wang, 2004; Roberts, 2002). As observed, some teachers strictly planned and implemented the curricular program.
The curriculum gives me a lot of ideas and activities to use with the kids, even for ELL students and special needs students, to make sure I meet all the needs in my class (T3, interview, October 2007).

Whereas others supplemented the program with other resources.

I use the internet a lot to get lesson plan ideas. The pacing guide and curriculum maps tell me the theme and skill to focus on but I don't always like the activities in the teacher guide. (T7, interview, October 2007).

Finally, the use of the Literacy Environment Checklist and the Classroom Observation and Teacher Interview Form developed by Early Language and Literacy Classroom Observation posed some additional limitations. The standardized nature of the descriptive tools allowed the researcher to quantify observations; however, this method was without the controlled conditions of the laboratory; thus, conclusions about cause-and-effect relationships cannot be drawn. Additionally, observed behavior can only be described, not explained.

Implications for Future Research

Future research studies which focus on the relationship between program implementation and student outcomes are recommended. To gain a better understanding of how program implementation impacts student outcomes, a qualitative study allowing the researcher to investigate instructional practice may be employed. Providing information on what and how the fully implemented program is intended to look may greater assist in explaining the results of this study.

Additionally, an examination of student performance on a wider range of assessment instruments should be used to help researchers determine which of the five
key areas of reading acquisition – phonemic awareness, phonics, fluency, vocabulary and reading comprehension – are most impacted by the Voyager program.

An improvement to the study would be to incorporate additional numbers of teachers and students. As discussed in the limitations section, limited teachers and students were available for inclusion in the investigation. Expanding the sample groups would limit the threats to the internal validity of the study.

One other potential improvement to the study would be to examine the impact of the Universal Voyager program on other reading indicators such as students’ attitude toward reading, students’ reading interests and/or motivations. Such indicators are generally not assessed on norm or criterion referenced assessments.

Another point of interest may be teacher training. An exploration of teachers with additional reading instruction training or additional years in the classroom --- how their instructional practice and effectiveness may or may not differ; thus providing greater insight into student achievement outcomes. For instance, what types of reading in-service programs, coursework, and specialized staff developments impact teachers’ instructional practices and student outcomes?

The question of how the implementation of the Voyager program affects student achievement is still unknown. The data gathered for this study did not capture the implementation level of teachers. Therefore, future research should continue to examine the relationship between the Voyager program and student achievement and reading acquisition.

Again, given there were no overall (main effect) differences between students in the Voyager Program and students in non-Voyager Programs more research and
development of reading programs for at-risk students is clearly needed. Such explorations would provide additional data that could prove useful to school and district leaders as they reflect upon the various reading programs available to school districts claiming to deliver dramatic gains among early grade school readers.
REFERENCES


Cattell, M. (1886). The time it takes to see and name objects. *Mind, 2*, 63-85.


Failure Free Reading’s Continuum of Effectiveness Research Summary (2004).


Grossen, B. (1997). *30 years of research: What we now know about how children learn to read* (A synthesis of research on reading from the National Institute of Child Health and Development commissioned by the Center for the Future of Teaching and Learning with funding support from the Pacific Bell Foundation). (www.cftl.org). The Center for the Future of Teaching and Learning: Santa Cruz, CA.


differences in reading/acquisition. Journal of Educational Psychology, 76, 1309-
1324.


Effective programs in beginning reading: A best-evidence synthesis.
Baltimore, MD: Johns Hopkins University, Center for Research and Reform in
Education.


Richard C. Owen.

Preschool Years.” In D. K. Dickinson and P. O. Tabors (Eds.), Beginning Literacy
with Language (pp. 1–25). Baltimore, MD: Paul H. Brookes.


Blackwell.

instruction. Reading & Writing Quarterly, II, 37-51.

Stanovich, K. (1980). Toward an interactive-compensatory model of individual
differences in the development of reading fluency. Reading Research Quarterly, 16,
32–71.

Stanovich, K.E. (1986). Matthew effects in reading: Some consequences of individual

Stice, C. F. & Bertrand, N. P. (1990). Whole language and the emergent literacy of at-
Skills, Tennessee State University. ERIC: ED 324 636.

Taylor, B. (2007). The what and the how of good classroom reading instruction in the
elementary grades. Minneapolis, MN: University of Minnesota Center for Reading
Research.


APPENDIX A: LITERACY ENVIRONMENT CHECKLIST
This checklist can be completed when no children are present, ideally before the children arrive. As classroom observers fill out this checklist, they become familiar with details of the environment. The careful attention paid to the environment helps observers complete the Classroom Observation; therefore, the checklist should be done prior to making the Classroom Observation.

**Book Area**

1. Is an area set aside just for book reading? [YES NO]

   If this area is used for other activities, such as for circle time or as a block area, score this item NO.

2. Is the area where books are located orderly and inviting? [YES NO]

   Are the books displayed on a bookshelf or bookcase? Are they oriented properly (front covers or spines facing out and right side up)? Are they neatly organized?

3. Does the area where books are located have soft materials? [YES NO]

   Are there pillows, cushions, or comfortable furniture (e.g., couch) in the area so that children can look at books comfortably?

**Book Selection**

4. Do the books in the classroom range in difficulty level? [Circle one: YES NO]

   This item refers to all books that are accessible to children, not only those books in the book area. Do some books have no words or very few words per page, whereas others have one or two paragraphs per page? Do some books include simple language, whereas others incorporate more sophisticated vocabulary?

5. How many books are easily available to children? [Circle one: Fewer than 15 16-25 26+]

   Count all books that are accessible to children, not only those in book area.

6. How many books convey factual information? [Circle one: 0 1-2 3-5 6+]

   Count all books that are accessible to children, not only those in book area. Include science- or math-related books and social studies books or books about other cultures, as well as health-related books.

7. Are there three or more books related to the current theme? [Circle one: YES NO]

   The current theme should be evident through classroom displays, activities, and teacher conversations with children. If you are unsure about the current theme, ask the classroom teacher.

**Book Area Total**

**Book Selection Total**
This checklist can be completed when no children are present, ideally before the children arrive. As classroom observers fill out this checklist, they become familiar with details of the environment. The careful attention paid to the environment helps observers complete the Classroom Observation; therefore, the checklist should be done prior to making the Classroom Observation.

**Book Area**

<table>
<thead>
<tr>
<th>Item</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is an area set aside for book reading?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Is the area where books are located easily accessible?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are the books displayed on a bookshelf or bookcase? Are they oriented properly (front covers or spines facing out and right-side up)? Are they neatly organized?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Does the area where books are located have additional materials?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there pillows, cushions, or comfortable furniture (e.g., couch) in the area so that children can look at books comfortably?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Book Selection**

<table>
<thead>
<tr>
<th>Item</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Do the books in the classroom range in difficulty level?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This item refers to all books that are accessible to children, not only those books in the book area. Do some books have no words or very few words per page, whereas others have one or two paragraphs per page! Do some books include simple language, whereas others incorporate more sophisticated vocabulary!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. How many books are easily available to children?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count all books that are accessible to children, not only those in book area.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. How many books convey actual information?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count all books that are accessible to children, not only those in book area. Include science- or math-related books and social studies books or books about other cultures, as well as health-related books.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Are there three or more books related to the current theme?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The current theme should be evident through classroom displays, activities, and teacher conversations with children. If you are unsure about the current theme, ask the classroom teacher.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Book Area Total**

**Book Selection Total**
**Book Use**

How many books are easily available for children’s use in the following areas? Only count books if the area in question is separate from the book area. For example, if the block area is also used as the book area, circle “0” for the number of books in the block area.

8. How many books are available in the science area? 0 1 2 3 4

9. How many books are available in the dramatic play area? 0 1 2 3 4

10. How many books are available in the block area? 0 1 2 3 4

11. How many books are available in other areas (not including the book area)? 0 1 2 3 4

List these other areas.

12. Is there a place for children to listen to recorded books/stories? YES NO

The listening center does not have to be a permanent area in the classroom. However, it must be in working order and available to children without adult assistance on the day of your observation.

**Writing Materials**

This includes but is not limited to alphabet posters, stencils, and letter shapes. The alphabet must be at children’s eye level or readily used by children.

13. Are there word cards with children's names or familiar words? YES NO

For example, are there cards with children’s names held together on a ring or cards with familiar words posted on the wall next to or above the writing area? Word cards must be in a place intended to support children’s writing. (Word cards do not include labels on objects around the room.)

14. Are there templates or tools to help children form letters? YES NO

For example, are there alphabet stencils, sandpaper letters, rubber stamps, and so forth?

15. How many varieties of paper are available for writing? 0 1 2 3 4

For example, are there construction paper, white lined and unlined paper, tracing paper, and so forth?

16. How many writing tools are available? 0 1 2 3 4

For example, are there pens, pencils, markers, crayons, colored pencils, magnetic letters, a chalkboard, a whiteboard, a typewriter, rubber stamps, and so forth?
**Literacy Environment Checklist**

<table>
<thead>
<tr>
<th>Item</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>22a. Are there writing tools in the dramatic play or block area?</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td><strong>For example, are there paper, pens/pencils, a chalkboard, a typewriter, and so forth?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22b. Are there props that prompt children to write in the dramatic play or block area?</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td><strong>If there are no writing tools in the dramatic play or block area (i.e., you scored item 22a NO), then mark this item NO. Props include items such as clipboards, telephones, menus, and so forth.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Are there alphabet puzzles available for children's use?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Alphabet puzzles must include all letters of the alphabet. Puzzles must be available without adult assistance.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Are there puzzles with words available for children's use?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Puzzles with words must include several short words, and meanings must be clearly indicated by pictures. Puzzles must be available without adult assistance.</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Writing Materials Total**

**Writing Around the Room**

- **How many varieties of teacher dictation are on display in the classroom?**
  
  This item is designed to determine the variety, rather than the number, of dictations. If the display of teacher dictation consists of work from a one-time, teacher-led activity completed by all children, count it as one example. If a single display consists of unique or spontaneous work from each child or the works were completed over a longer period of time (2+ weeks), count each item as a separate example.

- **How many charts, books, or other evidence of group discussion are there in the classroom?**
  
  Include teacher-created charts that show evidence of group discussion (e.g., My Favorite Color, Our Trip to the Aquarium).

- **How many varieties of children's writing are on display in the classroom?**
  
  This item is designed to determine the variety, rather than the number, of child writing samples on display. If the display of children's writing consists of work from a one-time, teacher-led activity completed by all children, count it as one example. If a single display consists of unique or spontaneous work from each child, or the works were completed over a longer period of time (2+ weeks), count each item as a separate example.

**Writing Around the Room Total**

---

Copyright © 2002 by Education Development Center, Inc., Newton, MA.  
Do not reproduce without permission of Paul H. Brookes Publishing Co. 1-800-638-3775 www.brookespublishing.com
APPENDIX B: LITERACY ACTIVITIES RATING SCALE
Literacy Activities Rating Scale

This rating scale should be completed at the end of your observation. When answering questions that refer to adults, please consider all adults who were present in the classroom, including lead and assistant teachers, teachers’ aides, parents, and volunteers.

### Book Reading

1. **How many full-group book-reading sessions did you observe?**
   - Write in the exact number of sessions AND circle the appropriate score.

2. **How many minutes were spent on full-group book-reading sessions?**
   - Write in the exact number of minutes AND circle the appropriate score.

3. **How many books were read during the full-group book-reading sessions?**
   - Write in the exact number of books AND circle the appropriate score.

   *This time may be reflected in the classroom schedule or may be an observed classroom routine.*

### Writing

4. **Did you see children include writing in their play?**
   - For example, children may be writing or scribbling as part of an art activity or dramatic play activity or while using blocks or manipulatives.
   - Circle one: YES NO

5. **Did you see children attempting to write letters or words?**
   - These attempts may include scribbling, but the scribbling must be intentional and the child should indicate what he or she wrote or intended to write.
   - Circle one: YES NO

6. **How many times did you see an adult help a child write?**
   - For example, the adult may answer questions about how something is spelled or may show a child how to form a specific letter.
   - Circle one: 0 1-2 More

7. **Did an adult model writing?**
   - The adult draws attention to the act of writing by spelling out or sounding out each word or letter that he or she writes or by somehow discussing what he or she has written.
   - Circle one: YES NO

### Scores

**Book Reading Total**

**Writing Total**
APPENDIX C: CLASSROOM OBSERVATION AND TEACHER INTERVIEW FORM
# Classroom Observation

## General Classroom Environment

<table>
<thead>
<tr>
<th>1. Organization of the Classroom</th>
<th>Exemplary</th>
<th>Basic</th>
<th>Deficient</th>
</tr>
</thead>
</table>
| **Evidence:**                   | - Furnishings are appropriately sized for young children and are in good repair. The classroom does not appear barren or crowded with furnishings.  
- The physical environment is intentionally organized to allow for groupings of different sizes (e.g., individuals, small groups, large groups) and for different types of activities (e.g., quiet, active, messy). There are established patterns of “traffic flow,” which serve to organize and support children’s movement throughout the classroom with a minimum of disturbance to those already engaged in activities.  
- Furnishings are arranged to support children’s ability to independently engage in activities. For example, shelves are low enough for children to select and replace materials; areas for messy projects are near clean-up supplies. | - Furnishings are appropriately sized for young children and are in good repair. The classroom does not appear barren or crowded with furnishings.  
- The physical environment is arranged to allow for groupings of different sizes (e.g., individuals, small groups, large groups) and for different types of activities (e.g., quiet, active, messy), but some reorganization of space may be needed to accommodate some activities or groups.  
- "Traffic flow" in the classroom may seem haphazard and may interfere with children already engaged in activities.  
- Although some furnishings are arranged to support children’s ability to independently engage in activities, other activities may require extensive teacher involvement or supervision to complete. | - Furnishings do not appear to be appropriate for young children and may be in disrepair. The classroom may appear barren or crowded with furnishings.  
- Furnishings and space are not arranged to easily accommodate groupings of different sizes (e.g., individuals, small groups, large groups) or different types of activities (e.g., quiet, active, messy).  
- "Traffic flow" in the classroom may lack organization and may be disruptive to children already engaged in activities.  
- Furnishings do not support children’s ability to independently engage in activities. For example, teachers may retain control over the distribution of materials and may need to constantly supervise active or messy activities. |

**Notes:**

There is strong evidence of an intentional approach to the organization of the physical environment.

---

Copyright © 2002 by Education Development Center, Inc., Newton, MA.  
Do not reproduce without permission of Paul H. Brookes Publishing Co.  
1-800-638-3775  www.brookespublishing.com
## Classroom Observation

### General Classroom Environment

<table>
<thead>
<tr>
<th>5</th>
<th>Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is strong evidence of an intentional approach to the organization of materials and displays, coordinated with ongoing learning goals.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is some evidence of an intentional approach to the organization of materials and displays, coordinated with ongoing learning goals.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3</th>
<th>Basic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some materials are organized in conceptually related groups, but appeal or accessibility to children may be limited. For example, a science area might contain small magnifying glasses, &quot;samples&quot; to magnify, and pencils and paper for drawing and recording observations. The materials and their organization suggest particular purposes to children.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials may be stored or arranged in a haphazard manner that limits their appeal and accessibility to children. For example, in an art area, markers may be out of ink, watercolors dried out, or colored pencils unsharpened.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials may be stored or arranged in a haphazard manner that limits their appeal and accessibility to children. For example, in an art area, markers may be out of ink, watercolors dried out, or colored pencils unsharpened.</td>
<td></td>
</tr>
</tbody>
</table>

### Notes:

- **Materials are clearly organized in conceptually related groups and are appealing and accessible to children.** For example, a science area might contain small magnifying glasses, "samples" to magnify, and pencils and paper for drawing and recording observations. The materials and their organization suggest particular purposes to children.

- **Displays are related to and clearly support current classroom investigations.** There is a predominance of child-generated, original work. Children's work is displayed in ways that reinforce children's sense of their own contributions to the learning community (e.g., at eye level, coordinated with ongoing themes).

- **Although children's work is displayed in an organized manner, the content may lack originality and may reinforce singular interpretations of classroom investigations (e.g., all children create the same "cut-and-glue" products).**

- **There is little or no relationship between displays and current classroom investigations. Teacher-generated displays may predominate.**

---

*Copyright © 2002 by Education Development Center, Inc., Newton, MA. Do not reproduce without permission of Paul H. Brookes Publishing Co.*
### General Classroom Environment

#### 3. Presence and Use of Technology

<table>
<thead>
<tr>
<th>Score</th>
<th>Exemplary</th>
<th>Basic</th>
<th>Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>There is strong evidence that technology is available and used regularly by children in the classroom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>There is some evidence that technology is available and used regularly by children in the classroom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>There is minimal evidence that technology is available and used regularly by children in the classroom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Computers or other technologies are available and accessible to children, and their regular use is encouraged. Technology in the classroom is used for a variety of purposes, including support of children's language and early literacy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Computers or other technologies are available and accessible to children, but their purposes and uses are somewhat limited.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use of technology may be limited to recreational purposes. For example, the only computer software available serves no apparent educational purposes, or a tape recorder is available during free play and children select music tapes to listen to.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
Technology includes items such as audiocassette recorders, cameras, overhead projectors, and computers.

**Evidence:**
- Technology in evidence in the classroom and observations of children using technology.
- Teachers plan for children's use of technology in coordination with ongoing learning experiences and are available to support children's use of technologies. For example, during a study of rain forests, the teacher and children create a tape recording of their own "rain forest sounds," which is used in dramatic play.
- Technology use in the classroom is narrowly defined; it may be used or suggested occasionally to supplement ongoing learning experiences. For example, a computer-based phonics game is available as a free choice activity, but children's use of the program is not monitored or used to inform ongoing instruction.
- Use of technology may be limited to recreational purposes. For example, the only computer software available serves no apparent educational purposes, or a tape recorder is available during free play and children select music tapes to listen to.
### General Classroom Environment

<table>
<thead>
<tr>
<th>5</th>
<th>Exemplary</th>
<th>4</th>
<th>Basic</th>
<th>3</th>
<th>2</th>
<th>Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Opportunities for Child Choice and Initiative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evidence: Classroom schedule posted or otherwise available, and appropriate mix of indoor and outdoor activities. Classroom resource center well-stocked and accessible.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: The daily schedule includes sufficient time for self-directed activities and independent exploration (i.e., alone or with other students). Schedule and grouping flexibility allow teachers and children to pursue deep, ongoing investigations. Classroom routines support children's engagement in self-directed activities. Teachers organize and provide interesting materials and experiences and actively facilitate children's constructive independent (i.e., alone or with other students) engagement in learning activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

There is some evidence that the design and structure of the classroom encourages child choice and initiative in the service of learning.

- The daily schedule includes some time for self-directed activities and independent exploration but may not allow for deep or ongoing investigations.
- Classroom routines support children's engagement in some self-directed activities.
- Teachers provide materials and/or activities and make children aware that they are available for independent use. Teachers may not actively support children's independent engagement in learning activities.

---

There is minimal evidence that the design and structure of the classroom encourages child choice and initiative in the service of learning.

- The classroom schedule may not include appropriate opportunities for children to engage in self-directed activities. The classroom may be characterized by strict scheduling and grouping practices or, conversely, by excessive time in unstructured activities.
- Classroom routines and materials do not support children's engagement in self-directed activities. For example, materials may not be available for children to use without the teacher's presence; activities may be inappropriately easy or too difficult; or routines may be so "scripted" that they do not allow for individualization, choice, or child initiative.
- Children may be expected to wait for teachers to provide and/or instruct them in the use of materials and activities.
### General Classroom Environment

<table>
<thead>
<tr>
<th>5. Classroom Management Strategies</th>
<th>5: Exemplary</th>
<th>4: Basic</th>
<th>3: Basic</th>
<th>2: Basic</th>
<th>1: Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence:</td>
<td>There is strong evidence that classroom management strategies exist and are enforced in ways that respect children's input and encourage their purposeful engagement.</td>
<td>There is some evidence that classroom management strategies exist and are enforced in ways that respect children's input and encourage their purposeful engagement.</td>
<td>There is minimal evidence that classroom management strategies exist and are enforced in ways that respect children's input and encourage their purposeful engagement.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Notes:</strong></td>
<td>- Children appear to have internalized regular rules and routines. This is evident as children move through the classroom day smoothly and with few conflicts and are most often seen engaged in purposeful activity.</td>
<td>- Children appear to understand regular rules and routines, but there is occasionally a need for teacher reminders or reinforcement about some rules and routines.</td>
<td>- Children appear to have limited understanding of rules and routines. This is evident in the classroom as children engage frequently in conflicts and rarely in purposeful activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Clear expectations for children's behavior are consistently communicated in multiple ways.</td>
<td>- Expectations for children's behavior are communicated from teacher to children.</td>
<td>- Expectations for children's behavior may be confusing or inconsistent.</td>
<td>- Teacher intervention in conflicts is calm, nonthreatening, and leads children toward peaceful, independent (i.e., alone or with peers) resolutions.</td>
<td>- The teacher consistently resolves conflicts for children. For example, teachers may separate certain children or may provide alternative materials without encouraging children to share or take turns.</td>
</tr>
</tbody>
</table>
### Classroom Observation

**General Classroom Environment**

<table>
<thead>
<tr>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exemplary</strong></td>
<td><strong>Basic</strong></td>
<td><strong>Deficient</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 6. Classroom Climate

- **Evidence:**
  - Interactions between teachers and children and between children that reflect quality of treatment.

- **Notes:**
  - The tone of classroom conversations is positive and shows respect for children's contributions, encouraging children to speak from their different perspectives and experiences.
  - Teachers listen attentively to children, encourage children to listen to each other, and deliberately foster a climate in which differing opinions and ideas are valued.
  - Teachers display fairness in treatment of children from differing gender, racial, and cultural groups.

- **Exemplary:**
  - There is strong evidence of a classroom climate that respects individual children and their contributions to the classroom.

- **Basic:**
  - There is some evidence of a classroom climate that respects individual children and their contributions to the classroom.

- **Deficient:**
  - There is minimal evidence of a classroom climate that respects individual children and their contributions to the classroom.

- The tone of teacher-child conversations is generally positive. Teachers engage in conversations with children but do not typically encourage voicing of multiple and diverse perspectives.
- Teachers listen to children but do not intentionally encourage children's conversations with each other. Similarity and convergence of opinions are valued.
- Teachers display fairness in treatment of children from differing gender, racial, and cultural groups.

- The tone of classroom conversations may be negative, or the teacher's manner may be harsh or punitive. Alternatively, the teacher may appear "distant" or "tuned out" and unavailable to children.
- Children are expected to listen to the teacher, and there are few opportunities for conversation.
- Teachers may show preferential treatment of children from differing gender, racial, and cultural groups.

---

Copyright © 2002 by Education Development Center, Inc., Newton, MA.

Do not reproduce without permission of Paul H. Brookes Publishing Co. 1-800-638-3775 www.brookespublishing.com
### 7. Oral Language Facilitation

**Evidence:**
- Interaction between teachers and children during lessons and activities.

**Notes:**
- Teachers appear to be aware of children's oral language abilities, considering both normative and individualistic patterns of development in first- and second-language development.
- Teachers plan sufficient time for conversations. Children are systematically encouraged to use oral language to share experiences, discuss and plan activities and for broader intellectual purposes (e.g., analyzing, predicting, problem solving, reflecting on learning).
- Goals and opportunities for extended uses of oral language (analyzing, predicting, and so forth) are coordinated with goals for literacy and content-area learning.
- Regular, intentional efforts are made to expand children's spoken vocabulary.

<table>
<thead>
<tr>
<th>Exemplary</th>
<th>Basic</th>
<th>Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

**Score:**
### Classroom Observation

#### Language, Literacy, and Curriculum

<table>
<thead>
<tr>
<th>5</th>
<th>Exemplary</th>
<th>4</th>
<th>Basic</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8. Presence of Books</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td>There is strong evidence that books are used systematically to support children's learning and development.</td>
<td></td>
<td>There is some evidence that books are used systematically to support children's learning and development.</td>
<td></td>
<td>There is minimal evidence that books are used systematically to support children's learning and development.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- There is a distinct book area in the classroom. It is evident that a variety of books are used throughout the day for instruction and enjoyment. The settings and displays of books are approached in a thoughtful, organized manner that is coordinated with ongoing classroom activities and learning goals.</td>
<td></td>
<td>- The settings and displays of books are approached in a thoughtful, organized manner and may include a separate book area.</td>
<td></td>
<td>- The settings and displays of books may not show organization or care and may limit appeal and accessibility to children.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- There are sufficient numbers of books, in good condition, with variety evident (e.g., genre, topic), used in various places in the room.</td>
<td></td>
<td>- There are sufficient numbers of books, in good condition, with some variety evident (e.g., genre, topic).</td>
<td></td>
<td>- The numbers, condition, and variety of books may be seriously limited.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The content and levels of available books are appropriate for the children in the classroom, and books include representations of various racial and cultural groups and non-stereotypical themes and characters.</td>
<td></td>
<td>- The content and levels of available books are appropriate for the children in the classroom, but books may not include representations of various racial and cultural groups and non-stereotypical themes and characters.</td>
<td></td>
<td>- The content and difficulty level of books may not be appropriate for the children in the classroom, and books may reinforce gender, racial, or cultural stereotypes.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Score:** [ ]
### Language, Literacy, and Curriculum

**5. Approaches to Book Reading**

**Exemplary**
- There is strong evidence of an intentional approach to book reading that is coordinated with goals for children's language and literacy development.
- Sufficient time for shared book reading and discussion of books is included daily in the classroom schedule.
- Teachers plan for and provide book-reading experiences in a variety of settings and groupings. For example, children may hear books in large groups, small groups, or individually, within and outside of the classroom.
- In addition to planned book-reading experiences, there are informal opportunities for children to explore, read, and hear books throughout the school day.
- Teachers coordinate book-reading experiences with ongoing curriculum themes and learning goals for children.

**Basic**
- There is some evidence of an intentional approach to book reading that is coordinated with goals for children's language and literacy development.
- Time for shared book reading and discussion of books is included at least three times per week in the classroom schedule.
- Teachers occasionally read books with small groups or individual children.

**Deficient**
- There is minimal evidence of an intentional approach to book reading that is coordinated with goals for children's language and literacy development.
- Planned time for shared book reading and discussing books is not evident in the weekly classroom schedule.
- Book reading may occur, but it is not systematically planned or organized.

**Score:** [Blank]
### Classroom Observation

**Language, Literacy, and Curriculum**

<table>
<thead>
<tr>
<th><strong>5</strong> Exemplary</th>
<th><strong>4</strong> Basic</th>
<th><strong>3</strong> Basic</th>
<th><strong>2</strong> Basic</th>
<th><strong>1</strong> Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9S. Reading Instruction</strong></td>
<td>There is strong evidence of an intentional approach to reading instruction that is coordinated with goals for language and literacy development.</td>
<td>There is some evidence of an intentional approach to reading instruction that is coordinated with goals for language and literacy development.</td>
<td>There is minimal evidence of an intentional approach to reading instruction that is coordinated with goals for language and literacy development.</td>
<td><img src="" alt="Score: " /></td>
</tr>
</tbody>
</table>

#### Notes:
- Teachers regularly plan for and provide daily reading experiences in a variety of ways. For example, children may participate in large-group shared reading, guided reading in small groups, and individual reading sessions with a teacher or peer.
- A range of teaching strategies supports children's reading comprehension. This includes thoughtful questioning and conversation about books, efforts to scaffold children's understanding of complex texts using children's experiences, and teaching of strategies such as predicting, questioning, rereading, and summarizing.
- Teachers provide simultaneous and tailored instruction in reading skills appropriate to children's reading level and English language proficiency. For example, a small group of kindergartners play a rhyming game to facilitate phonemic awareness while others construct word family trees.

#### Evidence:
- Teachers plan for and provide reading experiences in several settings, though use of varied approaches may be sporadic rather than regularly planned. For example, children may participate in large-group shared reading every day, but small-group instruction is not specifically planned.
- Teachers attempt to support children's reading comprehension through questioning and discussing books. However, their probes tend to be formulaic, such as, "What do you think will happen next?"
- Teachers provide instruction in reading skills appropriate to children's reading level, but emphasis is placed on the needs of the majority of students. Instruction is not tailored to meet individual needs.
- Teachers provide similar instruction in reading skills to all children, with minimal regard for individual needs. The skills taught may be based on age norms rather than on the developmental needs of this particular group of children.
<table>
<thead>
<tr>
<th>5</th>
<th>Exemplary</th>
<th>4</th>
<th>Basic</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10P: Approaches to Children's Writing</strong></td>
<td>There is strong evidence of a systematic approach to children's writing that supports their development.</td>
<td>There is some evidence of a systematic approach to children's writing that supports their development.</td>
<td>There is minimal evidence of a systematic approach to children's writing that supports their development.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prekindergarten and Kindergarten Version</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Evidence:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations of writing materials and opportunities for children and teachers to be engaged in writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Notes:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is strong evidence of a systematic approach to children's writing that supports their development.</td>
<td>There is some evidence of a systematic approach to children's writing that supports their development.</td>
<td>There is minimal evidence of a systematic approach to children's writing that supports their development.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Multiple motivations and opportunities are provided within the classroom for children to see writing and to use their emergent writing skills. Writing is differentiated from art activities.</td>
<td>- Some opportunities and materials are provided within the classroom for children to see writing and to use their emergent writing skills.</td>
<td>- Few or no opportunities or materials are provided within the classroom for children to see writing or to use their emergent writing skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- A variety of helpful materials and tools are accessible to support children's writing (e.g., types of writing implements, alphabet, word cards, lined paper).</td>
<td>- Some materials are available for children to use for writing activities.</td>
<td>- Specific materials or tools to support children's writing are not evident.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- When appropriate, instruction in writing is provided (e.g., helping children form letters, recognize letters, read and write words).</td>
<td>- When appropriate, instruction in writing is provided (e.g., helping children write their own names).</td>
<td>- If instruction in writing is provided, it may be ineffective or inappropriate (e.g., children must all practice a certain letter at a certain time).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Teachers are regularly available to support and encourage all children's writing efforts, which may include taking dictation, writing group stories, or engaging in real and pretend writing with children.</td>
<td>- Teachers are occasionally available to support children's writing efforts, which may include taking dictation, writing group stories, or engaging in real and pretend writing with children.</td>
<td>- Teachers are not regularly available to support all children's writing efforts and may discourage some children from writing attempts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Classroom Observation

**Language, Literacy, and Curriculum**

**10S. Writing Opportunities and Instruction**

<table>
<thead>
<tr>
<th>Exemplary</th>
<th>Basic</th>
<th>Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evidence:</strong> Teachers are purposeful in helping children see connections between elements of texts in reading and writing. They systematically introduce varied genres and guide children's learning of narrative, expository, and persuasive writing.</td>
<td>Teachers plan regular opportunities in which children are expected to write. However, connections between the elements of text in reading and writing are not specifically addressed.</td>
<td>Children's writing is limited to particular occasions and purposes, such as a weekly book report.</td>
</tr>
<tr>
<td>A variety of materials and tools are accessible to support children's spontaneous writing (e.g., various types of writing implements, paper, dictionaries, word walls).</td>
<td>Although a variety of materials and tools are available for children's writing, there is limited support for children's spontaneous writing.</td>
<td>There is minimal variety or accessibility of writing materials and tools. There is no support for children's spontaneous writing.</td>
</tr>
<tr>
<td>Teachers model and provide meaningful opportunities for children to write for various purposes and audiences and in content-area subjects, which may include journals, stories, reports, lists, notes, and so forth.</td>
<td>Teachers discuss varied genres and expose children to different purposes and audiences for writing. Writing is limited to language arts, and very little writing is done in content-area subjects.</td>
<td>Teachers may regularly instruct children's writing, but variety in genres, purposes, and audiences is not evident. There is little or no integration of writing in content-area subjects.</td>
</tr>
<tr>
<td>Particular writing skills and mechanics are taught according to the teacher's assessment of the children's developmental needs and in a meaningful context. For example, if children want to write and send a letter of thanks to a classroom visitor, a mini-lesson on conventions of letter writing may be incorporated.</td>
<td>Particular writing skills and mechanics are taught according to the teacher's assessment of children's developmental level, but these skills and mechanics may not be taught in meaningful contexts.</td>
<td>Particular writing skills are taught without regard for context or children's developmental needs.</td>
</tr>
</tbody>
</table>

**Notes:**

- Teachers model and provide opportunities for children to write for various purposes and audiences and in content-area subjects, which may include journals, stories, reports, lists, notes, and so forth.

---

**Score:**
### 11. Approaches to Curriculum Integration

**Evidence:**
Ongoing integration of curriculum and activities

**Notes:**
Activities are organized around goals for children’s conceptual understanding. When appropriate, opportunities for children to meaningfully use their language and literacy skills are integrated with content-area activities.

<table>
<thead>
<tr>
<th>Score:</th>
<th>Exemplary</th>
<th>Basic</th>
<th>Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>There is strong evidence of ongoing curriculum that meaningfully integrates information and skills.</td>
<td>There is some evidence of ongoing curriculum that meaningfully integrates information and skills.</td>
<td>There is minimal evidence of ongoing curriculum that meaningfully integrates information and skills.</td>
</tr>
<tr>
<td>4</td>
<td>• Materials, activities, and interactions encourage the use of themes meaningful to children to unify and integrate learning. Themes emerge and are allowed to develop over time (e.g., a week or more).</td>
<td>• Materials, activities, and interactions draw on themes that have some relevance for children. Themes may develop over time (e.g., a week or more).</td>
<td>• Materials, activities, and interactions may touch on common themes, but the themes themselves may not be meaningful to children or may be very narrow in scope. Themes may be too limited or too long in duration. Alternatively, themes may be absent or so diffuse that they are essentially meaningless.</td>
</tr>
<tr>
<td>3</td>
<td>• Activities may relate to goals, but the goals may be unclear or unrelated to children’s conceptual understanding. Opportunities for children to meaningfully use their language and literacy skills are not purposefully integrated with content-area activities.</td>
<td>• Activities may relate to goals, but the goals may be focused exclusively on developing particular skills. Attempts to integrate language and literacy skills with content-area activities are minimal.</td>
<td>• Activities may relate to goals, but the goals may be focused exclusively on developing particular skills. Attempts to integrate language and literacy skills with content-area activities are minimal.</td>
</tr>
<tr>
<td>2</td>
<td>• Activities may relate to goals, but the goals may be focused exclusively on developing particular skills. Attempts to integrate language and literacy skills with content-area activities are minimal.</td>
<td>• Activities may relate to goals, but the goals may be focused exclusively on developing particular skills. Attempts to integrate language and literacy skills with content-area activities are minimal.</td>
<td>• Activities may relate to goals, but the goals may be focused exclusively on developing particular skills. Attempts to integrate language and literacy skills with content-area activities are minimal.</td>
</tr>
<tr>
<td>1</td>
<td>• Activities may relate to goals, but the goals may be focused exclusively on developing particular skills. Attempts to integrate language and literacy skills with content-area activities are minimal.</td>
<td>• Activities may relate to goals, but the goals may be focused exclusively on developing particular skills. Attempts to integrate language and literacy skills with content-area activities are minimal.</td>
<td>• Activities may relate to goals, but the goals may be focused exclusively on developing particular skills. Attempts to integrate language and literacy skills with content-area activities are minimal.</td>
</tr>
</tbody>
</table>
### Classroom Observation

**Language, Literacy, and Curriculum**

<table>
<thead>
<tr>
<th>Score</th>
<th>5 Exemplary</th>
<th>4 Basic</th>
<th>3</th>
<th>2</th>
<th>1 Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Recognizing Diversity in the Classroom</td>
<td>There is strong evidence that approaches to language and literacy reflect diverse personal, family, and cultural backgrounds.</td>
<td>There is some evidence that approaches to language and literacy reflect diverse personal, family, and cultural backgrounds.</td>
<td></td>
<td></td>
<td>There is minimal evidence that approaches to language and literacy reflect diverse personal, family, and cultural backgrounds.</td>
</tr>
<tr>
<td>Evidence:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creativity:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- There are opportunities for the diversity that children bring to the classroom to be used meaningfully and regularly in the ongoing program. For example, teachers and children may explore the range of holidays and celebrations that occur for children in the group, possibly creating a calendar that depicts them and sharing traditions from multiple regions and cultures.
- There is evidence of ongoing, active attempts to learn and use information from children's homes and communities in classroom-based literacy activities.
- Children's prior knowledge and personal interests are used regularly as the basis for conversations, activities, and learning experiences in the classroom.
- Linguistic and cultural diversity is recognized and valued in multiple ways throughout the classroom.

- There may be few or no opportunities for the diversity that children bring to the classroom to be used in the ongoing program. Acknowledgment of other cultures is minimal.
- Attempts to learn about children's homes and communities are not evident or are unclear in their relationship to ongoing classroom activities.
- Activities in the classroom do not build on children's prior knowledge or personal interests.
- In classrooms with children from varied cultural backgrounds, linguistic and cultural diversity are not valued.

Score: [Blank]
### 13. Facilitating Home Support for Literacy

**Evidence:**
- Homework, newsletters, and other school-home contact information

**Notes:**
- Regular interactions between home and school include shared information about ways to support children's first and second languages, literacy, and learning.
- Families are provided appropriate materials and meaningful assignments that support children's practice and parents' facilitation of their children's learning and build on families' social/cultural experiences.
- Families are encouraged to seek out and use community resources in ways that contribute to children's language and literacy learning.

<table>
<thead>
<tr>
<th>Score</th>
<th>Exemplary</th>
<th>Basic</th>
<th>Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>There is strong evidence that home support for children's language literacy is considered integral to classroom-based programs and goals.</td>
<td>There is some evidence that home support for children's language literacy is considered integral to classroom-based programs and goals.</td>
<td>There is minimal evidence that home support for children's language literacy is considered integral to classroom-based programs and goals.</td>
</tr>
<tr>
<td>4</td>
<td>Interactions between home and school include some information about ways to support children's language, literacy, and learning.</td>
<td>Families are provided materials and assignments that support children's practice of literacy skills and can be understood and used by families.</td>
<td>Interactions between home and school may be rare or infrequent and do not provide information about ways to support children's language, literacy, and learning.</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>Families may be offered materials and assignments, but such materials may not support children's learning or may not be comprehensible to families.</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 14. Approaches to Assessment

#### Evidence

- **Exemplary**
  - There is strong evidence that appropriate, ongoing assessment techniques are used to evaluate learning and adjust instruction.
  - A range of assessment techniques is used flexibly and regularly with individuals and groups.
  - There are multiple opportunities for individual interactions that provide information used to evaluate learning and development.
  - There is consistent communication with specialists and outside resources that informs ongoing, classroom-based instruction for children.
  - There is regular and ongoing communication with families that provides information about children's learning and development and encourages family involvement and support.
  - Information gained from assessment is used to evaluate and adjust instructional practices to ensure individual children's continuing growth and achievement.

- **Basic**
  - There is some evidence that appropriate, ongoing assessment techniques are used to evaluate learning and adjust instruction.
  - Some assessment techniques are used regularly with individuals and groups.
  - There are opportunities for individual interaction that provide information relevant to children's ongoing learning and development.
  - Communication with specialists and outside resources is regular, but shared information may not be used as the basis for ongoing, classroom-based instruction for children.
  - There is occasional communication with families about children's learning, usually through a report card or schoolwide scheduled conferences.
  - Information gained from assessment is taken into account when making decisions about instructional practice.

- **Deficient**
  - There is minimal evidence that appropriate, ongoing assessment techniques are used to evaluate learning and adjust instruction.
  - A limited range of assessment techniques is used.
  - Opportunities for individual interaction are rare, infrequent, or not present, limiting teachers' ability to use individualized information to adjust learning experiences.
  - Communication with specialists and outside resources is limited to periodic reports about children and their activities with specialists.
  - There is little or no communication with families about children's learning. Report cards and other notices are the primary means used to report progress.
  - Information gained from assessments does not affect decisions about instructional practice or is ignored.

### Notes:

- There is evidence that assessment techniques are used to evaluate learning and adjust instruction.
- There are multiple opportunities for individual interaction that provide information used to evaluate learning and development.
- There is consistent communication with specialists and outside resources that informs ongoing, classroom-based instruction for children.
- There is regular and ongoing communication with families that provides information about children's learning and development and encourages family involvement and support.
- Information gained from assessment is used to evaluate and adjust instructional practices to ensure individual children's continuing growth and achievement.

### Score: [Blank]
Teacher Interview

An interview must take place after observing the classroom for 30–40 minutes. You should have seen a range of activities, including some focused specifically on language and literacy. In general, asking these interview questions takes about 10 minutes. After some of the following initial questions, probes are suggested; use these if they are needed to score an item on the Classroom Observation.

Please describe your approach to curriculum.

How do you plan your instruction and activities?

This question elicits information on organization of place, time, and content. What activities and goals do children learn? Related Classroom Observation domains: 3, 4, 5, and 6.

Probes: I notice that a lot of things seem related to a _____ theme; can you tell me more about that? How did you choose that theme? How much time was and/or will be spent on this theme? What are your goals? What are some things you expect children to learn? What determines how topics or particular literature titles are used in your classroom?

Probes: How do children typically use the computer, tape recorder, and so forth? What types of computer programs/software do you use? How do you choose the software?
Probes: Do you use any particular methods or program for helping children to become readers and writers? What are they? How did you come to use these methods or programs?

Probes: How is the diversity that your children bring to the classroom reflected in your curriculum and instruction?
In what ways do you interact or communicate with children's families?

This question gathers information on family contacts especially in regard to early literacy. Related Classroom Observation elements: 12 and 13.

Probes: How do you communicate with families about their children's language and literacy development? What methods do you use? How often?

--

Probes: How do you use this information when planning activities for children? In what ways do you work with children who have special learning needs? Are there particular specialists or other people who help with these children? Who are they? How do you communicate with the specialists?
DISTRICT OF COLUMBIA
PUBLIC SCHOOLS

Office of the Assistant Superintendents
Elementary Schools Division
Union Square Building, 9th Floor
825 North Capitol Street, N.E.
Washington, D.C. 20002
Phone: (202) 698-0731  Fax: (202) 442-5017/18

Old Dominion University
c/o University Institutional Review Panel
Darden College of Education
Norfolk, VA 23508

RE: Permission Letter to Conduct the Study

University Institutional Review Board:

As Assistant Superintendent in the Office of Accountability for the District of Columbia Public Schools, I have given Ms. Shanika Hope permission to conduct research in our school system. I have spoken with Ms. Hope and understand the scope of her research and how she will collect and present her data. All information to be gathered will be done in a confidential and appropriate manner. I further understand that Ms. Hope’s study is expected to run from August 30, 2007 to December 30, 2007. At no time will Ms. Hope’s research be used in a way that would have potential risk to subjects.

Should you have any questions, please feel free to contact me.

Sincerely,

Assistant Superintendent
RE: Study Information Letter

Dear District Administrator:

This letter is to inform you of a study I am conducting as part of my doctoral dissertation through Old Dominion University and is being supervised by Dr. Bol. I have received permission from the Office of Accountability to analyze the impact of the Universal Voyager Literacy Program on reading achievement and teacher instructional practices. I would like to provide you with more information about this project.

In recent years, scientific research has provided tremendous insight into exactly how children learn to read and the essential components for effective reading instruction. There is, however, no large-scale educational research study demonstrating a 100 percent success rate – as NCLB Act mandates. Under NCLB, school districts must implement instructional practices and materials supported by scientific evidence to enhance children's reading skills. Hence, even more pressure is being placed on school districts to implement best practices in reading; thereby, increasing student achievement.

The purpose of this study, therefore, is to analyze the impact of the Universal Voyager Literacy Program on reading achievement and teacher instructional practices in an urban school district, and to determine the extent to which this impact varies across Title I and non-Title I schools, student gender, and ethnicity.

This study will take place in sixteen schools – located throughout the district. This study will examine students in the Voyager Program and not in the Voyager Program will be compared in terms of reading test scores from a standardized reading achievement test (the DCCAS). Teachers will be compared in terms of three measures of instructional effectiveness (the Literacy Environment Checklist, The Literacy Activities Rating Scale, and the Classroom Observation and Teacher Interview Form) which provide both quantitative scores and qualitative data.

Participation in this study is voluntary. It will involve a 45 minute observation and an interview of approximately 30 minutes in length to take place after school at the school site. Teachers may decline to answer any of the interview questions if they so wish. Further, they may decide to withdraw from this study at any time without any negative consequences by advising the researcher. With their permission, the interview will be tape-recorded to facilitate collection of information, and later transcribed for analysis. Shortly after the interview has been completed, I will send you a copy of the transcript to give them an opportunity to confirm the accuracy of our conversation and to add or clarify any points they may wish. All information provided is considered completely confidential. Teachers' names will not appear in any thesis or report resulting from this study, however, with their permission anonymous quotations may be used. Data collected during this study will be retained for 1 year in a locked cabinet in my home.
Only researchers associated with this project will have access. There are no known or anticipated risks to them as a participant in this study.

If you have any questions regarding this study, or would like additional information, please contact me at 202-581-1615 or by email at shope001@odu.edu. You can also contact my research advisor, Dr. Linda Bol at 757-683-3000 email lbol@odu.edu.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research at Old Dominion University. I hope that the results of my study will be of benefit to those schools directly involved in the study, other schools not directly involved in the study, as well as to the broader research community.

Thank you in advance for your assistance in this project.

Yours Sincerely,

Shanika Hope,  
Doctoral Student
RE: Teacher Permission and Consent Letter to Conduct the Study

Dear Teacher:

This letter is an invitation to consider participating in a study I am conducting as part of my doctoral dissertation through Old Dominion University and is being supervised by Dr. Bol. I would like to provide you with more information about this project and what your involvement would entail if you decide to take part.

In recent years, scientific research has provided tremendous insight into exactly how children learn to read and the essential components for effective reading instruction. There is, however, no large-scale educational research study demonstrating a 100 percent success rate – as NCLB Act mandates. Under NCLB, school districts must implement instructional practices and materials supported by scientific evidence to enhance children's reading skills. Hence, even more pressure is being placed on school districts to implement best practices in reading; thereby, increasing student achievement.

The purpose of this study, therefore, is to analyze the impact of the Universal Voyager Literacy Program on reading achievement and teacher instructional practices in an urban school district, and to determine the extent to which this impact varies across Title I and non-Title I schools, student gender, and ethnicity.

This study will examine students in the Voyager Program and not in the Voyager Program will be compared in terms of reading test scores from a standardized reading achievement test (the DCCAS). Teachers will be compared in terms of three measures of instructional effectiveness (the Literacy Environment Checklist, The Literacy Activities Rating Scale, and the Classroom Observation and Teacher Interview Form) which provide both quantitative scores and qualitative data. Therefore, I would like to include you as one of several teachers to be involved in my study. I believe that because you are actively involved in the implementation of your school’s reading program, you are best suited to speak to the various issues, such as the literacy environment and literacy activities.

Participation in this study is voluntary. It will involve a 45 minute observation and an interview of approximately 30 minutes in length to take place after school at your school site. You may decline to answer any of the interview questions if you so wish. Further, you may decide to withdraw from this study at any time without any negative consequences by advising the researcher. With your permission, the interview will be tape-recorded to facilitate collection of information, and later transcribed for analysis. Shortly after the interview has been completed, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish. All information you provide is considered completely confidential. Your name will not appear in any thesis or report resulting from this study, however, with your permission anonymous quotations may be used. Data collected
during this study will be retained for 1 year in a locked cabinet in my home. Only researchers associated with this project will have access. There are no known or anticipated risks to you as a participant in this study.

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at 202-581-1615 or by email at shope001@odu.edu. You can also contact my research advisor, Dr. Linda Bol at 757-683-3000 email lbol@odu.edu.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research at Old Dominion University. However, the final decision about participation is yours. I hope that the results of my study will be of benefit to those schools directly involved in the study, other schools not directly involved in the study, as well as to the broader research community.

I very much look forward to speaking with you and thank you in advance for your assistance in this project.

Yours Sincerely,

Shanika Hope,
Doctoral Student
CONSENT FORM

I agree to participate in a study being conducted by Shanika Hope under the supervision of Dr. Linda Bol. I have made this decision based on the information I have read in the Information letter. As a participant in this study, I realize that I will be observed and will take part in a brief interview. I may decline answering any of the items, if I so choose. All information which I provide will be held in confidence and I will not be identified in any way in the final report. I understand that I may withdraw this consent at any time by notifying Ms. Hope.

I also understand that this project has been reviewed by and has received ethics clearance through the Office of Research at Old Dominion University and that I may contact this office if I have any concerns or comments resulting from my involvement in this study.

Participant's Name: _______________________________(Please print)

Participant's Signature: ________________________________

Witness' Signature: ________________________________

Date: ____________________
APPENDIX G: VITA
ASSISTANT SUPERINTENDENT/SCHOOL REFORMER

Instructional Leadership ~ Achievement Monitoring & Accountability ~ Data Driven Decisions

State and District-Level Administrator successful at building high-performance leadership teams and leading sophisticated state and federal mandates while managing a program budget of $110 million. Background includes monitoring the delivery of programs for all students, developing and administering staff development, conducting evaluations, and resolving personnel and community issues. Critical thinker and adept communicator who can apply extensive knowledge of current educational and District trends and practice to resolve school issues. A strategic visionary with a clear sense of purpose and urgency when faced with diverse situational challenges during periods of both stagnate achievement outcomes and evolving political climate. Skilled at delivering innovative solutions within traditional parameters, translating district needs into specific growth strategies, and planning/executing multi-faceted instructional campaigns designed to improve student outcomes, increase teacher capacity and prepare students for the 21st century workforce. Key qualifications include:

- Community Engagement
- Federal Grants Management
- Leadership Coach

- School Turnaround Specialist
- Strategic Business Partnerships
- Strategic Planning

Doctorate of Philosophy in Education Leadership · Darden College of Education · Old Dominion University, Norfolk, VA

Master of Science · Darden College of Education · Old Dominion University, Norfolk, VA

CAREER HIGHLIGHTS

- Appointed to the District of Columbia Education Compact
- Appointed to the DC Children & Youth Investment Trust Curriculum Advisory Panel
- Coordinated district-wide Lucy Calkins Literacy Symposium (1200 educators attended)
- Designed and facilitated several staff developments including: “Unwrapping the Standards”, “Curriculum Mapping”, “Data Driven Decisions” and “Completing the Local School Transition Plan”
- Recognized by the Virginian Pilot newspaper as local area top 20 African American leaders for 2001

PROFESSIONAL

DISTRICT OF COLUMBIA PUBLIC SCHOOLS
Assistant Superintendent of Elementary and Secondary Education Present
DC Office of the State Superintendent of Education

- Establishes and implements programs, policies and regulations over elementary and secondary education, federal programs, early childhood education, school improvement, teacher recruitment/retention, assessment and English language learners.
S.L. Hope

Develops, manages and justifies the annual budget (over $110 million) and multi-year strategic plan.

Regularly presents, reports, testifies, and drafts policy briefs for the Office of the State Superintendent of Education, the State Board of Education, the Mayor, the Council of the District of Columbia, community organizations, local and national education organizations, and other stakeholders.

Ensures curriculum and instructional supports are developed to meet the academic standards.

Plans and develops activities that focus on enhancing educational outcomes and student performance in the District and helps to ensure that appropriate and optimum program resources are utilized.

Analyzes and evaluates local and federal legislation to determine its effects on the development or implementation of identified policy priorities.

Approves and manages multi-year and long range work plans, schedules, staffing needs, goals and objectives; while establishing performance measures for the office and evaluation of program effectiveness.

Coordinates the efforts of over 100 directors, support staff and contractors.

Director of School Performance 2006-2007
Friendship Public Charter Schools

Assist in the development of the Friendship Design, a key goal of the Friendship Public Charter School (FPCS) Strategic Plan

Provide leadership in the design and implementation of assessment-related initiatives, such as formative exit assessments for grades 3, 5, 8 and 11, year end high school assessments, and the state assessment

Develop and manage an integrated, valid and informative assessment program in support of FPCS content standards

Construct benchmark tests that are correlated to FPCS content standards and the pacing of the essential curriculum such that they can be legitimately used as part of a student’s quarterly grades

Provide evaluative information to assist executive leadership team to make data-driven decisions regarding the expansion, continuation and/or elimination of intervention programs operating within FPCS

Develop and implement an accountability system which is aligned with the Federal NCLB Act, the DC Public Charter School Board accountability and compliance program, the FPCS accreditation plan and any FPCS school improvement plans

Provide ongoing training of teachers and administrative staff, as well as parents and other stakeholders on the proper use and interpretation of test results (e.g., SRI, SAT, PSAT, AP, DC CAS, functional and others)

Develop specific accountability indicators for administrators and create online access to accountability data in a user-friendly format

School Performance Officer 2004-2006
DCPS Office of the Assistant Superintendents

Advise and provide oversight to over 35 school administrators in the management and organization of school building, planning and coordination of instructional programs.
• Coordinate and support DCPS schools in comprehensive instructional and staff development planning.
• Review and monitor local school budgets (over $30 million) to ensure instructional viability and compliance.
• Organize the design, planning, and implementation of special projects established to promote achievement of local priorities and mandates that result in the institutionalization of improved leadership, teaching and learning.
• Plan and manage special District-wide programs related to local priorities and mandates, at the divisional school level.

VIRGINIA PUBLIC SCHOOLS
Academic Reviewer/School Improvement
VA Department of Education
• Provided technical assistance to schools with a failing accreditation rating. Duties include: classroom observations, teacher/administrator interviewing, documentation evaluation, and technical reporting of findings.

Principal
Park Place Elementary School
• Advised, prepared, and administered half-million dollar budget.
• Provided leadership in the identification and implementation of best practices, staff development, and on-going program evaluation.
• Observed and evaluated performance of therapists and teachers on a regular basis to ensure that therapy meets the individual needs of students and is performed in accordance with National Institute of Learning Disabilities model of educational therapy.
• Fostered social, emotional, physical, and intellectual development by providing students with a challenging and academically rigorous curriculum tailored to their special needs.

Program Evaluator/Researcher
Old Dominion University
• Designed, conducted, and reported results of various program evaluations; analyze student and teacher needs based on qualitative methods documenting the interests, abilities, knowledge and skills; work collaboratively with other departments on matters of assessment and evaluation.

Teacher/Standards Specialist
Lindenwood Elementary School

TECHNICAL SKILLS
Experienced and proficient in Microsoft Office Suite (Word, Access, Excel, PowerPoint, Outlook, Visio), SPSS, C++, and various software for business; thoroughly familiar with applications for tracking, compiling, statistical analysis and project management.

References Available Upon Request