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# Reading First/Bay State Reading Initiative: Public vs Private Implementation – Which Produces the Best Results?

A Dissertation Presented

by

MARLENE A. DI LEO

Submitted to the Graduate School of the University of Massachusetts Amherst in the partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

May 2011

Education

Educational Policy and Leadership

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# Reading First/Bay State Reading Initiative: Public vs Private Implementation – Which Produces the Best Results?

A Dissertation Presented
by

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# DEDICATION

In loving memory of my mother, Lucille Rose Di Leo, and mother-in-law, Genoveva Santana.

#### **ACKNOWLEDGEMENTS**

I would like to thank my advisor, Dr. Joseph B. Berger, for sharing his time, support, and expertise as he guided me through this process. I did not know that the day he asked me, "Is there anything I can do for you?" would change my life forever. I would like to extend my appreciation to the members of my committee, Dr. Linda E. Driscoll and Dr. Daniel Gerber, for agreeing to take part in my process and offering their time and knowledge.

I want to thank Dr. Elizabeth Zielinski for the time and guidance she provided as I searched for a meaningful topic which supported my daily practice.

I want to thank all of the teachers and administrators of the two Western MA schools who took part in my study. I greatly appreciate the time they took in sharing their experiences and practices with me. Special thanks go out to the Literacy Coaches in each school, Kathy Adams, Colleen Mucha and Anne Marie Lake. Your help and assistance was invaluable and greatly appreciated.

I want to thank Dr. Mary-Elizabeth Beach for the support she has afforded me as I made my way through this journey while employed.

Special thanks go out to my family, to Martha for believing in me and supporting me with my decision to continue on with my studies as we worked together raising our two children, Natalie and Zachary. To Natalie and Zachary, thanks for keeping me grounded in who I am and for reminding me that "quitting is not an option."

#### ABSTRACT

Reading First/Bay State Reading Initiative: Public vs Private Implementation – Which

Produces the Best Results?

#### MAY 2011

MARLENE A. DI LEO, B.S., UNIVERSITY OF MASSACHUSETTS

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The dissertation is a study to determine which program, Reading First or Bay State

Reading Initiative, will demonstrate the greatest gains in reading for students in grades K-3 using
a 3-Tier Reading Model. The findings from this study are intended to provide pertinent
information on which best practices work in increasing student achievement for reading.

Education reform continues to be a hot topic at all levels within the United States. With the
spending of billions of federals, state and local dollars, the persistent talk of accountability is
ongoing. Since NCLB inception, the year 2014 when all students need to reach proficiency in
statewide standardized tests in mathematics and reading, continues to be a threatening time
period. With each state setting its own definition and determination of what proficiency is, it is
measured by the Adequate Yearly Progress (AYP). This AYP measurement will determine each
school's progress incrementally until it reaches 100% in 2014. 48% of all schools in
Massachusetts failed to make their AYP in 2004. It is predicted that by 2014, 90% of schools in
Massachusetts will not reach its APY obligation (MassPartners for Public Schools, 2005). With
the pursuit of reaching AYP, the search is still on for what best practices work in increasing
student achievement.

This study utilizes a mixed method research design; including quantitative analysis of the reading scores, a qualitative analysis of teacher and administrator perspective on the effectiveness

of each program and a financial cost-effectiveness comparison of the two programs. The quantitative research design includes comparing DIBELS and GRADE results of two elementary schools for students in grades K – 3 each of which uses a different reading program. School A uses the Houghton Mifflin Reading Series for their core reading curriculum while School B uses Scott Foresman Reading Street. In addition to comparing the aggregate scores of each school to each other, a number of sub-groups will also be compared. These groups will include low income students (students who receive free and reduced lunch), students with limited English proficiency (LEP), and special education students. Mean comparisons will be utilized to identify which program produces the best results.

In order to identify strengthens and weaknesses of each approach a questionnaire will be utilize to obtain this information from teachers and the administrators who took part in implementing both programs.

In these times of tight budgets and difficult decisions on how to meet the needs of all students it is imperative that cost effectiveness is examined between the two programs. Which of these two programs will provide the greatest gain? How much will that gain cost? Which program will reap the best results for the least amount of money?

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#### CHAPTER I

#### STATEMENT OF THE PROBLEM

In times of increasing educational standards and an accompanying increase in accountability for meeting these standards, Massachusetts schools are not only challenged but required by the Education Reform Law of 1993 and the No Child Left Behind Act (NCLB) to ensure that all students are able to reach proficiency by the year 2014. In facing the challenge, schools in need of improvement have received an increase in school funding. Many schools received these additional financial supports in the form of grants which targeted particular areas of student achievement. Reading improvement has been one area that has received a large amount of additional financial support through grants, both at the state and federal level. Many Massachusetts schools benefited from the receipt of either the Reading First Grant or the Bay State Reading Initiative Grant. Both of these grants required that the school receiving the funding implement a 3-Tier Reading Model. However, while both grants were funded by the state, the state maintained oversight of the Reading First Grant but not of the Bay State Reading Initiative. Oversight of this grant was given to a private, non-profit organization, The Boston Foundation an initiative of Ed Moscovitch and Barbara Gardner. This funding, in the form of a grant, was awarded to Middlesex Community College. Although both grants mandated that schools use a 3-tier reading model, the way that the model was implemented varied. Determining which grant overseer's recipients demonstrated the greatest gains in a 3-tier reading model, the Reading First recipient or the Bay State Reading Initiative recipient, the public organization or the private organization, is a study that will elicit valuable information for the future success of this particular education

subject as well as a variety of others in Massachusetts and elsewhere?

### A. Purpose of the Study

Education reform continues to be a hot topic at all levels within the United States. With the spending of billions of federals, state and local dollars, the persistent talk of accountability is ongoing. Since NCLB's inception, the year 2014 when all students need to reach proficiency in statewide standardized tests in mathematics and reading, continues to be a threatening time period. Since each state is setting its own definition and determination of what proficiency is, the Adequate Yearly Progress (AYP) was developed as a standard. This AYP measurement will determine each school's progress incrementally until it reaches 100% by 2014. 48% of all schools in Massachusetts failed to make their AYP in 2004. It is predicted that by 2014, 90% of schools in Massachusetts will not have reached their AYP obligation (MassPartners for Public Schools, 2005).

With the pursuit of reaching AYP, the search is still on for what best practices work increasing student achievement. This study will determine which grant, Reading First or Bay State Reading Initiative, will demonstrate the greatest gains in reading for students in the grades K-3 in a 3-Tier Reading Model.

#### **B.** Research Questions

The pedagogy of the Reading First and Bay State Reading Initiative are very similar as both follow the same research. The major differences of these grants lie in the partnership that is made with the districts and schools along with the differences of the coaching models. The writers of the Bay State Reading Initiative grant, Barbara Gardner

and Ed Moscovitch, had additional insights into ways to assist schools through their literacy-based whole school turnaround plan. Therefore, this study is lead by the following research questions:

 Which program, Reading First or Bay State Reading Initiative, is most effective for improving reading in grades K-3?

The following related questions will also be explored:

- Which grant demonstrated greatest gains in student reading levels?
- What are the strengths and weaknesses of each approach from the perspective of a teacher?
- What are the strengths and weaknesses of each approach from the perspective of an administrator?
- Which approach is most cost effective?

#### C. Significance of the Study

The jury is still out on whether or not the investment of Reading First has seen any return on the millions of dollars that have been spent. The results of Reading First have been mixed and have been identified in the following areas:

- "Reading First did not improve students' reading comprehension.
- Reading First increased total class time spent on the five essential components of reading instruction promoted by the program.
- Reading First increased highly explicit instruction in grades one
   and two and increased high quality student practice in grade two.

Reading First had mixed effects on student engagement with print"
 (National Center for Education Evaluation and Regional
 Assistance 2008).

With the mixed results of the Reading First program, if it is found that the Bay State Reading Initiative demonstrates greater results in reading than Reading First it may impact reading education in the following ways:

- The findings could have an impact on the way Reading First is implemented.
- 2. The findings could have an impact on school reform.
- The findings could indicate the need for building partnership in order to see a positive impact on reading.
- 4. The findings could indicate the need for providing principal coaches in order to see a positive impact on reading.

#### D. Assumptions

One assumption of the study is that principal coaches need to be part of the implementation process in order to see greater results. If the leadership of the school does not understand the process of teaching reading or in fact does not believe in the process of how reading is being taught, then it is less likely that the principal can convince the faculty of its importance. Both programs, Reading First and Bay State Reading Initiative, need to have the leadership and faculty support the process. However, how often does it occur that a school district makes the decision for the school and leaves the school with no other option than to follow through on the agreement made by its

superintendent without its input? What type of effort will there be as the faculty is being put through its training for these programs if the belief in how to get results is weak and uncommitted? The success of this program relies on the premise that the leadership will guide the faculty in reaching a common goal.

Another assumption of the study is that when funding gets cut after the implementation of a program, it has negative effects on the results. When federal funding was cut for the Reading First program, the Massachusetts Department of Education was forced to cut back on the professional development and support that had been promised to the schools. Once a school has signed on to the Bay State Reading Initiative, program funding is awarded for five years. If during those five years, a school feels that it needs added support for its literacy coach or principal mentor, all that is needed is a request for added support to be provided. It is then assumed that with a commitment of funding and support in place over the life of the grant, positive results will ensure.

Another assumption is that the whole school reform component is an important element in the attempt to secure changes within the educational setting. The Bay State Reading Initiative believed that in order to have successful school change a strong partnership needed to be established between the school and its literacy and principal coaches.

#### E. Definitions

The definitions I propose to guide my research for this study include the following:

**Dynamic Indicator of Basic Early Literacy Skills (DIBELS):** Indicators used to assess an individual's phonological awareness (initial sound fluency and phonemic

segmentation fluency), phonics (nonsense word fluency) and fluency (oral reading fluency) (DIBELS Data System).

Group Reading Assessment Diagnostics Evaluation (GRADE): A diagnostic tool used to assess an individual's ability to comprehend written text.

**Phonemic Awareness:** Recognizing and using individual sounds to make up words (Education, Intergovernmental, Affairs, Partnerships & Unit, 2003)

**Phonics:** The relationship between letters and the sounds those letters represent.

Recognizing familiar words through this sound letter relationship (Education,

Intergovernmental, Affairs, Partnership & Unit, May 2003).

**Reading Fluency:** In order to understand what is read an individual must be able to read words quickly and accurately (Education, Intergovernmental, Affairs, Partnership & Unit, May 2003).

**Vocabulary Development:** Learning strategies to assist students in understanding what is read (Education, Intergovernmental, Affairs, Partnerships & Unit, May 2003).

#### F. Overview

In this chapter I described the study's purpose and significance, and proposed specific questions to guide my research on which reading program produces the greatest gains, Reading First or Bay State Reading Initiative.

Review of the literature and research that my study will draw from will appear in the following chapter. The paper begins with a review of the federal legislation that was put into place beginning with the Elementary and Secondary Education Act of 1965 concerning the war on poverty in the attempt to bridge the educational gap, and ends with a review of the most recent reauthorization, the No Child Left Behind Act of 2001 (NCLB). The review looks not only at the federal effort of school reform, but also includes the Massachusetts Education Reform Act of 1993. Through the years, in spite of the fact that more money has been poured into education, the gaps remain. And with an increase in funding comes an increase in assessment, accountability, and school reform.

Through NCLB came the Reading First grant, which was awarded to schools that had a high percentage of disadvantaged students. In addition to being classified as disadvantaged, these students were identified as not having reached proficiency in math and reading. The review section also discusses the Reading First program along with the Bay State Reading Initiative program. The pedagogy of these programs is similar, but there is a difference in the process of implementation. This chapter also reviews the reading wars, whole language and phonics instruction. The debate over which methodology of teaching reading, whole language or phonics instruction, yields the best results in getting students to read is addressed in this chapter. The five areas of reading are included in the literature review. The literature review concludes with the 3-tier reading model along with the Dynamic Indicators of Basic Early Literacy Skills and the Grade Reading Assessment and Diagnostic Evaluation which are used to assess the 3-tier reading model.

Chapter Three contains my conceptual framework and outline the research design.

This section also includes how to put to use my research questions along with outlining the methodology, participants, data, measures, analysis, limitations and conclusion.

#### CHAPTER II

#### HISTORICAL BACKGROUND

Closing the achievement gap, particularly in fundamental subjects such as reading, is the driving force behind the current era of education reform which challenges us to "Leave No Child Behind". The No Child Left Behind Act of 2001 (NCLB) is a relatively recent manifestation of a reform movement that finds its roots buried deeply within the administration of President Lyndon Johnson. In 1965, President Lyndon Johnson signed into law the Elementary and Secondary Education Act (ESEA). This act provided federal dollars to the most needy of schools and children. President Johnson stated, "Poverty must not be a bar to learning and learning must offer an escape from poverty" (Ohio Education Association 1). During this time period in our nation, President Johnson's War on Poverty ignited the search for academic excellence as he continued his pursuit of equal education for all children. Prior to the ESEA the oversight of education was at the state and local levels. The passing of this act saw an increase in federal involvement in education and a costly price tag for its programs, with the question of whether the increase in funding actually raised student achievement. The federal government took the lead in becoming the big brother to local and state education boards, federal funding, along with state and local efforts, began to address the needs of poor students and schools. Over the course of the next forty years, ESEA moved through three difficult time periods (Ohio Education Association 2007).

1965 to 1980 – The Elementary and Secondary Education Act was the forefather of providing equal access to education for all students. The discussion during this time

centered on Title 1 funding and the criteria on how these funds could be utilized. These funds were targeted for disadvantaged schools and students for supplemental use. Eleven billion dollars a year was earmarked for ESEA with 80% of it being funneled into the Title 1 grant (Ohio Education Association 2007). The Title 1 grant is a federally funded program with a purpose of ensuring that all children have an opportunity to obtain a high quality education. This program was created to improve the academic achievement of the disadvantaged (U. S. Department of Education, 2004).

1980 to 1990 – This time period heralded the release of "A Nation at Risk". Generated during President Ronald Reagan's administration by an eighteen-member commission made up of individuals from the private sector, government, and education, this report brought education into the national spotlight in part by comparing the state of the nation's schools to the country's economy. This was the first time talk of accountability and improvement was being addressed at the national level. President Reagan brought attention to the fact, that our schools were not preparing students to meet the need of our nation's workforce. The commission not only examined quality of teaching and learning but also compared American schools and colleges to schools and colleges in other advanced countries. The commission found that our schools were not making the grade on a national or international level. It noted drops in SAT scores of 40 to 50 points in the math and verbal tests during the period of 1963-1980. Out of all seventeen year olds that were tested, only forty percent could draw inferences from written text and only one fifth of these individuals could write a persuasive essay. Five major topics were determined from the thirty eight recommendations that were made.

These included content, standards and expectations, time, teaching, leadership and fiscal support (Ohio Education Association 2007).

1990 to the Present – The accountability factor has been brought to the forefront during this time. Policy-makers want evidence of success for the cost of doing educational business. The initiative that brought the focus to standards-based reform was President Clinton's Goal 2000. Through this initiative, states were required to develop standards for math and reading and schools were then issued report cards for their efforts. States were required to develop tests and assess low income students once in elementary school, once in middle school and then once in high school. When President George Bush took office in 2001, the ESEA was reauthorized as the NCLB Act of 2001.

ESEA of 1965 has been reauthorized eight times in the last forty-four years and the search for equality, accountability and results continues to evolve. The reauthorization of the NCLB, which expired on September 30, 2007, is still pending (U. S. Department of Education 2005).

#### A. No Child Left Behind

On January 8, 2002 the current era of reform was formally ushered in when President George W. Bush signed the NCLB Act of 2001. President Bush focused the framework for educational reform used to establish this law around assessment, accountability and school improvement. States were now required to develop standards for math and reading with assessments that would test for the understanding of these standards by students in grades 3-8 (U. S Department of Education 2005).

According to the U. S. Department of Education the NCLB Act of 2001 was established on four pillars (U. S. Department of Education 2004).

Strong Accountability for Results

More Freedom to States and Communities

**Proven Education Methods** 

More Choices for Parents

These four pillars are the frameworks that the NCLB is built upon. Each pillar has a specific role while at the same time, together, they strive to meet the act's focus of assessment, accountability and school improvement. Each pillar's role is described in the following sub-sections.

Strong Accountability for Results: States were required to assess all children annually in grade 3 – 8 in their core academic subjects. Not only were states required to develop standards and assessments to measure student's understanding of these standards, they were also required to develop adequate yearly progress (AYP) objectives. These objectives are used to judge student achievement and the calculations are used to set expectations for schools and districts as the aggregate for the entire school and disaggregate of student subgroups (U. S. Department of Education 2005). The subgroups included students with disabilities, students with limited English proficiency (LEP), economically disadvantaged students (students who qualify to receive free/reduced lunch), and African American/Black, Hispanic, Asian, White and Native American students (Massachusetts Department of Education 2008). The NCLB mandates that all these sub-groups of students will meet their proficiency in reading and math by the year 2014 (U. S. Department of Education 2005). When a school fails to

meet its AYP determination for two years in a row it is then deemed in need of improvement. A school in need of improvement must then write a two-year school improvement plan that identifies the cause or causes of poor academic achievement for its core academic subjects. A school must utilize 10% of its Title 1/Part A funds to provide professional development for its teachers in the areas that have been targeted for improvement. Students can opt out of their schools that have been determined as "needs improvement" and request to be transferred to another public school or public charter school in their district that is not this designated category, the district mandated to pick up the expense of transporting these students to and from their new school. An accountability status of needs improvement for three years in a row requires that school the district provide supplemental educational services (SES) for students who are from low income families. Through Title 1 funding services can be arranged for by a public or private sector provider (U. S. Department of Education 2004).

Schools are encouraged, and if they are Reading First schools obligated, through NCLB to implement only scientifically-based research programs to address the gaps in student achievement. These programs that are suggested must have been proven effective through the use of consistent instructional methods (Stanovich & Stanovich, 2006). In addition, part of NCLB mandated that academic materials purchased with federal funds needed to meet the criteria that gave them the scientifically-based research stamp of approval.

More Freedom for States and Communities: With the passing of the NCLB Act came the consolidation of a number of different federal grants including the Improving Teacher

Quality State Grants, Educational Technology, Innovative Programs, Safe and Drug-Free Schools, and Title 1. This consolidation allowed districts the flexibility to transfer money between programs without separate approval giving them the latitude to utilize funds where *they* felt they were needed most, whether for current teacher development or the hiring of new teachers (U. S. Department of Education 2004). However, when it came to purchasing educational materials, districts choices were restricted to newly established guidelines. All materials purchased with Title 1 dollars needed to carry the label of scientifically-based research. The U. S. Department of Education did not publish an "approved list" of programs that could be purchased with federal funding. The requirements were based upon the definition of scientifically-based research materials as defined in the law (U. S. Department of Education 2004).

Proven Educational Methods: As per the strict requirements written into Public Law 107-110, the educational programs and practices that are promoted through NCLB need to be scientifically-based research ones. Scientifically-based research as defined by NCLB is as follows:

- (A) "Means research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs; and
- (B) Includes research that
  - (i) Employs systematic, empirical methods that draw on observation or experiment;
  - (ii) Involves rigorous data analysis that are adequate to test the stated hypotheses and justify the general conclusions drawn;

- (iii) Relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators;
- (iv) Is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions and with appropriate controls to evaluate the effects of the condition of interest, with a preference for random-assignment experiments, or other designs to the extent that those designs contain within-condition or across-condition controls;
- (v) Ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at a minimum, offer the opportunity to build systematically on their findings; and
- (vi) Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review" (107<sup>th</sup> Congress 540-541).

More Choices for Parents: Parents have some options under NCLB if their children attend an under-performing school. Parents can choose for their child to be transferred to another public school within their district that is not deemed under-performing. The district will be responsible for the transportation of this student. Low income students who are attending a school that has not meet its AYP for three years are eligible for SES, including after school services, tutoring, and summer school. In addition, students who

attend a chronically dangerous school or while attending school have been a victim of a violent crime can opt to attend a safe school within their district (U. S. Department of Education 2005). As NCLB pulled together key aspects of education reform, for some states the reform was already underway.

# B. Massachusetts Education Reform Act

In Massachusetts, prior to the NCLB Act, education reform had already begun at the state level. On June 18, 1993, Governor William Weld signed the Massachusetts Education Reform Act (MERA). Work began on the mandates of that act to put it into practice. Between the months of September 1993 and June 1994 a forty member commission sought the input of over 50,000 Massachusetts citizens with the question, "What should all students know and be able to do?" as they worked to ascertain the common core of learning (Massachusetts Department of Elementary & Secondary Education 1995). This effort reviewed all areas of policy that governed education in the state of Massachusetts and led to a systemic reform effort that would leave no stone unturned and education would be forever changed (Driscoll et al. 2005). Five strategic goals emerged in an implementation plan developed out of fifty-four district activities. These goals included:

Strategic Goal I: Establish new standards and programs that ensure high achievement. This goal focused on establishing statewide student standards and was accomplished through a partnership with the citizens' of the commonwealth and a forty member Commission appointed to draft the Common Core of Learning. The Common Core of Learning designed curriculum frameworks for specific content areas such as

mathematics, science and technology, history and social sciences, English, the arts, foreign languages and health (Massachusetts Department of Elementary & Secondary Education 1995).

The frameworks were developed through an initiative called Project PALMS, which was made up of individuals with a stake in education: teachers, principals, department heads, college deans and presidents, cultural institutions and professional associations. Their assignment was to develop frameworks for the content area of mathematics and for science and technology. These were working committees that encouraged participation, throughout the state as they worked to agree upon what these frameworks should look like and came to be known as the Statewide Curriculum Framework Advisory Council (Massachusetts Department of Elementary & Secondary Education 1995).

During 1988-1994 the statewide assessment was known as the Massachusetts Educational Assessment Program (MEAP). This assessment was administered on every other year cycles with review of the results of testing at the building and district level. Not all students were required to take part in this assessment. Certain students with special needs and limited English proficient students (LEP) were exempt from taking the test (Massachusetts Department of Elementary & Secondary Education 1995).

The new assessment, which came out of the Massachusetts Education Reform

Act, was different from the MEAP in a number of ways:

- Yearly assessments
- Results for individual students
- Inclusion for all students

- The frameworks needed to be written and implemented prior to the assessment system being developed
- Starting with the class of 1999, students must have received a certification
  of competency by passing this assessment in order to receive a diploma
  (Massachusetts Department of Elementary & Secondary Education 1995).

Analysis of Strategic Goal II: Administer a fair and equitable system of school finance. A sound financial base was the premise of the beginning of a successful academic endeavor but the lack of funding was an almost guaranteed scenario for academic failure. On June 15, 1993 the Massachusetts Supreme Judicial Court, in the landmark case of McDuffy v. Robertson, noted the state's constitutional duty to financially take care of its schools. This finding was made three days prior to the signing of MERA. When Governor Weld signed the act into law, he promised the citizens and schools of Massachusetts that he and the Legislature would provide proper funding: hence, the formula for a standard budget known as the foundation budget (Massachusetts Department of Elementary & Secondary Education 1995)

The foundation budget was based on the number and mix of students that attended a school. There was a set number of guidance counselors, teachers, and special education teachers for every 100 students. If a school had a higher percentage of low-income students, LEP students, or vocational students additional funds were made available for these students (Massachusetts Department of Elementary & Secondary Education 1995)

Analysis of Strategic Goal III: Work with school districts to create a governance structure that encourages innovation and accountability. MERA provided for a top down transformation of governing schools. Principals were now given the power to make building level decisions pertaining to staffing, operations, curriculum, and budget decisions. Through this transfer of power, principals were no longer included in collective bargaining units. School councils were made part of the reform to assist principals with their new found responsibilities pertaining to budget and curriculum (Massachusetts Department of Elementary & Secondary Education 1995).

The secretary of education now had the authority to establish twenty-five charter schools. Charter schools ran separately from public schools, but would be funded in the same way as a public school. Charter schools would have the flexibility to implement any program or pilot new programs its board of directors felt would best meet the needs of their students without any district control or restrictions (Massachusetts Department of Elementary & Secondary Education 1995).

The evaluation process used to assess these schools would eventually be based on statewide performance standards. School standards would need to be developed first in order to determine achievement, so for the time being attendance and drop-out rates would be used as the initial benchmarks. The results of these school performance standards marked the beginning of school accountability. All results were made public to allow for successful schools to share their models of academic delivery in hopes of sharing successful methods. Unsuccessful models of academic delivery could also be identified in order that other schools would not implement low performing models. With the increase of publicity came the increase of information that was shared between

schools, districts, and the state. The idea was that one day the amplified use of technology would provide for a better transition in the sharing of all information. If education reform was going to work then school accountability needed to be part of the process (Education Reform First Annual Implementation Report Analysis of Strategic Goal III 1/3). When schools were determined to be chronically under-performing, the commissioner of education had the authority to put the school in receivership. MERA gave the receiver of this school the power to remove the principal, reorganize the school, and replace the staff with the added provision of reporting back to the Commissioner (Education Reform First Annual Implementation Report Analysis of Strategic Goal III 1/3).

Analysis of Strategic Goal IV: Enhance the quality and accountability of all education personnel. Improve the quality and accountability of all educational personnel. In order for education reform to realize the types of systemic changes needed for success at the foundation of its efforts, professional standards needed to be established and implemented and the accountability of these standards needed to be just, genuine and significant. Within a year's time, two important fundaments were identified: professional licensure and employment (Education Reform First Annual Implementation Report Analysis of Strategic GOAL IV 1/3).

Provisional certification for an initial license, prior to a teacher or administrator being given full certification, began in October 1994. This intermediate step was necessary to insure that teachers and administrators had the content understanding to become successful professionals. Teachers and administrators were given five years to acquire the necessary professional development that was needed to

obtain full certification. Once certified, all educators needed to develop Individual Professional Development Plans that guided the direction of their studies. Additionally, every five years, a teacher or administrator would need to apply for recertification to insure that teachers and administrators participated in the minimal amount of professional development that would keep them current within their discipline. (Education Reform First Annual Implementation Report Analysis of Strategic GOAL IV 1/3).

The second part of Goal IV focused on professional standards. Districts were given the authority to make employment decisions with the best interests of the students in mind. This occurred through direct and indirect observations, parent surveys and professional development objectives. These state guidelines needed to be just, genuine, and inclusive. (Education Reform First Annual Implementation Report Analysis of Strategic GOAL IV 1/3).

Analysis of Strategic Goal V: Improve the Department of Education of Elementary and Secondary Education's capacity and effectiveness in implementing Education Reform.

The Massachusetts Department of Elementary and Secondary Education needed to develop an Education Reform Implementation Plan to guide its work with districts and schools as it took on the leadership role in driving the Education Reform Act. Through this effort, statewide standards were developed and approved by the Board of Education, which was the major goal of this plan. Much change needed to occur within the department to assure that a shift occurred that was similar to a "customer-driven service organization" (Massachusetts Department of Education 1995).

In addition to professional standards, the Department of Elementary and Secondary Education began to work in unison with Massachusetts' public and private institutions of higher education that offered teacher-training programs to assure that these standards were being incorporated into their programs. It is through this partnership's work that these standards were included in grades K-12 through higher education (Massachusetts Department of Education 1995).

In order to fulfill the education reform requirements, this goal also included the use of technology. The network created would connect every school to each other and to the state and the internet. But as of time of this writing this goal has not been achieved (Massachusetts Department of Education 1995). As the NCLB Act pushed to hold states to a standard of assessment, accountability and school improvement, its demands trickled down to the Massachusetts Reading First program.

# C. Reading First Grant

Reading First is a federal initiative that was established through the NCLB Act of 2001. The intent of this initiative was to "help ensure that all children can read at or above grade level by the end of third grade, thereby significantly reducing the number of students who experience difficulties in later years" and was to be achieved through the Department of Education funding at the state level for reading programs that are scientifically-based research programs (National Center for Education Evaluation and Regional Assistance 2008). These research programs included mandated components such as phonetic awareness, phonics, vocabulary development, reading fluency (including oral language), and reading comprehension strategies (Antunez 2002).

Through a competitive federal Department of Education grant process, school districts applied for funding through a state sub-grant under the premise that if awarded they must use scientifically-based reading research programs along with the instructional and assessment tools that go along with the research (National Center for Education Evaluation and Regional Assistance 2008).

The amount of state funding was determined by the number of children who come from families that have incomes below the poverty level. States distributed funds to districts and schools by greatest need criteria in terms of students' reading ability and poverty status. The districts and schools with the highest student needs received the most funding (National Center for Education Evaluation and Regional Assistance 2008).

The key components to the Reading First Program included:

- On-going technical support for schools and districts from state Department of Education agencies.
- The core reading curriculum must be a scientifically-based research
  program and implemented as directed to assure the reliability of the
  program. The core program occurred daily during a 90-minute block of
  time, delivered at the correct reading level for students.
- Implementation of intervention programs delivered for 30-plus minutes per session for students identified as needing extra help (National Center for Education Evaluation and Regional Assistance 2009).
- Professional development and a literacy coach for teachers to guide them through the process of working with struggling readers.

- Utilization of diagnostic tools to identify which skills the students have not developed and the interventions needed to address the missing skills.
- Progress monitoring of students who are given the intervention (National Center for Education Evaluation and Regional Assistance 2009)

All of these components were monitored by the state Department of Education which also arranged for site visits and regional meetings to assess the implementation of the criteria of the grant (National Center for Education Evaluation and Regional Assistance 2009). Department of Education Reading Specialists were assigned to districts/schools to assist with the training of the building Literacy Coach. This literacy coach trained the teaching staff in the implementation of the core curriculum, interventions, and methods of data collection, analysis, and utilization.

In October 2002 the state of Massachusetts Department of Education (MADOE) received a \$100 million dollar grant, to be funded over a six-year period, for the Massachusetts Reading First Program (MRFP). Within the first year, a number of different requirements needed to be satisfied for implementation of the Reading First Grant, the first one being eligibility notification. On November 21, 2002 at a Massachusetts' school districts' superintendents' meeting, the superintendents were introduced to the eligibility criteria of the grant, which was based on "low levels of reading proficiency and high levels of poverty" (UMass Donahue Institute, Research & Evaluation Group 4). Also during that month, a newly formed Reading Leadership Team created policy that included process management and evaluation in line with the Reading First Program. In December 2002, the MADOE held workshops to assist districts in developing their grant proposals, which would be due for submission in

February 2003 so that awards of the grant could be announced in March of that year (UMass Donahue Institute, Research & Evaluation Group 2003).

Phase 1/Round 1 grants were awarded on March 25, 2003, to thirty-eight districts for a total of sixty-one schools. Once funding was awarded it was determined that the MADOE mistakenly awarded funding to thirteen ineligible districts, thereby leaving twenty-five districts eligible for a total of forty-six schools. Funding was awarded through an application process that was reviewed by a team of professionals using a rubric scoring system. Districts needed to score a "Meets the Standard" or "Exemplary Plan" in order to be awarded funding and were rated on ten rubric sections. These sections included:

- 1. "Schools to be Served (five points maximum)
- 2. Instructional Leadership (fifteen points maximum)
- 3. Instructional Programs and Strategies (fifteen points maximum)
- 4. Supplemental and Intervention Instructional Materials (five points maximum)
- 5. Availability of Print Materials (five points maximum)
- 6. Instructional Assessments (fifteen points maximum)
- District and School-Based Professional Development (fifteen points maximum)
- 8. District Based Technical Assistance (ten points maximum)
- 9. Evaluation Strategies (ten points maximum)
- 10. Competitive Criteria (five points maximum)" (UMass Donahue Institute,Research & Evaluation Group 5).

A district was found ineligible if it did not meet the criteria in all of the ten sections of the scoring rubric and needed to score a minimum of 70 out of 100 points on the rubric in order to be funded (UMass Donahue Institute, Research & Evaluation Group 2003).

Phase 1/Round 2 was a second round of funding, which would be made available to awarded districts on October 1, 2003. Round 2 districts needed to score 65 out of a possible 100 points on the scoring rubric and its schools would be known as the John Silber Reading Schools. This added another seven funded districts (UMass Donahue Institute, Research & Evaluation Group 2003). "The following is a brief summary profile of the characteristics of Phase 1 Reading First districts:

- The median percentage of students scoring below the proficient level in reading is 53%, with individual districts figures ranging from 29% in Plymouth to 77% at the Lowell Community Charter School.
- The median percentage of students scoring at the warning level in reading is 9%, with individual district figures ranging from 2% in Pittsfield to 30% at the Boston Renaissance Charter School.
- The median percentage of students in poverty is 25% with individual district figures ranging from 13% in Quincy to 62% at the Lawrence Family Development Charter School" (UMass Donahue Institute, Research & Evaluation Group 6).

All of these Phase 1 districts were required to select a scientifically-based research core reading program and intervention programs along with any additional materials from the funds awards. In addition, 85% of school faculties and their principals needed to attend a

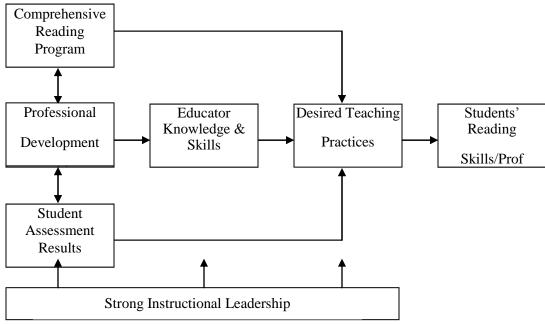
one-week summer reading academic prior to implementation of the program in order to be considered for funding (UMass Donahue Institute, Research & Evaluation 2003).

During the next three months MADOE had a number of contracts to award in preparation for the implementation of MRFP. A bidding process was set up to locate an agency that would come to be part of the Partnership for Achievement of Reading (PAR). PAR was responsible for supervising all of the professional development needed for the MRFP. In March 2003 a number of different agencies were contracted to be part of the PAR including Lexia Learning Systems, Grimes Reading Institute and the Hanson Initiative for Language and Literacy (HILL) at Massachusetts General Hospital's Institute for Health Professions. Responsible for all parts of the Teacher Reading Academies (TRA's) including development of all curriculums pertaining to the academics, additionally, PAR hired all of the teacher trainers. They would also become the Regional Professional Development Providers (PRs) who would provide for the hiring and training of those individuals who would then oversee the professional development. The responsibility of supervising the operations of two Reading Centers also came under the PAR's watch (UMass Donahue Institute, Research & Evaluation 2003).

Each partner had its own responsibility to PAR. Lexia "served as a fiscal agent providing management and administrative support" (UMass Donahue Institute, Research & Evaluation 8). The Teacher Reading Academies and the Reading Resource Centers were the responsibility of the Grimes Reading Institute. HILL oversaw the area of Regional Professional Development Providers (UMass Donahue Institute, Research & Evaluation Group 2003).

The major pieces of MRFP being evaluated were the comprehensive reading programs, the professional development and support activities that were provided for literacy coaches and teachers, and in addition the student assessment data. The idea was that these three major pieces would have an impact on teachers' knowledge and skills which would then impact the desired teaching practices and have a positive effect on students' reading skills and proficiency. Strong instructional leadership would be needed throughout the entire process of implementation to reach the desired outcome. This evaluation component was included to fulfill the federal requirement of an Annual Performance Review. The logic model was used to evaluate all the components of MRFP (UMass Donahue Institute, Research & Evaluation 2003).

Figure 1. Components of the Massachusetts Reading First Program Logic Model *Logic Model:* 



(UMass Donahue Institute, Research & Evaluation Group 2003)

In attendance at the superintendents' introductory meeting held on November 21, 2002 by the MDOE was Barbara Gardner, Associate Commissioner of School Readiness for the MADOE and Ed Moscovitch, educational consultant. Both individuals were there to answer any questions superintendents might have in the application process for the MRFP. A few short years later Gardner and Moscovitch would, themselves, request state funding to begin an initiative of their own.

### D. Bay State Reading Initiative Grant

On November 15, 2005 the Bay State Reading Initiative (BSRI) published a first report at Middlesex Community College to inform its friends, supporters and the general public about state funding for this new initiative (Gardner 1/7). Gardner and Moscovitch decided to form an alliance with education groups and teacher trainers to establish a nonprofit organization that would work with Massachusetts' schools in the implementation of a reading instruction program that used scientifically-based methods. This initiative was established as a not-or-profit corporation with 501(c)3 status. The Bay State Reading Initiative was funded through a small grant awarded by the Boston Foundation, and a two-year appropriation from the Massachusetts Legislature. Ed Moscovitch and Barbara Gardner were named as chairman of the board and director, respectively. One of the first jobs the board oversaw was the implementation of a contract with between the state and Middlesex Community College, which would be the receiver of the appropriations awarded by the state. Middlesex Community College would then contract with Gardner and Moscovitch to run the Reading Institute. Gardner and Moscovitch wanted to provide schools and districts with the type of support that was thorough and

ongoing. There were essential elements that both Gardner and Moscovitch believed a reading program needed in order to make significant gains when working with disadvantaged students (Gardner 1/7). When determining these basic elements of a school turnaround model, Moscovitch suggested inclusion of the following:

- Data and formative assessment would drive instruction
- Research-based assessments and interventions
- Whole school reform
- Beginning focus-Literacy

## (Moscovitch 1/14)

Gardner noted that in order to improve the reading skills of disadvantaged students, a" whole school change" needed to occur (Gardner 1/7). Including an understanding on the part of the faculty of the importance of *shared responsibility* for the progress of their students. Teachers would be trained to work collaboratively in addressing student needs and issues, as students worked to improve their reading skills. Teachers training would include data usage in order to identify student reading gaps. Progress monitoring, another training segment, would verify whether specific reading interventions were successfully teaching students the reading skills necessary to close the gaps.

The BSRI began to take form, as Gardner and Moscovitch identified districts and schools that might want and need their guidance. Each district that BSRI worked with was responsible for hiring and paying their building reading coach. BSRI was responsible for training and supporting this individual throughout the contract period. A Chief Literacy Coach was hired both for this purpose and for the actual teacher training in the areas mentioned earlier. The initial training took place over a ten-session program.

The teacher training took place the summer prior to implementation of the program. This training occurred over a five-day period that included "research-based literacy instruction, classroom management for small-group instruction, and an introduction to Dynamic Indicator of Basic Early Literacy Skills (DIBELS) and other assessments" (Gardner 5).

The BSRI also had to direct its attention to district and school leadership issues to ensure that the leadership had a comprehensive understanding of what it takes to "turn a school around." A Principal Coach had the responsibility of training the principals of the schools who were taking part in BSRI. The initial training took place over six half-day sessions. To round out the team of experts in the areas of teacher training, literacy coaches, assessment, and various other areas of reading, BSRI also engaged a number of partners that assisted them in achieving student growth as they collectively worked towards their goals (Gardner 2005).

Gardner noted that both the school and its partner needed a strong commitment in order to see successful change. In order to accomplish this, BSRI recognized the necessity of school assessment teams (Gardner). As mentioned above, BSRI favored the use of DIBELS which measures fluency and phonic skills. DIBELS benchmarks would be given to all students three times a year fall, winter, and spring. BSRI would also be responsible for staff training on how to use the accumulated data. Establishing school leadership teams was pertinent to teacher involvement in planning for implementation of the program. Coaches used embedded instruction so that teachers have a hands-on experience. Once they were able to observe real life lessons, there was a better chance that they would return to their classrooms and model those lessons. Another important

piece of the program's outline was providing a common planning time for grade level teacher teams to meet and review the data. This time gave the teachers, coach and principal the opportunity to discuss and monitor student progress (Gardner, 2005).

Gardner noted that the school and its partner needed to share a strong commitment in order to see successful change. BSRI would provide support to teachers, the literacy coach and the principal whenever it was needed and for as long as it was needed there was no established timeline that school needed to work within and by. BSRI asked that schools be responsible for hiring and paying for the building literacy coach with the proviso that BSRI retain some input into the hiring process. Additionally, principals had to agree to be in a classroom two – three hours per day. And finally, the faculty needed to sign on to the endeavor (Gardner, 2005).

## E. History of Teaching Reading

National debate has occurred for many years over how to effectively teach reading. For the last number of years, reading specialists throughout the country have been focused on the debate between the whole language approach and the code-emphasis approach. Around the 1930's a new method of reading was introduced to our nation called whole language or whole word. Students were encouraged to memorize lists of whole words and whole stories to assist them in recognizing words in order to increase their vocabulary. The thought was that with this increased vocabulary came an increase in fluency and comprehension. Although this method was based only in thought rather than research the nation chose to adopt it as the main method of reading education (Sweet 1996). Blumenfled noted that he was shocked to discover that children in America were

using reading methods that had been established in the early 1800s mainly to help the deaf learn to read. Even more incomprehensible is that this method is no longer even being used to help the deaf learn to read, but it is still being used to teach the rest of the nation to read. Moats states that the whole language system was mainly based on beliefs and intentions. Many individuals accepted these beliefs without anyone providing evidence that this method was a better way to teach children to read. Meaning and purpose were the main objectives in early reading according to Goodman and Smith. These authors stated that reading comes as naturally as speaking and learning to read letter by letter and sound by sound was not a natural process for a child.

The accepted beliefs by the promoters of whole language are characterized by Moats as the following:

- "Children and adults use similar strategies to read and spell.
- Learning to read and spell is just like learning to talk.
- Phoneme awareness, phonics, spelling, punctuation, and other skills of written language can be learned "naturally."
- Teach phonics and spelling on an "as needed" basis, that is, after students make errors on words while they are reading and writing.
- Too much phonics instruction is harmful to children.
- Children should construct their own insights into language.
- It is unimportant to teach strategies for reading single words out of context.
- Good readers can recognize words on the basis of a few soundsymbol really need to know the inner details, such as vowels.

 When a child is reading and cannot recognize a word, the child should be asked to guess at the word from context and then sound the word out if guessing does not yield a word that would make sense in the sentence" (Moats 15).

After studying a number of reviews of research from the following studies The National Reading Panel's *Teaching Children to Read*, Marilyn Adam's *Beginning to Read*, Jack Fletcher and G. Reid Lyon's summary of the National Institute of Child Health and Human Development's studies of reading and Catherine Snow, M. Susan Burns, and Peg Griffin's *Preventing Reading Difficulties in Young Children*, Moats complied facts from these studies to dispute the beliefs of the whole language approach. These facts are as follows:

- "Learning to read is not natural.
- The alphabetic principle is not learned simply from exposure to print.
- Spoken language and written language are very different, and mastery of each requires unique skills and proficiencies.
- The most important skill in the beginning stages of reading is the ability to read single words completely, accurately, and fluently.
- Context is not the primary factor in word recognition" (Moats 17-18).

Moats and others continued to question why the whole language approach continued to find a place within the classrooms of this country's schools when the research showed that it was not the most effective way to teach children to read. Resnick & Weaver surveyed a number of leading researchers in the field of reading. Their studies indicated that 90% of the researchers favored systematic phonics over the whole language method

of teaching reading. Chall also supported the systematic phonics method and sought to incorporate it into teacher training programs citing the success it had prior to the whole language craze.

The National Academy of Science enlisted a committee of experts in the area of reading research and instruction to do an analysis of the research literature. The end result of this study was a report entitled *Preventing Reading Difficulties in Young Children* (Snow, Burns and Griffin 1998). It noted that for over twenty-five years, researches had debated the reading war. The report cited that a sufficient field of empirical work existed so that results and conclusions could be formed. It was believed that through these findings the knowledge of how reading develops and how instruction should be utilized to prevent reading difficulties in children had finally been determined. These experts claimed that a balance of decoding letters and sound, along with obtaining meaning from the context, were needed in order to have successful reading instructions (Snow, Burns, and Griffin 1998).

A National Reading Panel (NRP) was convened in 1997 by a request from Congress to the Director of the National Institute of Child Health and Human Development (NICHD). The panel was asked to determine the most effective methods of teaching reading including research-based knowledge (National Reading Panel's Report 2006). Utilizing the foundation work that had begun through the report produced by the National Academy of Sciences, the NRP set out to select the topics that needed to be addressed. Beginning with these key areas noted in the report-alphabetic, fluency, and comprehension the panel held regional hearings to gather oral and written testimony from vested individuals. These individuals included teachers, parents, students, university

faculty, educational policy experts, and scientists. At the conclusion of these hearings the panel developed areas of study, which included:

- "Alphabetic
  - Phonemic Awareness Instruction
  - Phonics Instruction
- Fluency
- Comprehension
  - Vocabulary Instruction
  - o Text Comprehension Instruction
  - Teacher Preparation and Comprehension Strategies
     Instruction
- Teacher Education and Reading Instruction
- Computer Technology and Reading Instruction"

(National Reading Panel http://nichd.nih.gov/publications/nrp/intr.cfm).

At this time a methodology subgroup was established to form a research review process. Having criteria to determine scientific evidence was very important to a number of individuals who had attended the regional meeting. They voiced strong concerns about having guidelines set in place for this review. NRP took the concern of these individuals seriously and established specific criteria that these reviews needed follow, which included:

- Studies needed to be published in a referred journal in English.
- The focus of the study was reading development of children from preschool to grade 12.

 Studies that used an experimental or quasi-experimental design with a control group or a multiple baseline method.

(National Reading Panel http://nichd.nih.gov/publications/nrp/intr.cfm).

Additional subgroups made up of one or more panel members, were formed and given a topic to investigate. "The subgroups formulated seven broad questions to guide their efforts in meeting the Congressional charge of identifying effective instructional reading approaches and determining their readiness for application in the classroom:

- 1. Does instruction in phonemic awareness improve reading? If so, how is this instruction best provided?
- 2. Does phonics instruction improve reading achievement? If so, how is this instruction best provided?
- 3. Does guided oral reading instruction improve fluency and reading comprehension? If so, how is this instruction best provided?
- 4. Does vocabulary instruction improve reading achievement? If so, how is this instruction best provided?
- 5. Does comprehension strategy instruction improve reading? If so, how is the instruction provided?
- 6. Do programs that increase the amount of children's independent reading improve reading achievement and motivation? If so, how is this instruction best provided?
- 7. Does teacher education influence how effective teachers are at teaching children to read? If so, how is this instruction best provided?"

(National Reading Panel http://nichd.nih.gov/publications/nrp/intr.cfm).

In an effort to quiet the reading debate, a national reading policy was established utilizing the NRP report and Reading First which were both congressionally mandated initiatives. In the Reading First Initiative, scientific research based reading programs were mandated in an attempt to hold schools accountable for having all students reading by third grade. These programs needed to be based on the "essential components of reading instruction," which was established through the NRP program. Title 1 law Section 1208 (3) states, "The term essential components of reading instruction means explicit and systematic instruction in:

- phonemic awareness
- phonics
- vocabulary development
- reading fluency; including oral reading skills
- reading comprehension" (Education of Education 16-17).

Learning to read is a complex system of taking meaning from printed text that requires using all of these five components. The functions of these componentss are as follows:

- "Phonemic Awareness Recognizing and using individual sounds
  to create words. Children need to be taught to hear sounds in
  words and that words are made up of the smallest parts of sound,
  or phonemes.
- 2. Phonics -Understanding the relationships between written letters and spoken sounds. Children need to be taught the sounds

- individual letters and groups of letters make. Knowing the relationships between letters and sounds helps children to recognize familiar words accurately and automatically, and decode new words.
- 3. Reading Fluency -Developing the ability to read a text accurately and quickly. Children must learn to read words, rapidly and accurately in order to understand what is read. When fluent readers read silently, they recognize words automatically. When fluent readers read aloud, they read effortlessly and with expression. Readers who are weak in fluency read slowly, word by word, focusing on decoding words instead of comprehending meaning.
- 4. Vocabulary Development -Learning the meaning and pronunciation of words. Children need to actively build and expand their knowledge of written and spoken words, what they mean and how they are used.
- 5. Reading Comprehension -Acquiring strategies to understand, remember and communicate what is read. Children need to be taught comprehension strategies, or the steps good readers use to make sure they understand text. Students who are in control of their own reading comprehension become purposeful, active readers"

(U. S. Department of Education, Office of Intergovernmental and Interagency Affairs, Educational Partnerships and Family Involvement Unit 4).

## F. Three Tier Reading Model

Reading First utilized a 3-tier reading model as a framework to address the needs of students to assure that they have these essential components to become successful readers. This prevention model provides differentiated instruction for all students which is assessment driven. It must have a scientific research based reading core together with the prescribed supplemental materials and reading interventions for struggling readers. Through assessments, struggling readers are identified and then placed into an additional tier-1, tier-2 or tier-3 in order to address their reading gaps through the use of scientific research based reading interventions (Vaughn 2004).

How assessment are used within the 3-tier reading model are as follows:

- Tier 1 Benchmark assessment is given three times a year
   (fall/winter/spring). Benchmarks assessments are utilized to
   determine if students are making adequate progress along with
   planning instruction. The data is also used to identify struggling
   students who need additional instruction and reading interventions.
- Tier 2 & 3 In addition to the three times a year benchmarking, the students determined to be in these tiers are monitored on a bimonthly basis. This data is used to monitor student progress as teachers use it to plan their instruction (Vaughn 2004).

How instruction is delivered throughout the 3-tiers of the model is broken down in the following manner:

#### • Tier 1 – Core Instruction

- 90 minute instruction for ALL students on a daily basis
- Benchmark assessment occurs three times a year
- Instruction happens within the classroom setting

## • Tier 2 – Supplemental Instruction

- Identified through benchmark assessment, these students are not responding to Tier 1 and are not making adequate progress
- 30 minute supplemental instruction in addition to the 90 minutes of core instruction on a daily basis
- Tier 2 students will be progress monitored on a bimonthly basis
- Instruction occurs in a small group setting with a 1:3, 1:4, 1:5, or 1:6 teacher/student ratio

## • Tier 3 – Intensive Intervention

- These students are not responding to Tier 1 or 2 instruction
- 2 30 minute intensive intervention sessions in addition to the 90 minutes of core instruction on a daily basis

- The five essential components of reading are emphasized
- Tier 3 students will be progress monitored on a bimonthly basis
- Instruction occurs in a small group setting with a 1:1, 1:2, or 1:3 teacher/student ratio (Vaughn 2004).

Assessments: The assessment used that allows teachers to identify which students need to be placed in tiers 1, 2, or 3 is the Dynamic Indicators of Basic Early Literacy Skills (DIBELS). These indicators were designed to assess the area of phonological awareness, phonics, and fluency (DIBELS Data System).

- The measures of Phonological Awareness that are assessed are:
- -Initial Sounds Fluency (ISF): this measures a student's ability to identify and generate initial sounds of a given word.
- -Phonemic Segmentation Fluency (PSF): this measures a student's ability to generate individual sounds within a given word.
  - The measure of Phonics that is assessed is:
- -Nonsense Word Fluency (NWF): this measures a student's knowledge of letter-sound relationship in addition to their ability to blend sounds together to make "nonsense" words.
  - The measure of Fluency that is assessed is:
- -Oral Reading Fluency (ORF): this measures a student's ability of reading grade- level connected text (DIBELS Data System).

Both Reading First and Bay State Reading Institute utilize DIBELS to measure basic early literacy skills for students in grades K-3.

Learning to read is a complex skill. When it comes to assessing a student's comprehension piece of the skill of reading, both the MARF and the BSRI programs rely on the measuring tool known as the Group Reading Assessment Diagnostics Evaluation (GRADE). Not only does GRADE assess a students' reading level, it also can determine a students' reading growth over time. It is a normative diagnostic assessment that can determine comprehension. It is administered within the whole classroom. The GRADE assessment occurs fall and spring in order to determine student growth. The results can be utilized for lesson planning and intervention determination in addition to student progress (Massachusetts Department of Education 2003).

Even with a national reading policy in place, the debate still goes on. The new term "balanced literacy" has emerged into the discussion. "Balanced literacy" attempts to combine the best of whole language and phonics. Again, it is done without any scientifically-based research to back up the idea that merging both concepts will assist students in learning to read (Moats 2000)...

#### G. Reading First Federal & State Impact Studies/Evaluations

Insuring that all children can read at or above grade level by third grade was the major focus of the Reading First Program. A requirement of the legislation was to evaluate the implementation of this program this was accomplished by utilizing a survey of K-3 teachers, principals, and literacy coaches in the spring of 2005 and 2007. Samples were taken from Reading First and non-Reading First schools across the nation. Reading

First schools' program implementation was different than non-Reading First schools in the following manner:

- Instructional Time Reading First schools dedicated more time to reading compared with non-Reading First schools. Time scheduled for reading in Reading First schools was at least 90 minutes per day.
- Instructional Materials During the first year of implementation for Reading First schools, major changes to their core materials were made. However after the first year 40% of schools reported that they added new intervention programs for struggling readers.
- Scientifically Based Reading Research (SBRR) Alignment Reading programs in Reading First schools were 93% more likely to utilize SBRR then in non-Reading First schools, which utilized SBRR 76% of the time.
- Assistance to Struggling Readers Teachers in Reading First schools
  utilized interventions for struggling readers 80% of the time when compared to nonReading First schools, that reported interventions 63% of the time. 84% of the Reading
  First schools utilized a diagnostic assessment to determine these deficiencies compared to
  non-Reading First schools at 67%.
- Assessment Reading First schools reported to be more likely to utilize assessment when planning instruction and grouping students 91% of the time as compared with non-Reading First schools that reported using assessment 78% of the time. Monitoring student progress occurred 88% more often for Reading First schools than for non-Reading First schools.
  - Reading Coaches Reading First schools were more likely to have a

reading coach 99% of the time compared to the non-Reading First schools' figure of 57% of the time. In the Reading First school, 75% of the coaches spent all of their time in that role, while 19% did the same in non-Reading First schools.

 Professional Development – Reading First teachers participated in reading-related professional development 90% of the time compared to non-Reading First schools that reported 73% of the time (U. S. Department of Education 2008).

In addition the *Reading First Implementation Evaluation Final Report* noted statistically significant evidence of improved reading over time more quickly than students in the non-Reading First schools from successive cohorts of third and fourth grade students. This analysis was based on states' reading assessment scores which noted a 2 – 3% points on average for pre-post implementation of Reading First schools to non-Reading First schools on the number of students who met the state standard for the third grade reading assessment. (U. S. Department of Education 2008). Another positive and statistically significant relationship was noted between the schools' third grade reading state assessment scores and four measures taken from the survey data. These measures included: classroom reading instruction; strategies used to assist struggling readers, professional development participation; and using assessment to drive instruction (U. S. Department of Education 2008).

States aligned their Reading First programs with that of the National Reading First recommendations. To implement Reading First in Oregon, the School-wide Beginning Reading Model was utilized to deliver their reading program. Seven essential components that make up this model are (1) "A school-wide focus on essential reading content; (2) Regular use of reliable and valid assessments to inform instruction; (3)

Protected and sufficient time allocated to reading instruction; (4) Data-based leadership devoted to sustained effective implementation and outcomes; (5) High-quality professional development that drives continuous improvement in the quality of reading instruction; (6) Research-based instructional programs and materials; (7) Differentiated instruction to optimize learning for all students" (Baker et al. 2007, 1).

To identify reading problems among Oregon's Reading First students, the DIBELS measures were used for Nonsense Word Fluency (end of Kindergarten) and Oral Reading Fluency (end of grades 1, 2 & 3). In addition, DIBLES was utilized for progress monitoring over time. In order to determine grade level reading performance the Stanford Achievement Test-10 (SAT-10) was administered at the end of every year (Baker et al. 2007).

The findings of the Oregon Reading First three-year report included:

- 50 schools took part in the Oregon Reading First program. 33 schools in Cohort A and 17 schools in Cohort B. Using the SAT-10 measure cohort A schools showed increases each year and for each grade. When comparing Year 3 (Cohort A) results to Year 1 (Cohort B) results the improvements are statistically significant.
- The percent of students reading at grade level has increased each
  year and the percent of students at high risk is decreasing on a
  yearly basis.
- A similar pattern of results occurred for Cohort B.

- During 2006 Cohort A schools showed greater gains than Cohort B schools for all grades and measures (SAT-10, DIBELS & Oregon Statewide Reading Assessment).
- Fourth year of analysis showed the trend continued for all Oregon Reading First schools (Baker et al., 2008).

Indiana evaluated its Reading First Program after the fifth year of implementation. The evaluation not only studied student achievement but also examined the progress and fidelity of implementation of the program. Indiana Reading First utilized DIBELS for formative assessment and the Terra-Nova CAT and Indiana Statewide Testing of Educational Progress Plus (ISTEP+) were used for the summative assessment. The six primary questions that guided the evaluation were:

- 1. "To what extent do Reading First school implement the five essential reading components.
- 2. To what extent do Reading First classrooms implement specific instructional strategies such as the 90-minute block, progress monitoring, etc.?
- 3. What types of reading instruction strategies are consistently applied in all K-3 classrooms?
- 4. What type of professional development activities does the district and the school support?
- 5. How well does the district-and school-supported professional development provide for consistent, high quality classroom instruction?
- 6. What types of technical assistance are provided to the schools by the district? How effective is it?" (Rouge 13-14).

Teachers, interventionist, coaches, and principals were surveyed in answering the six primary evaluation questions. In addition, site visits and interviews were also utilized in collecting data. The National Reading First guidelines created the framework that all states needed to follow. How well the states implemented the guidelines became a part of the evaluation process for the Reading First Program.

## H. Bay State Reading Initiative Trend Study

BSRI enlisted the efforts of School-Works to study the progress of implementations of its school reform model in all of the fifteen schools that it supports within Massachusetts. The data was collected through Self Study Reporting of teachers, principals, and literacy coaches. In addition, the evaluation team did on-site visits in the spring of 2007 and the spring of 2008.

The program priorities that are identified in BSRI Trend Report are:

- Effective implementation of reading programs.
- Assessment of reading progress is obtained with a state selected method.
- Classroom teachers in grades K-3 and special education teachers in grades K-12 are provided professional development that is of high quality to address instruction, assessment, and intervention strategies.
- In order to have valid and reliable information about the progress of reading for all students in grades K-3 an evaluation strategy was established (School-Works).

The ten program elements that were evaluated within the School-Works trend report are expectations that are also identified within the grant. These ten program elements include:

- Common Planning Time
- Core Curriculum
- Data Meeting and Walkthroughs
- Differentiation and Small Group Instruction
- Formative Assessment
- Interventions
- Principal Leadership
- Professional Development
- Reading Block
- School-based Reading/Literacy Coach

The evaluators noted the most important achievements made within the first three years of implementation of the BSRI were 1) Teachers and schools were provided with training on how to implement assessment tools so that they now use data to drive instruction; 2) Making sure that teachers have the resources needed to teach. These resources include curriculum, materials and professional development; and 3) Utilizing student success to assist with teacher buy-in of the program (Smart-Works 2008).

Both grants noted positive results in terms of implementation of program elements of their model at the state level. Reading First also reported positive results at the federal level in terms of implementation of the model. However, BSRI has a number of different elements that is not addressed in the Reading First model including Common

Planning Time, Data Meeting and Walkthroughs, and Principal Leadership. The BSRI expectations of these three elements are as follows:

#### **"BSRI Grant Expectations for Common Planning Time:**

Within the BSRI project, the school schedule is arranged to allow teachers at each grade level to talk together about the curriculum, individual student progress and how they can work together to move all students forward.

### **BSRI** Grant Expectations for Date Meetings and Walkthroughs:

Within the BSRI project, the principal will conduct regular data meetings with grade-level teams. These meetings will include the school reading coach and other relevant teachers (for example, special education or Title 1 teachers), but will be led by the principal. Data meetings will celebrate the success of students making gains. They will also explore the needs of students who are struggling, including a discussion of what the students' problems may be and how the classroom teacher and the rest of the team might address them.

These data meetings will be tied closely to the principal's walkthroughs. Her/his observations of classroom strengths and weaknesses, along with an analysis of assessment results, will help set the meetings' agendas. Following up on the steps agreed upon during data meetings will be a key component for future walkthroughs.

### **BSRI Grant Expectations for Principal Leadership:**

Within the BRSI project, the educational leadership of the principal will be a key factor in school success. On a typical day, the principal will devote 2 to 3 hours to classroom visits and other education leadership tasks. The principal will lead by example, creating a leadership team, participating as a member of the assessment team and finding ways to interact directly with students" (School-Works 1-3).

Whether a Massachusetts Reading First School, Oregon Reading First School, or Indiana Reading First School, many of the components of each program looked very similar due to the federal guidelines. The Bay State Reading Initiative also noted similar elements to its program with a few added ones. Will having a whole school reform model make a difference in the outcome of student scores? Will having a principal's coach have an impact on buy-in with teachers or will having common planning time or leadership team meetings be the missing pieces to having a successful reading program? This study will determine which grant, Massachusetts Reading First or the Bay State Reading Initiative, will demonstrate the greatest gains in reading for students in grades K-3 in a 3-Tier Reading Model.

#### CHAPTER III

#### RESEARCH METHODOLOGY

The purpose of this chapter is to provide an overview of the research methodology employed in this study. First, the conceptual framework for my research study is described. This chapter also contains both the main research question along with the secondary questions. The research design of the study is defined along with a description of the methodology, participants, data, measures, analysis, limitation and conclusions.

## A. Conceptual Framework

The need in identifying best practices is paramount towards this effort to ensure that all students reach proficiency in the mastering of reading and math by the year 2014. With the prediction that 90% of the schools in Massachusetts will not reach proficiency by the year 2014 much work remains in the area of identifying which best practices that have the greatest impact on increasing student achievement (MassPartners for Public Schools, 2005). Both the MRFP and the BSRI's main objective was to identify students who had not reached the reading benchmarks in grades kindergarten through third grade and provide for them reading interventions to address their needs. Both these programs followed the same body of research however there are major differences when comparing implementation of these two grants. These differences include:

 Bay State Reading Initiative (BSRI) provides a Principal Coach to mentor the building principal through the life of the program

- Once a school signs on with BSRI program the funding is awarded for five years
- If during those five years a school feels that it needs added support for its
   Literacy Coach or Principal Coach then all that is needed is a request for added support to be provided by BSRI
- In order to secure positive change the BSRI believes that whole school reform needs to be established between the school and its two coaches for this change to occur.

In comparison the Reading First Program:

- Does not provide principals with a Principal's Coach.
- Does not speak of a whole school reform model.
- Does not provide literacy and principal support on demand.
- Funding is awarded on a yearly basis

As noted earlier in this proposal, "balanced literacy" has immerged as the optimal way to combine the best of whole language and phonics (Moots 2000). However, little research has been conducted to assess these concepts that will assist students in learning to read and there is essentially no empirical evidence that focuses on the implementation of programs as a key to the effectiveness of balanced literacy initiatives. Therefore, this study builds upon the work of Hoy & Miskel (2001) who contend that the effectiveness of educational programs can only be assessed if we understand the implementation of them as a transformational process within schools that are best conceptualized as formal social systems. As such, this study not only examines changes in student reading scores, but also examines the processes used in the implementation from the perspectives of both

teachers and administrators. Ultimately, this framework provides a more holistic understanding of the ways in which these reading programs are understood and implemented by the key organizational agents (teachers and administrators) charged with the responsibility for improving reading in their schools. Using this framework, I believe that comparing the MRFP to the BSRI will determine which program produces the best results students within the specific real-world settings of schools as complex social systems. The ability to identify which best practices produce the greater results will assist educators in meeting the challenge of having all students reach proficiency in the mastering of reading by the year 2014.

### B. Research Questions

In this research study, I am investigating whether the impact of the Massachusetts

Reading First Grant compared to that of the Bay State Reading Initiative on the results of reading assessments. Therefore, this study is lead by the following research questions:

 Which program, Reading First or Bay State Reading Institute, is most effective for improving reading in grades K-3?

The following related questions will be explored:

- Which grant demonstrated greatest gains in student reading levels?
- What are the strengths and weaknesses of each approach from the perspective of a teacher?
- What are the strengths and weaknesses of each approach from the perspective of an administrator?
- Which approach is most cost effective?

## C. Research Design

This study utilizes a mixed method research design, including quantitative analysis of the reading scores, a qualitative analysis of teacher and administrator perspective on the effectiveness of each program, and a financial cost-effectiveness comparison of the two programs. The quantitative research design includes comparing DIBELS and GRADE results of two elementary schools for students in grades K–3, each of which uses a different reading program. School A uses the Houghton Mifflin Reading Series for their core reading curriculum while School B uses Scott Foresman Reading Street. In addition to comparing the aggregate scores of each school to each other, a number of sub-groups will also be compared. These groups will include low-income students (students who receive free and reduced lunch), students with limited English proficiency (LEP), and special education students. Mean comparisons will be utilized to identify which program produces the best results.

In order to identify strengthens and weaknesses of each approach, a questionnaire will be used to obtain this information from teachers and the administrators who took part in implementing both programs.

In these times of tight budgets and difficult decisions on how to meet the needs of all students, it is imperative that cost effectiveness is examined between the two programs. Which of these two programs will provide the greatest gain? How much will that gain cost? Which program will reap the best results for the least amount of money?

# D. Participants/Data Sources

The subjects in my research sample are students in two Western Massachusetts' elementary schools that are located in different school districts. One school just completed its third year in the Bay State Reading Initiative (School A) and the second school (School B) took part in Reading First for five years. Data will be used from the first three years of each program. The first three years of implementation of the Bay State Reading Initiative for School A took place during the 2006/07 and 2008/09 school years. The first three years of implementation of the Reading First for School B took place during the 2003/04 and 2005/06 school years.

Data sources will be utilized from the DIBELS benchmarking, which occurs three times a year: fall, winter, and spring. These interim target scores are as follows for grades K through grade 3:

	<u>Fall</u>	Winter	<u>Spring</u>
Kindergarten: Initial Sound Fluency	0-3/At Risk 4-7/Some Risk 8+/Low Risk	0-9/Deficit 10-24/Emerging 25+/Established	
Letter Naming Fluency	0-1/At Risk 2-7/Some Risk 8+/Low Risk	0-14/At Risk 15-26/Some Risk 27+/Low Risk	0-28/At Risk 29-39/Some Risk 40+/Low Risk
Phoneme Segmentation Fluency		0-6/At Risk 7-17/Some Risk 18+/Low Risk	0-9/Deficit 10-34/Emerging 35+/Established
Nonsense Word Fluency		0-4/At Risk	0-14/At Risk

		5-12/Some Risk 13+/Low Risk	15-24/Some Risk 25+/Low Risk
First Grade: Letter Naming Fluency	0-24/ At Risk 25-36/Some Risk 37+/Low Risk		
Phoneme Segmentation Fluency	0-9/Deficit 10-34/Emerging 35+/Established	0-9/Deficit 10-34/Emerging 35+/Established	0-9/Deficit 10-34/Emerging 35+/Established
Nonsense Word Fluency	0-12/At Risk 13-23/Some Risk 24+/Low Risk	0-29/Deficit 30-49/Emerging 50+/Established	0-29/Deficit 30-49/Emerging 50+/Established
Oral Reading Fluency		0-7/At Risk 8-19/ Some Risk 20 +/Low Risk	0-19/At Risk 20-39/Some Risk 40 +/Low Risk
<b>Second Grade:</b>			
Nonsense Word Fluency	0-29/Deficit 30-49/Emerging 50+/Established		
Oral Reading Fluency	0-25/At Risk 26-43/Some Risk 44+/Low Risk	0-51/At Risk 53-67/Some Risk 68+/Low Risk	0-69/At Risk 70-89/Some Risk 90+/Low Risk
	<u>Fall</u>	<u>Winter</u>	Spring
Third Grade: Oral Reading Fluency	0-52/At Risk 53-76/Some Risk 77+/Low Risk	0-66/At Risk 67-91/Some Risk 92+/Low Risk	0-79/At Risk 80-109/Some Rise 110+/Low Risk
		(Official DIRELS Home Page 2004)	

In addition, GRADE assessment will take place fall and spring determined by the following subtests:

## "Level K:

- -Phonological Awareness: Sound Matching & Rhyming
- -Early Literacy Skills: Print Awareness, Letter Recognition, Phoneme-Grapheme

## Correspondence

- -Word Reading
- -Listening Comprehension

# Level 1, 2 & 3:

- -Word Reading
- -Word Reading
- -Sentence Comprehension
- -Passage Comprehension
- -Listening Comprehension"

(Massachusetts Department of Education 2004).

The scoring for GRADE utilizes raw scores, which are then converted to stanines. The stanines are classified as follows:

• Stanine 1-3 = Weak

- Stanine 4 = Low Average
- Stanine 5-6 = Average
- Stanine 7-9 = Strength

The demographic data was obtained through the Department of Elementary and Secondary Education's website at <a href="http://profiles.doe.mass.edu/">http://profiles.doe.mass.edu/</a>.

	School A	School B
First Language not English	0.8	0.4
Limited English Proficient	0.2	0.4
Low-income	40.3	45.1
Special Education	22.5	13.0
Free Lunch	29.3	37.7
Reduced Lunch	11.0	7.4

The teacher/administrator questionnaire (Appendix A/1&2 & B/1 & 2) will be sent out to eleven teachers and one administrator from School A and twelve teachers and one administrator from School B. A qualitative analysis of teacher and administrator perspectives on the effectiveness of each program will be done. In addition, a financial cost-effectiveness comparison of the two programs will be included in this study.

## E. Data/Measures/Coding

Raw scores of DIBELS and GRADE assessments, from students who have been identified in the second and third tier of the reading model, will be used to determine

reading gains for each school. Comparisons of value gained will be compared between schools.

A questionnaire will be utilized to gather information from teachers and administrators in determining strengths and weaknesses of each program. The questionnaire will be used to determine teachers' perception of the programs:

- Were they were fully prepared to implement the reading program? How was the
  initiative rolled out in their building? Was there a leadership team developed to
  undertake such an initiative?
- How much support was given to them over the first three years of the program?
- Did their Principal have a major role in this initiative? And if so, to please share this experience.
- Did the Principal/Literacy Coach get the teachers to buy into such a program?
- Describe your work with your Literacy Coach?
- What type of ongoing Professional Development did you receive?

An Administrator's questionnaire will be used to determine the Principal/Literacy Coaches' perception of their roles in the initiative by asking them:

- How did you get the teachers to buy into such an initiative?
- How did you support your teachers and your Building Literacy Coach?
- How much money was appropriated to your program over the first three years?
   Was it consistent?
- How often were you visited by the program's Literacy Coach/Principal Coach?
- What type of Ongoing Professional Development did you receive?

The answers to these questions will be used to determine which processes were utilized in implementing each reading program.

## F. Limitations

For any research design there are intrinsic limitations for each study. The limitations in this study are as follows:

Due to the fact that there is only one elementary school for each of these districts, comparisons need to be made across districts and not within a district. All thorough the data comparisons are across districts, the demographics of each school is similar.

Each school has been limited to one literacy coach and one administrator. Each person has their own perception of how the implementation occurred for Reading First and BSRI. A possible limitation is that the sample size is not large enough to get a definitive understanding of the process. In addition, limited sample size could allow for response bias as each individual is looking to shed a positive reflection on the program his or her school is using.

Another possible limitation for my study are the years in which the data was collected. The data comparisons for my study will be the first three years of each program. The first three years occurred during different times for School A and School B. School A's first three years of implementation of Reading First occurred from 2003/04 through 2005/06 and School B's implementation of BSRI occurred from 2006/07 to 2008/09.

# G. Conclusion

With a new administration, President Barack Obama and U.S. Secretary of Education Arne Duncan, comes a new educational initiative for reform "Race to the Top." The price tag for beginning a new round of educational reform stands at \$4.35 billion dollars and counting with an additional \$5.6 billion for additional grants. This competitive grant is seeking to identify states and districts that want to change the way we do educational business (U.S. Department of Education 2009). The search for school improvement continues after many administrations and billions of federal dollars. Conducting research on identifying best reading practices that produce the best results will help us end this search.

#### **CHAPTER IV**

#### RESULTS

As noted previously, schools strive to reach their Adequate Yearly Progress (AYP), best practices continue to be identified in hopes of increasing student achievement. This study examines the implementation and impact of two grant-funded programs, Reading First and Bay State Reading Initiative (BSRI), which are designed to increase gains in reading for students in grades K-3 in a 3-Tier Reading Model. A mixed method research design was utilized for this study that includes a quantitative analysis of the reading scores (DIBELS and GRADE), a qualitative analysis of teachers' and administrator s' perspectives on identifying strengths and weaknesses of each approach, and a financial cost-effectiveness comparison of the two programs. The outcomes of the data analyses used in this researchers response to respond to the research questions in this study are discussed in this chapter. More specifically, the results of the quantitative analysis of student data are presented first in this chapter, followed by a presentation of the results that have been derived from the analysis of the survey data and focus groups with educators at each participating school, and the chapter concludes with a financial cost-benefit analysis of the two programs.

#### A. Variable Definitions

Descriptive Statistics for Variables Used in the Regression Analyses

Table 1 defines all of the student-related variables used in the quantitative analyses.

Table 1 Variable Definitions.

(Table continued on the next page.)

Individual Characteristics	Definition
Gender	Identification of gender utilizing a single item (1=male, 2=female).

(Table continued from previous page.)

Free or Reduced Lunch

Students who receive free and reduced lunch identified

utilizing a single item (0=not free & reduced,

1=receiving free or reduced lunch).

Special Education Students who receive support services through special

education identified utilizing a single item (0=not special

education student, 1=special education student).

School Identification of school utilizing a single item (1=Bay

State Reading Initiative, 2=Reading First).

GRADE 2 Beginning Single item indicator for fall baseline benchmark for the

Group Reading Assessment Diagnostics Evaluation (GRADE) measuring comprehension for grade 2.

GRADE 2 Middle Single item indicator for winter benchmark for the

Group Reading Assessment Diagnostics Evaluation (GRADE) measuring comprehension for grade 2.

GRADE 2 End Single item indicator for spring benchmark for the

Group Reading Assessment Diagnostics Evaluation (GRADE) measuring comprehension for grade 2.

GRADE 3 Beginning Single item indicator for fall baseline benchmark for the

Group Reading Assessment Diagnostics Evaluation

(GRADE) for grade 3.

GRADE 3 Middle Single item indicator for winter benchmark for the

Group Assessment Diagnostics Evaluation (GRADE)

measuring comprehension for grade 3.

GRADE 3 End Single item indicator for spring benchmark for the

Group Reading Assessment Diagnostics Evaluation (GRADE) measuring comprehension for grade 3.

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Initial Sound Fluency (ISFK) Beginning	Single item indicator $(0-8+)$ measuring initial sound fluency for the fall benchmark for students in kindergarten utilizing the Dynamic Indicator of Basic Early Literacy Skills (DIBELS).
Initial Sound Fluency (ISFK) Middle	Single item indicator (0-25+) measuring initial sound fluency for the winter benchmark for students in kindergarten utilizing the Dynamic Indicator of Basic Early Literacy Skills (DIBELS).
Letter Naming Fluency (LNFK) Beginning	Single item indicator (0 - 8+) measuring letter naming fluency for the fall benchmark for students in kindergarten utilizing DIBELS.
Letter Naming Fluency (LNFK) Middle	Single item indicator (0 - 27+) measuring letter naming fluency for the winter benchmark for students in kindergarten utilizing DIBELS.
Letter Naming Fluency (LNFK) END	Single item indicator (0 - 40+) measuring letter naming fluency for the fall benchmark for students in kindergarten utilizing DIBELS.
Phoneme Segmentation Fluency (PSFK) Middle	Single item indicator (0 - 18+) measuring phoneme segmentation fluency for the winter benchmark for students in kindergarten utilizing DIBELS.
Phoneme Segmentation Fluency (PSFK) End	Single item indicator (0 - 35+) measuring phoneme segmentation fluency for the spring benchmark for students in kindergarten utilizing DIBELS.
Nonsense Word Fluency (NWFK) Middle	Single item indicator (0 - 13+) measuring nonsense word fluency for the winter benchmark for students in kindergarten utilizing DIBELS.
Nonsense Word Fluency (NWFK) End	Single item indicator (0 - 25+) measuring letter naming fluency for the spring benchmark for students in kindergarten utilizing DIBELS.
Letter Naming Fluency (LNF1) Beginning	Single item indicator (0 - 37+) measuring letter naming fluency for the fall benchmark for students in the first grade utilizing DIBELS.
Phoneme Segmentation Fluency	Single item indicator $(0-35+)$ measuring phoneme
(PSF1) Beginning, Middle, End	segmentation fluency for the fall, winter and spring benchmarks for students in grade 1 utilizing DIBELS.

(Table continued from previous page.)

(ORF1) End

(ORF2) Middle

(ORF2) End

(ORF3) End

(ORF3) Beginning

Nonsense Word Fluency Single item indicator (0-24+) measuring nonsense word (NWF1) Beginning fluency for the fall benchmark for students in grade 1

utilizing DIBELS.

Single item indicator (0 - 50+) measuring nonsense word Nonsense Word Fluency (NWF1) Middle, End fluency for the winter and spring benchmark for students

in grade 1 utilizing DIBELS.

Oral Reading Fluency Single item indicator (0 - 20+) measuring oral reading (ORF1) Middle

fluency for the winter benchmark for students in

grade 1 utilizing DIBELS.

Single item indicator (0 - 40+) measuring oral reading Oral Reading Fluency

fluency for the spring benchmark for students in

grade 1 utilizing DIBELS.

Nonsense Word Fluency Single item indicator (0 - 50+) measuring nonsense word (NWF2) Beginning

fluency for the fall benchmark for students in grade 2

utilizing DIBELS.

Single item indicator (0 - 44+) measuring oral reading Oral Reading Fluency (ORF2) Beginning

fluency for the fall benchmark for students in grade 2

utilizing DIBELS.

Oral Reading Fluency Single item indicator (0 - 68+) measuring oral reading

fluency for the winter benchmark for students in grade 2

utilizing DIBELS.

Oral Reading Fluency Single item indicator (0 - 90+) measuring oral reading

fluency for the spring benchmark for students in grade 2

utilizing DIBELS.

Oral Reading Fluency Single item indicator (0 - 77+) measuring oral reading

fluency for the spring benchmark for students in grade 3

utilizing DIBELS.

Oral Reading Fluency Single item indicator (0 - 92+) measuring oral reading

(ORF3) Middle fluency for the winter benchmark for students in grade 3

utilizing DIBELS.

Oral Reading Fluency Single item indicator (0 - 110+) measuring oral reading

fluency for the spring benchmark for students in grade 3

utilizing DIBELS.

**GRADE Change Scores** Single item indicator measuring change in GRADE (Table continued from previous page.)

(Change2) Computed by subtracting GRADE grade 2 beginning as

a baseline indicator from GRADE grade 2 end as an

outcome indicator.

GRADE Change Scores Single item indicator measuring change in GRADE

(Change3) Computed by subtracting GRADE grade 3 beginning as

a baseline indicator from GRADE grade 3 end as an

outcome indicator.

Initial Sound Fluency Change

Scores (ISFChange)

Single item indicator measuring change in initial sound fluency computed by subtracting initial sound fluency kindergarten beginning as a baseline indicator from initial sound fluency kindergarten middle as an outcome indicator.

Letter Naming Fluency Change

Scores (LSFChange)

Single item indicator measuring change in letter naming fluency computed by subracting letter naming fluency kindergarten beginning as a baseline indicator from letter naming fluency kindergarten end as an outcome

indicator.

Phoneme Segmentation Fluency

Change Scores (PSFChange)

Single item indicator measuring change in phonome segmentation fluency kindergarten middle variable as a baseling indicator from phoneme segmentation fluency

grade 1 end as an outcome indicator.

Oral Reading Fluency

Change Scores (ORFChange)

Single item indicator measuring change in oral reading fluency grade 1 middle from oral reading fluency grade

3 end as an outcome indicator.

#### B. Mean and Standard Deviations

The following three tables (2, 3 and 4) present the means and standard deviations for all student-related quantitative variables used in this study; the tables provide information for each school separately and the two schools combined. An analysis of statistical difference between the schools for each of the variables is provided in the subsequent T-test analysis presented later in the chapter. Table 2 presents the means and

standard deviations for all of the variables for the Bay State Reading Initiative that are used in the regression equations.

Table 2 Mean and Standard Deviations for all Variables for Bay State Reading Initiative

	Mean	Standard Deviation
Change2	9.58	7.36
Change3	4.44	6.42
ISFChange	17.30	9.30
LNFChange	35.62	11.56
NWFChange	61.65	28.20
ORFChange	78.39	25.88
PSFChange	23.47	16.88
Gender	1.43	0.50
Free or Reduced Lunch	0.16	0.37
Special Education	0.20	0.40
GRADE 2 Beginning	28.87	10.53
GRADE 2 End	38.51	6.24
<b>GRADE 3 Beginning</b>	32.22	9.95
GRADE 3 End	36.67	8.30
ISF K Beginning	8.33	6.16
LNF K Beginning	11.12	11.33
ISF K Middle	25.63	9.22
LNF K Middle	33.94	15.33
PSF K Middle	28.67	14.83
NWF K Middle	27.88	20.20
LNF K End	46.75	14.65
PSF K End	48.88	11.41
NWF End	38.51	21.00
LNF 1 <sup>st</sup> Beginning	42.83	15.20
PSF 1 <sup>st</sup> Beginning	40.87	10.68
NWF 1 <sup>st</sup> Beginning	35.63	20.51
PSF 1 <sup>st</sup> Middle	48.04	12.09
NWF 1 <sup>st</sup> Middle	62.51	28.27
ORF 1 <sup>st</sup> Middle	39.25	28.51
PSF 1 <sup>st</sup> End	50.75	9.26
NWF 1 <sup>st</sup> End	78.97	31.51
ORF 1 <sup>st</sup> End	63.13	30.15
NWF 2 <sup>nd</sup> Beginning	73.47	34.69
ORF 2 <sup>nd</sup> Beginning	57.67	31.55
ORF 2 <sup>nd</sup> Middle	90.44	34.84
ORF 2 <sup>nd</sup> End	103.01	34.41
ORF 3 <sup>rd</sup> Beginning	89.12	34.90
ORF 3 <sup>rd</sup> Middle	107.63	38.32
ORF 3 <sup>rd</sup> End	115.75	36.89

Table 3 presents the mean and standard deviations for all of the variables for Reading First that are used in the regression equation.

Table 3 Mean and Standard Deviations for all Variables for Reading First

	Mean	Standard Deviation
Change2	11.764	8.31
Change3	6.11	5.00
ISF Change	13.80	9.66
LNF Change	30.14	12.21
NWF Change	46.86	24.73
ORF Change	77.17	25.61
PSF Change	35.99	18.67
Gender	1.49	0.50
Free or Reduced Lunch	0.34	0.48
Special Education	0.13	0.33
GRADE 2 Beginning	24.33	11.44
GRADE 2 End	36.09	7.86
GRADE 3 Beginning	31.12	8.92
GRADE 3 End	37.43	7.98
ISF K Beginning	11.67	7.44
LNF K Beginning	13.22	12.51
ISF K Middle	25.46	10.92
LNF K Middle	31.79	15.01
PSF K Middle	16.64	12.79
NWF K Middle	14.90	15.14
LNF K End	43.36	13.20
PSF K End	33.38	15.08
NWF K End	22.58	16.87
LNF 1 <sup>st</sup> Beginning	42.55	14.28
PSF 1 <sup>st</sup> Beginning	31.35	17.49
NWF 1 <sup>st</sup> Beginning	26.56	17.50
PSF 1 <sup>st</sup> Middle	0	0
NWF 1 <sup>st</sup> Middle	0	0
ORF 1 <sup>st</sup> Middle	30.04	24.24
PSF 1 <sup>st</sup> End	50.58	12.54
NWF 1 <sup>st</sup> End	61.25	25.41
ORF 1 <sup>st</sup> End	49.46	28.67
NWF 2 <sup>nd</sup> Beginning	61.68	26.34
ORF 2 <sup>nd</sup> Beginning	50.14	26.44
ORF 2 <sup>nd</sup> Middle	0	0
ORF 2 <sup>nd</sup> End	92.02	33.17
ORF 3 <sup>rd</sup> Beginning	73.98	29.31
ORF 3 <sup>rd</sup> Middle	0	0
ORF 3 <sup>rd</sup> End	108.34	32.75

Table 4 presents the mean and standard deviations for all of the variables for both programs.

Table 4 Mean and Standard Deviations for all Variables for All

	Mean	Standard Deviation
Change2	10.85	7.96
Change3	5.30	5.71
ISF Change	15.28	9.63
LNF Change	32.48	12.20
NWF Change	53.14	27.15
ORF Change	77.92	25.55
PSF Change	30.67	18.91
Gender	1.47	0.50
Free or Reduced Lunch	0.26	0.44
Special Education	0.16	0.36
GRADE 2 Beginning	26.27	11.25
GRADE 2 End	37.15	7.29
GRADE 3 Beginning	31.66	9.32
GRADE 3 End	37.08	8.05
ISF K Beginning	10.25	7.09
LNF K Beginning	12.33	12.02
ISD K Middle	25.53	10.19
LNF K Middle	32.71	15.12
PSF K Middle	21.75	14.88
NWF K Middle	20.42	18.54
LNF K End	44.80	13.88
PSF K End	39.97	15.61
NWF K End	29.35	20.26
LNF 1 <sup>st</sup> Beginning	42.68	14.63
PSF 1 <sup>st</sup> Beginning	35.55	15.54
NWF 1 <sup>st</sup> Beginning	30.51	19.37
PSF 1 <sup>st</sup> Middle	48.04	12.09
NWF 1 <sup>st</sup> Middle	62.51	28.27
ORF 1 <sup>st</sup> Middle	34.29	26.57
PSF 1 <sup>st</sup> End	50.67	11.15
NWF 1 <sup>st</sup> End	69.08	29.53
ORF 1 <sup>st</sup> End	55.65	30.03
NWF 2 <sup>nd</sup> Beginning	66.79	30.84
ORF 2 <sup>nd</sup> Beginning	53.62	29.00
ORF 2 <sup>nd</sup> Middle	90.44	34.84
ORF 2 <sup>nd</sup> End	97.13	34.18
ORF 3 <sup>rd</sup> Beginning	81.60	33.02
ORF 3 <sup>rd</sup> Middle	107.63	38.32
ORF 3 <sup>rd</sup> End	112.19	34.81

#### C. Correlations

The three individual characteristics that were used as variables to determine gains in reading scores were free or reduced lunch, special education, and gender. The free or reduced lunch and special education categories were chosen to reflect state Massachusetts Comprehensive Assessment System (MCAS) subgroups (Massachusetts Department of Elementary and Secondary Education 1995). Gender was chosen to determine whether boys or girls had the greatest gains in reading scores. School was the control variable that all these independent variables were compared to.

The correlations in Table 5 noted a significant positive relationship between school and a number of variables include Free or Reduced Lunch (r = .216 \*\*), Change2 (r = .129\*), Change3 (r = .171\*), and PSF Change (r = .329\*\*). A significant negative relationship between school and a number of variables were noted. These results included ISF Change (r = -.180\*), LNF Change (r = -.223\*\*), and NWF Change (r = -.270\*\*). When comparing Change 2 and Special Education a positive significance of r = .155\* was noted. Change 3 and gender showed a significant positive relationship of r = .156\*. NWF Change and Special Education noted a positive significant relationship of r = .024\*. And PSF Change showed a positive significant relationship with Free or Reduced Lunch of r = .176\* and with Special Education of r = .012\*.

LNF Change and Special Education showed a negative significant relation of r = -.147\*. NWF Change and Free or Reduced Lunch also showed a negative significant relationship of r = -.144\* as did ORF Change and Special Education of r = -.369\*.

Table 5 Correlations for Variables (N=230)

#### Variables

	1	2	3	4
School	1.00			
Gender	.041			
Free or Reduced Lunch	.216**	.112		
Special Education	088	.006	036	
Change2	.129*	015	048	.155*
Change3	.171*	.156*	089	056
ISF Change	180*	.085	095	029
LNF Change	223**	.097	057	147*
NWF Change	270**	047	144*	.024*
ORF Change	040	026	013	369**
PSF Change	.329**	.119	.176*	.012*

<sup>\*</sup>p≤.05, \*\*p≤.01

## D. T-Tests

In order to determine whether there was statistical significance between the two programs, a t-test was utilized in comparing the means of change for each variable (CHANGE2, CHANGE3, ISF Change, LNF Change, PSF Change, NWF Change, and ORF Change). For the Reading First Program Change2 noted a statistical significance of -2.06\* at the p< .05 level when compared to Bay State Reading Initiative. Change2 covered the period from the beginning of grade 2 to the end of grade 2. Reading First also noted statistical significance for PSF Change of -3.84\*\* at the p<\_.01 level. PSF Change covered the period from the middle of kindergarten to the end of grade 1.

Bay State Reading Initiative noted statistical significance for ISF Change of 2.00\* and LNF Change of 2.51\* both at the p≤.05 level when compared to the Reading First program. The ISF Change and LNF Change occurred from the beginning of kindergarten to the end of kindergarten. In addition, Bay State Reading Initiative noted

statistical significance for NWF Change at the p $\leq$ .01 level when compared to the Reading First program. The NWF Change covered the period from the middle of kindergarten to the end of grade 1.

The ISF Change also noted a statistical significance at the p $\leq$ .05 level (2.00). This change occurred from the beginning of kindergarten to the end of kindergarten. The LNF Change also noted statistical significance at the p $\leq$ .05 level (2.51). This change occurred from the beginning of kindergarten to the end of kindergarten. The NWF Change (2.99\*\*) for the Bay State Reading Initiative and PSF Change (-3.84\*\*) for the Reading First program both noted statistical significance at the p $\leq$ .01 level. The NWF Change and PSF Change covered the period from the middle of kindergarten to the end of grade 1.

Table 6 offers statistical significance of the differences between the programs that were identified by T-tests when comparing the means.

Table 6 T-tests

	Mean	Mean		
	Reading First	BSRI	t-tests values	
Change2	11.76	9.58	-2.06*	
Change3	6.11	4.44	-1.42	
ISF Change	13.80	17.30	2.00*	
LNF Change	30.14	35.62	2.51*	
NWF Change	46.86	61.65	2.99**	
ORF Change	77.17	78.39	0.20	
PSF Change	35.99	23.47	-3.84**	

<sup>\*</sup>p\le .05, \*\*p\le .01, \*\*\*p\le .001

## E. Regression Analysis

Multiple Ordinary Least Squares regression equations are utilized to determine the effect of each reading program on reading scores after controlling for the effects gender, socio-economic status (measured by free or reduced lunch as a proxy indicator), and special education status. A regression equation was run for each of the seven measured reading skills as dependent variables with the controls listed above used as independent variables in each of the seven equations. The skills measured included: GRADE change grade 2 (Change2), GRADE change grade 3 (Change3), Initial Sound Fluency (ISF), Letter Naming Fluency (LNF), Phonemic Segmentation Fluency (PSF), Non-Word Fluency (NWF) and Oral Reading Fluency (ORF).

Table 7 describes the results for the regression analysis using gender, free or reduced lunch, special education, and school as the dependent variables for documenting change in reading scores for the GRADE assessment for grade 2 (Change2). The variables special education ( $\beta$  = 0.18) and school ( $\beta$  = 0.15) were noted as statistically significant predictors for the greatest gains in reading scores for Change2. This equation explained eight percent of the variance with more than half the explained variance contributed by the School variable.

Table 7 Results of Regression Analysis for Change 2 (N= 218)

Variable	b	β	
Gender	0.05	-0.00	
Free or Reduced Lunch	-1.28	-0.07	
Special Education	3.77	0.18**	
School	2.32	0.15*	
R <sup>2</sup> for Individual Students	0.03*		
R <sup>2</sup> for School	0.05*		
R <sup>2</sup>	0.08*		

\*
$$p \le .05$$
, \*\* $p \le .01$ , \*\*\* $p \le .001$ 

Table 8 describes the results for the regression analysis using gender, free or reduced lunch, special education, and school as the dependent variables for documenting change in reading scores for the GRADE assessment for grade 3 (Change3). The variable school  $(\beta = -0.18)$  noted statistically significant predictors for greatest gains in reading scores for Change3. This equation explained nine percent of the variance with the School variable accounting for two-thirds of that explained variable.

Table 8 Results of Regression Analysis for Change3 (N= 99)

Variable	b	β
Gender	1.67	0.15
Free or Reduced Lunch	-1.36	-0.11
Special Education	-0.80	-0.05
School	-1.96	-0.18*
R <sup>2</sup> for Individual Students	0.03* .	
R <sup>2</sup> for School	0.06*	
$R^2$	0.09*	

 $p \le .05, **p \le .01, ***p \le .001$ 

Table 9 describes the results for the regression analysis using gender, free or reduced lunch, special education, and school as the dependent variables for documenting change in reading scores for the Initial Sound Fluency (ISF). The variable school ( $\beta$  = -0.18) noted statistically significant predictors for the greatest gains in reading scores for ISF. This equation explained seven percent of the variance, with most of the explained variance coming from the School variable (five percent).

Table 9 Results of Regression Analysis for ISF Change (N=119)

Variable	b	β	
Gender	2.12	0.11	
Free or Reduced Lunch	-1.19	-0.05	
Special Education	-1.87	-0.07	
School	-3.52	-0.18*	
R <sup>2</sup> for Individual Students	0.02*		
R <sup>2</sup> for School	0.05*		
$R^2$	0.07*		

 $p \le .05, **p \le .01, ***p \le .001$ 

Table 10 describes the results for the regression analysis using gender, free or reduced lunch, special education, and school as the dependent variables for documenting change in reading scores for the Letter Naming Fluency (LNF). The variable special education ( $\beta$  = 0.20) and school ( $\beta$  = 0.27) noted statistically significant predictors for the greatest gains in reading scores for LNF. This equation explained fourteen percent of the variance, with most of the explained variance contributed by the School variable.

Table 10 Results of Regression Analysis for LNF Change (N= 119)

Variable	b	β
Gender	3.20	0.13
Free or Reduced Lunch	0.32	0.01
Special Education	-6.83	-0.20*
School	-6.56	-0.27**
$R^2$ for Individual Students $R^2$ for School	0.04* 0.10**	

 $R^2$  0.14\*\*

 $p \le .05, *p \le .01, ***p \le .001$ 

Table 11 describes the results for the regression analysis using gender, free or reduced lunch, special education, and school as the dependent variables for documenting change in reading scores for the Phonemic Segmentation Fluency (PSF). The variable school ( $\beta$  = 0.31) noted statistically significant predictors for the greatest gains in reading scores for PSF. This equation explained sixteen percent of the variance and the School variable accounted for seventy-five percent of this effect.

Table 11 Results of Regression Analysis for PSF Change (N= 119)

Variable	b	β
Gender	3.25	0.07
Free or Reduced Lunch	2.77	0.06
Special Education	2.96	0.06
School	11.90	0.31***
R <sup>2</sup> for Individual Students	0.04*	
R <sup>2</sup> for School	0.12**	
$R^2$	0.16**	

 $p \le .05, **p \le .01, ***p \le .001$ 

Table 12 describes the results for the regression analysis using gender, free or reduced lunch, special education, and school as the dependent variables for documenting change in reading scores for the Nonsense Word Fluency (NWF). The variable School ( $\beta$  = -0.25) noted statistically significant predictors for greatest gains in reading scores for NWF. This equation explained ten percent of the variance with eighty percent of the explained variance contributed by the School variable.

Table 12 Results of Regression Analysis for NWF Change (N= 119)

Variable	b	β
Gender	-1.17	-0.02
Free or Reduced Lunch	-3.64	-0.05
Special Education	-1.23	-0.02
School	-13.84	-0.25**
$R^2$ for Individual Students	0.02*	
R <sup>2</sup> for School	0.08*	
$R^2$	0.10**	

 $p \le .05, **p \le .01, ***p \le .001$ 

Table 13 describes the results for the regression analysis using gender, free or reduced lunch, special education, and school as the dependent variables for documenting change in reading scores for the Oral Reading Fluency (ORF). The variable special education ( $\beta$  = -0.37) noted statistically significant predictors for the greatest gains in reading scores for ORF. This equation explained twenty-eight percent of the variance, with fifty percent of the explained variance contributed by the School variable.

Table 13 Results of Regression Analysis for ORF Change (N= 103)

Variable	b	β
Gender	-2.31	-0.05
Free or Reduced Lunch	-0.98	-0.02
Special Education	-25.96	-0.37***
School	-2.10	-0.04
R <sup>2</sup> for Individual Students	0.14*	

$R^2$	for School	0.14*
$R^2$		0.28**

\* $p \le .05$ , \*\* $p \le .01$ , \*\*\* $p \le .001$ 

# F. Bay State Reading Initiative Teachers' Experience

The qualitative data collected for teacher experience was done through a teacher survey (Appendix A/1). There were nine teachers who took part in the teacher survey. Out of those nine teachers two taught kindergarten, one teacher taught grade 1, one teacher taught grade 2 and five teachers taught grade 3. The total number of years teaching ranged from 5 years to 30 years for a 17.5 average. The years teaching in their current school ranged from 2 years to 11 years with a 7.5 average. All nine teachers reported having formal training to teach reading prior to implementing their reading program.

When teachers were asked through the Teacher Survey Items (Appendix D/1), how well prepared teachers felt in implementing the reading program five teachers responded very prepared and four somewhat prepared. When asked how satisfied they were with the training they received for the reading program six teachers stated very satisfied while two responded somewhat satisfied and one not very satisfied. When pertaining to the supplemental materials they received and how satisfied they were with the materials, four teachers were very satisfied while two teachers were somewhat satisfied and three responded not very satisfied. When asked if they were satisfied with the role their principal played in the implementation of the program four teachers were very satisfied while two were somewhat satisfied and three was not very satisfied. Teachers were asked how satisfied they were with the support that was given to them

over the first three years of the reading program and their reply was five teachers being very satisfied, three somewhat satisfied and one stated not very satisfied. The last survey item asked was how satisfied were you with the ongoing professional development that you received throughout the reading program and the responses included three teachers felt very satisfied, three felt somewhat satisfied, two were not very satisfied and one not at all satisfied.

During the open-ended response (Appendix E/1) portion of the survey the teachers were asked what they believed was the overall strengths of the BSRI program. Teachers responded three times to small group instruction/center training, and the reading core (Scott Foresman *Reading Street*) as to what contributed to the strength of the reading program. Twice teachers identified the reading coach, student interventions, summer training, and ongoing professional training. Only once did a teacher mention have BSRI staff at meetings as being helpful.

The second open response question asked about the overall weakness of the reading program. Teachers responded five times to the overall daily expectations as being too demanding and unrealistic. Two responded to the "Sidewalks" interventions as being too weak and two mentioned concerns with the lack of support staff and training. Single responses included the lack of comprehension focus in the program, the spelling program being too confusing, no differentiation of teachers' strengths and weaknesses, and one teacher stated that they did not feel that the program had any weaknesses.

The last open response question asked if they could do the reading program over again what would they change about their program as two teachers would change the

"Big Brother" atmosphere along with the feeling of not being supported. Two teachers noted that they would not change a thing. Single responses included staff to deliver professional development (PD), use a guide reading series instead of core, one year of PD prior to implementation and feedback to teachers after BSRI staff classroom walk-through.

## G. Reading First Teachers' Experience

The qualitative data collected for teacher experience was done through a teacher survey (Appendix A/2). There were nine teachers who took part in the teacher survey. Out of those nine teachers two taught kindergarten, one teacher taught grade 1, three teachers taught grade 2 and three teachers taught grade 3. The total number of years teaching ranged from 13 years to 34 years with a 27.78 average. The total number of years teaching in their current school ranged from 8 years to 34 years with a 21.11 average. There were seven teachers who had come into the reading program with formal experience with two teachers having no formal training.

When teachers were asked through the Teacher Survey Items (Appendix D/2), how well prepared teachers felt in implementing the reading program five teachers responded very prepared and four somewhat prepared. When asked how satisfied they were with the training they received for the reading program six teachers stated very satisfied and three somewhat satisfied. When pertaining to the supplemental materials they received and how satisfied they were seven teachers stated were very satisfied while two teachers were somewhat satisfied. When asked if they were satisfied with the role their principal played in the implementation of the program six teachers stated somewhat satisfied and

that was given to them over the first three years of the reading program and their reply was five teachers being very satisfied, three teachers somewhat satisfied and one not very satisfied. The last survey item asked was how satisfied were you with the ongoing professional development that they received throughout the reading program and the responses included six teachers felt very satisfied, and three felt somewhat satisfied.

During the open-ended response (Appendix E/2) portion of the survey the teachers were asked what they believed was the overall strengths of the Reading First program. When asked about the strength about the Reading First program four teachers responded the professional development, four teachers replied the assessment tools and four mentioned the materials. Two replies spoke about the reading coach and two identified the explicit and systemic instruction. A number of single responses included the Three Tier Reading model, continuity of skills grade to grade, delivered at student's level and how well the five key reading components were integrated.

The second open response question asked about the overall weakness of the reading program. Three teachers responded the lack of writing in the program. Two responses for lack of support staff and more coaching in the classroom were noted. Single responses included lack of time to become familiar with materials and instruction, lack of comprehension assessment component, a lot of information to comprehend at one time, too much testing, not enough of phonics and basal reader too repetitive and boring to teach.

The last open response question asked if they could do the reading program over again what would they change about their program as three teachers mentioned that they would integrate more writing into their program. Two teachers would add a comprehension piece. Single responses included utilizing the literacy coach more, more information prior to implementation of the program, to be more positive, try to implement more supportive materials and use a variety of curriculums instead of a scripted approach.

# H. Summary of Teacher Survey Responses

Table 14 compares the teacher survey responses between the Reading First and the Bay State Reading Initiative Teachers. The responses from both groups of teachers were similar for all items except for two. There was a considerable difference between the two groups of teachers when asked "how satisfied were you with the supplemental materials you received." Seven of the Reading First teachers reported that they were very satisfied with the material compared to only four of the Bay State Reading Initiative teachers stating that they were satisfied with the materials while three were not very satisfied. The other item that noted a considerable difference pertained to "how satisfied were you with the role your principal played in the implementation of the program?" There were no Reading First teachers who claimed to be very satisfied with the role their principal played in the implementation of the program while four Bay State Reading Initiative teachers were very satisfied with their principal's role. In addition six Reading First teachers that they were somewhat satisfied with the role their principal played in the implementation of the program while only two Bay State Reading Initiative teachers were somewhat satisfied with the role their principal played.

Table 4.14 Teacher Survey Responses:

Item	Very	Somewhat	Not Very	Not at All
	Satisfied	Satisfied	Satisfied	Satisfied
How well prepared were you to implement the reading program?	<u>5</u>	4	<u>0</u>	<u>0</u>
	5	4	<b>0</b>	<b>0</b>
How satisfied were you with the training you received for the reading program?	<u>6</u>	3 2	<u>0</u> 1	<u>0</u> <b>0</b>
How satisfied were you with the supplemental materials you received?	7	2	<u>0</u>	<u>0</u>
	4	2	3	<b>0</b>
How satisfied were you with the role your principal played in the implementation of the program?	<u>0</u>	<u>6</u>	3	<u>0</u>
	<b>4</b>	2	3	<b>0</b>
How satisfied were you with the support that was given to you over the first three years of the reading program?	<u>5</u>	3 3	<u>1</u>	<u>0</u> <b>0</b>
How satisfied were you with the ongoing professional development that you received throughout the reading program?	<u>6</u>	3	<u>0</u>	<u>0</u>
	3	3	2	1

<u>Underlined</u> = Reading First

**Bold** = Bay State Reading Initiative

# I. Bay State Reading Initiative Administrative Experience

The qualitative data collected for administration experience was done through an administrator's survey (Appendix B/1). There was one administrator that took part in the survey for the BSRI program. The number of years this individual had served as an administrator was 20 years with 5 years serving in that school. This individual reported that they had 16 years teaching experience however limited experience in teaching reading. The first open response question asked to the administrators' was, how did you get the teachers to buy into the initiative of taking part in the reading program? BSRI principal replied "by making sure they had all the support in place for the program implementation - materials, support staff, hand- holding during program change initiatives, and classroom modeling by the reading coach".

The second question asked the principal was how do they support their teachers and Building Literacy Coach? The BSRI principal replied "by covering classrooms so teachers could meet together to plan and strategize, go over data, and discuss individual students and strategies". When asked about how often they were visited by the program's Literacy Coach/Principal's Coach the principal's response was "once a month when involvement began and for the first couple of years. Visits occurred less often after that, but whenever requested."

When asked about ongoing professional development that they personally received, the BSRI principal stated, "Purposeful walk-through, analyzing data, and leading grade level meetings to focus on difficult issues." The BSRI principal felt that the best thing about the reading program was that "it differentiates its strategies of instruction options that actually allow teachers to instruct with a variety that has empowered more children to read." When asked what the BSRI principal would change

about the reading program and why, the response was, "if we lose funding that reduces our support staff, we will have a difficult time delivering interventions. The success of this program is dependent on interventions that are directed by an instructor and the classroom teachers are dependent on having the appropriate support."

# J. Reading First Administrator's Experience

The qualitative data from administrators was collected through an administrator's survey (Appendix B/2). There was one administrator that took part in the survey for the Reading First program. The number of years this individual had served as an administrator was 15 years with 5 years serving in that school. This individual reported that they had 5 years teaching experience with no formal training on how to teach reading. The first open response question asked to the administrators' was how did you get the teachers to buy into the initiative of taking part in the reading program? The Reading First Assistant Principal replied "the initiative was begun the school year preceding my being hired. It was chosen to address poor student achievement in reading at the school."

The second question asked the assistant principal was how did you support your teachers and Building Literacy Coach? The Reading First Assistant Principal replied, "I participated in the Read First Summer Workshops and collaborated with the Reading First Teacher/Coordinator regularly during Student Assistant Team meetings to address concerns around student progress in reading." When asked how often they were visited by the program's Literacy Coach/Principal's Coach the replied was, "The Principal and Reading First Coordinator participated in training several times each year." When asked

about what type of ongoing professional development that they personally received the assistant principal replied, "only the summer Reading First Training." The response to the question of what did you like best about the reading program the response was, "The ability to differentiate via leveled readers was helpful, along with the data gathered via DIBELS testing that helped pinpoint areas in need of more intensive instruction/intervention." The last question asked what would you have changed about the reading program and this administrator answered, "the timed aspect of the DIBELS is important but I'd like to be able to collect data timed and untimed and see what that data shows. Another area of weakness was the reading comprehension as opposed to being able to decode.

## K. Teacher Interviews

Three teachers from the Bay State Reading Initiative and three teachers from the Reading First program took part in the follow up interview. All six teachers completed the teacher survey (Appendix A/1 & A/2) and was part of the implementation of their reading programs.

#### 1. Bay State Reading Initiative Teacher Responses

When asked about their philosophy of reading two out of the three teachers from the BSRI program noted a balanced literacy approach to reading. These teachers felt that reading was an interactive process and a number of strategies needed to be utilized to meet the needs of the students as the teachers focused on the five components of reading. They spoke of utilizing a basil reader in addition to read aloud, shared, guided and independent reading to develop language skills in content. All three teachers believed

that their reading philosophy was similar to that of BSRI however they were not quite sure on how to access all of the pieces that needed to be included in one program.

Teachers felt that BSRI validated their approach of teaching reading for them as the program assisted them in an understanding of how to coordinate all of the pieces that needed to get addressed in addition to having interventions and an assessment piece in place.

When asked about what has been the impact on the program, on students, and on teachers there was no common theme that was identified across the three teachers. When asked what the best part of the program was two out of three teachers cited the ability to differentiate instruction. Getting to work in small groups allowed teachers a greater ability to differentiate instruction. When questioned about the most challenging part of the program, two out of three teachers noted time. Finding time to get in all that was required in the program proved to be a challenging piece. In addition to keeping groups on time as students worked their way through their reading centers.

When asked how important do you think the role of the Literacy Coach played in the implementation of your program was asked all three teachers responded that this individual played a huge role. BSRI teachers felt that their coach was the driving force to the program and had great impact on the program. Teachers did not always feel comfortable with the coaches from BSRI however they felt that their building Literacy Coach was the person who got it all to happen. That she was their go to person on data, progress monitoring, lesson modeling, resources and anything else that they needed.

When asked about the impact of their principal during the implementation of the program teachers did not feel that this individual had as great an impact as the Literacy Coach.

When asked if the position of the Literacy Coach continues to play an important role in the program all the teachers answered yes. The Literacy Coach continues to play an active role with teachers through data assessment, grouping of students, progress monitoring of students in addition to being the overseeing of the program. Teachers did state that they are now more comfortable in implementing the program however the Literacy Coach continues to major piece of the program.

A common theme that was identified when asked how did funding impact the implementation of your reading program as two out of three teachers stated that without the funding they would not have had a Literacy Coach. Teachers also noted that through the funding of BSRI they received professional development. When asked if funding was unlimited what additional support would have been beneficial for the program as the teachers cited more supplemental materials along with additional staff to deliver reading interventions were their replies. Teachers could not recall if lack of funding created any problems for their program.

#### 2. Reading First Teacher Responses

When asked what their philosophy about reading was a theme that emerged from the Reading First Teachers was that whole language by itself does not work. Two out of three teachers stated that they have already lived through that phase of teaching reading through a whole language approach and it did not work well for students. They were glad to see a back to phonics approach. When asked about their present reading program and if it had any impact on their philosophy two out of three teachers stated that the weeklong professional development that took place at the start of the implementation of

their program had a big impact on them. Teachers felt the training enhanced phonics and assisted them greatly. One teacher stated that her college education did not help her in this area. She felt the weeklong training made her aware of a number of areas in reading that she had never been exposed to. Teachers also noted that using data to drive instruction had an impact on them. Teachers felt that teaching reading was now a science as it took the guess work out of the process.

The next question of what was best about the program that found common themes among two out of the three teachers were the supplies and materials they were able to purchase with the influx of money that they received. A new core curriculum was purchased in addition to the interventions. The ability to have the Literacy Coach was also identified as the best part of the program. When asked about what was most challenging about the program two out of three teachers stated that the Literacy Coach was the one who was left to get the administration and teachers on board. With the grant requirements of making sure that the interventions were up and running in first year all of the pieces were left to the Literacy Coach to implement. Teachers felt that the administration did not support the initiative to the fullest extent and some teachers were left do their own thing.

When the question was asked as to what, if anything, they would change about the program two out of three teachers referenced professional development. One of the teachers stated that when the program began the professional development was great however it diminished over time. That at one point the professional development was being delivered in half hour or hour blocks of time which was very ineffective. She felt that a half or full day professional development would have been better utilized.

The question on how important do you think the role of the Literacy Coach played in the implementation of the program brought and overwhelming response of huge from all of the teachers. The Reading First teachers felt that they couldn't see how it would have gotten done without the Literacy Coach. However, because she needed to be all things to all people in addition to driving the program and the administration her time was limited in demonstrating lessons. Teachers would have liked more opportunity for the coach to be modeling lessons. Teachers felt that the Literacy Coach had the knowledge and was a good resource for them. When the teachers were questioned as to if the position of the Literacy Coach continued to play an important role in the program all three teachers answered yes. Teachers noted that she continues to be a good resource to go to and is invaluable for teacher support. At this time the Literacy Coach spends much time delivering interventions and teachers would like her to be in the classroom more observing lessons.

The question on how did funding impact the implementation of your reading program two out of three teachers noted that there was plenty of money for resources and professional development. However the time needed to effectively deliver the professional development was not available. When asked if funding were unlimited, what additional support would have been beneficial for your program all three teachers stated additional staff for smaller groups and more staff to deliver interventions were cited. Two out of three teachers did not feel that funding created any problems for their program. Teachers felt that they received any materials that they needed.

When comparing the responses from these two groups of teachers in this cross case analysis the following common themes emerged:

- Balanced Literacy
- Weeklong Professional Development
- Literacy Coach

Teachers felt the best way to approach the subject of teaching reading needed to have a balanced approached. Having a whole language model by itself did not work for most children. They felt that back to phonics was an important piece that children needed to have in a reading program. They felt that utilizing this approach had small group instruction in addition to using data to drive instruction.

The weeklong professional development was mandatory in both programs.

Teachers felt that it was an eye opening experience especially the new teachers. Now for the first time teachers looked at teaching reading as a science. The professional development that was provided offered the education teachers needed to implement their new reading program.

The overwhelming response to all of the interview questions was the one pertaining to the Literacy Coach. It appears that this individual made the greatest impact compared to all aspects of the program. It had the greatest impact on teachers who looked to the Literacy Coach for guidance and support. It was with an overwhelming response from all six teachers of both programs that the Literacy Coach played a huge part in the implementation of their programs. It appears that this individual, the Literacy Coach, was the driving force of both programs.

# L. Which Approach is Most Cost Effective?

An analysis of the cost effectiveness between the two programs indicates a significant difference in the amount of money that was utilized to run each program. The Bay State Reading Initiative had a total expenditure of \$33,008.87 for fiscal year of July 2007 through June 2008. The expenditure items for the not for profit Bay State Reading Initiative included: Administrative and Other (Hotel/Accommodations, Seminars and Training/Non-BSRI), Curriculum/Materials and Substitute Teachers, Professional Development (Professional Development Summer, Stipends, Professional Development-Other). The break down for the fiscal year of 2007/08 was as follows:

BSRI Grant Line Items	2007/08
Administrative & Other	
Hotel/Accommodations	\$51.34
Seminars and Training	\$81.31
Total Other	\$132.65
Curriculum/Materials and Substitutes	
Interventions	\$30,704.78
Substitutes	\$1,715.00
Total Curriculum/Subs	\$32,419.78
Professional Development	
PD Summer Stipends	\$360.00
PD - Other	\$96.44
Total Professional Dev	\$456.44
Total Expense	\$33,008.87

BSRI building Literacy Coach reports that the program has been awarded roughly \$30,000.00 each year since the start of the grant. The only documented Profit & Loss information that I could obtained was the fiscal year 2007/08. Through the grant BSRI paid for the entire core curriculum of the reading program in addition to the non-consumables. These non-consumable items included leveled readers, intervention materials, professional development trainings, and student text. The district was obligated to pay for the building Literacy Coach's salary.

Reading First				
Grant Line Ite	ems	2003/04	2004/04	2005/06
Administratio	n	\$10,000.00		
Professional S	Staff	\$81,000.00	\$60,077.00	\$66,830.00
Support Staff		\$45,000.00	\$24,487.00	\$21,500.00
Fringe (Retire	ement)	\$8,800.00	\$7,611.00	\$7,200.00
Contractual S	ervices	\$115.00	\$500.00	
Supplies		\$58,435.00	\$538.00	\$8,357.00
Travel		\$6,200.00	\$500.00	\$990.00
Other		\$450.00		\$61.00
GrandTotal		\$210,000.00	\$93,713.00	\$104,938.00

The Reading First grant noted a total expenditure for the school year 2003/04 of \$210,000.00, for the school year 2004/04 of \$93,713.00, and for the school year 2005/06 of \$104,938.00. The grant line items for the Reading First grant included:

Administration, Professional Staff, Support Staff, Fringe (retirement), Contractual Services, Supplies, Travel and Other. The Reading First grant covered the expense of the Literacy Coach and two paraprofessionals in additional to the coast of the core curriculum. At the beginning of the grant in 2003/04 expenditure to purchase intervention materials were not allowed. Districts were required to absorb the cost of these materials for the first year of implementation. In subsequent years districts were allowed to utilize their funding to cover these materials.

Total funding for BSFI for the first three years of implementation was \$99,026.61 while the Reading First funding totaled \$408,651.00. Reading First noted a seventy-five percent increase in funding when compared to the BSRI.

## M. Conclusion

The overall results for this study indicate that the findings from a triangular approach (quantitative, qualitative, and cost effectiveness) in identifying elements of a reading program produced mixed results. A comparison of mean differences across a variety of reading test scores provided mixed results, although the results of the regression suggest that both schools, despite the different reading programs, exhibited significant effects. There were also similar, but mixed, results from educators at each school. The biggest difference appeared in the financial cost analysis in which significantly more funds were expended on Reading First. The implications for these findings are discussed in Chapter 5.

### CHAPTER V

### **CONCLUSION**

### A. Overview of the Study

The purpose of this chapter is to summarize and interpret the key findings from this study. The chapter begins with an overview of the study, then moves to a discussion about the ways in which the results inform the research questions and subsequently moves into a discussion of implications for policy, practice and future research.

This study compared the gains in reading scores of two elementary schools in Western Massachusetts. Both programs were grant funded, one through state oversight and one through a non-profit organization. The pedagogical approach used in both of these two programs was similar given that both programs utilized a 3- Tier Reading Model. However, they differed because one school utilized a Principal's coach in addition to addressing whole school reform, while the other did not. With the prediction that 90% of Massachusetts schools will not reach its AYP obligation by 2014, much work needs to be done in determining which practices are producing good academic results and which ones are not (MassPartners for Public Schools, 2005). In the pursuit of student achievement, this study sought to determine which grant, Reading First or Bay State Reading Initiative demonstrates the greatest gains in reading for students in the grades K-3. As the search for academic excellence continues to be extremely expensive with no guarantee of success, much practical research still needs to occur. Through the results of this study, a clearer picture can be drawn of which program elements need to be part of the implementation process in seeking greater impact on students' reading scores.

The importance of this study focuses on the determination as to whether Bay State

Reading Initiative demonstrated greater results in reading than Reading First. The findings from
the research in this study may impact reading education in the following ways:

- The findings could have an impact on the way Reading First is implemented
- The findings could have an impact on school reform
- The findings could indicate the need for building partnership in order to see a positive impact on reading
- The findings could indicate the need for providing principal coaches in order to see a positive impact on reading

The subjects in my research sample are students from two Western Massachusetts' elementary schools which are located in different districts. Data were used from the first three years of implementation for each program. Bay State Reading Initiative (School A) took place during the 2006/07 through the 2008/09 school years. The Reading First (School B) program took place during the 2003/04 through the 2005/06 school years.

Raw scores of DIBELS and GRADE assessments were used in comparing between schools for the subgroups of free or reduced lunch students, special educations students, and gender. Comparisons of value gained were used when compared between schools. Strengths and weaknesses were determined through a teacher (Appendix A 1/2) and administrator (Appendix B 1/2) questionnaires. A follow up interview was given to three teachers in each program.

### B. Review of Research Questions

1. Which is the most effective program for improving reading scores?

In determining which program Reading First or Bay State Reading Initiative is most effective for improving reading in grades K-3 statistical significance of the differences between the programs were identified through the use of T – tests used for comparing the means of the variables. It was determined that Bay State Reading Initiative had higher scores on four reading indictors as Reading First had positive effects on two indicators. Bay State Reading Initiative proved to have be a slightly more effective program for improving reading scores. However through the Teacher Response Survey a different outcome was perceived by teachers when determining the effectiveness of each of the perspective programs. When asked about the strengths of their programs the Reading First Teachers reported a multitude of items that they believe was a strength to their program. These items and number of responses included professional development (4), assessment tools (4), materials (4), reading coach (2), explicit/system instruction (2), 3 – Tier reading model (1), continuity of skills grade to grade (1), program delivered at students' level (1), and integration of 5 key reading components (1). The Bay State Reading Initiative teachers' responses included small group/center training (3), reading core (3), reading coach (2), student interventions (2), summer training (2), ongoing professional development (2) and Bay State Reading Initiative at the staff meetings (1).

When both groups of teachers were asked about the weaknesses within their programs the Reading First teachers responses were lack of writing in the program (3), lack of support staff (2), more coaching in the classroom (2), lack of time to become familiar with materials and instruction (1), lack of comprehension assessment component (1), a lot of information to comprehend at one time (1), too much testing (1), and too

repetitive/boring to teach (1). For the Bay State Reading Initiative teachers their responses included daily expectations/too demanding (5), interventions weak (2), lack of support/training (2), lack of comprehension focus (1), spelling program too confusing (1), no differentiation of teachers' strengths and weaknesses (1). It is through this question that you begin to hear rumbling of teacher dissatisfaction within the program when they speak of the daily expectations that is required of them.

When the teachers were asked if you could do the program over again what would you change the Reading First teachers responses included integrate more writing (3), add comprehension (2), utilize the literacy coach more (1), more information prior to implementing program (1), be more positive (1), implement more supportive materials (1), and use a variety of curriculums/not scripted approach. The Bay State Reading Initiative teachers responses included "big brother" atmosphere alone with feeling of not being supported (2), not change a thing (2), staff to deliver professional development (1), use a guided reading series (1), one full year of professional development prior to implementation (1), and feedback after Bay State Reading Initiative staff does a classroom walk-though (1). Again there is a feeling from the Bay State Reading Initiative teachers that they are were watched with a "got you" kind of mentality. Through some of their responses it does not appear that they all received the same type of support of teamwork that the Reading First teachers reported. None of the Reading First teachers spoke about experiencing the "Big Brother" mentality or the feeling of lack of support.

2. Which Grant Demonstrated Greatest Gains in Student Reading Levels

Free or reduced lunch, special education, and gender were used as the independent variables used to predict reading outcomes as indicators of gains in reading scores and School was used as a control variable. Through regression analysis statistically significant predictors were determined for each of the seven measured reading skills. When determining statistical significance, half or more of the explained variance was contributed by the School variable. When comparing the School variable to the GRADE assessment for comprehension for second grade, for third grade, for Initial Sound Fluency, for Letter Naming Fluency, for Phonemic Segmentation Fluency, for Nonsense Word Fluency, and for Oral Reading Fluency a statistical significance was indicated for all of these variables. When predicting student scores School has a larger effect then gender, special education, or free or reduced lunch student characteristics. The Bay State Reading Initiative students had the higher scores on four reading indicators while the Reading First students had positive effects on two reading indicators.

3. What are the Strengths and Weaknesses of Each Approach from the Perspective of a Teacher?

To determine the strengths and weaknesses of each program from the perspective of a teacher a teachers' survey (Appendix A/1, 2) was administered to those who took part in the implementations of the programs. When questioning the Bay State Reading Initiative teachers about the strengths of their program they reported a number of reasons. On three occasions teachers identified small groups and center training as a strength of the program and the reading series, Scott Foresman, noted the same number of responses. Teachers responded twice to one of the following items of interventions, summer training, or ongoing professional training.

Moreover, only once did a teacher mention that it was helpful to have the Bay State Reading Initiative staff at their meetings.

The Reading First teachers' responded four times to professional development, assessment tools, or materials as strengths of the program. Twice teachers mentioned the Reading Coach and explicit/systemic instruction. And only once did a teacher cite the 3 - Tier Model, continuity of skills from grade to grade, program delivered at student's level, or integration of the five key reading components.

In comparing the responses between the teachers of the two reading programs about the overall strengths professional development and the Reading Coach were the only two items that teachers reported the same for either program. There was a total of sixteen items that they identified as strengths for both programs.

In identifying weaknesses of their program Bay State Reading Initiative teachers cited overall daily expectation was too demanding and expectations unrealistic for five teacher response. Twice teachers responded that the "Sidewalks" interventions were weak or useless. Single responses were reported for no training for new teachers, Special Education teachers went out and got their own training for interventions, interventions not focused enough on comprehension, confused spelling program, no differentiation of teachers' strengths and weaknesses, and one teacher stated no weaknesses were noted for the program.

When the Reading First teachers noted the weaknesses of their program they reported three times about the lack of writing. Twice, teachers identified more staffing for support, reduction of money, and more coaching within the classrooms. One time responses to the overall weaknesses of the program included more time to become familiar with materials and instruction, adding a comprehension component to the testing, a lot of information at one time, too much testing, not enough of phonics, and basal reader too repetitive and boring to teach.

In comparing the responses between the teachers of the two reading programs about the overall weaknesses, making sure there is enough staff to provide support was the only item that identified as weaknesses for both programs. Once again, there are mixed results about the effectiveness of each program when considered from the perspective of teachers. Each of the

programs had varying strengths and weaknesses. It is worth noting that teachers identified more strengths than weaknesses for each program.

4. What are the Strengths and Weaknesses of each Approach from the Perspective of an Administrator?

To determine the strengths and weaknesses of each program from the perspective of an administrator a administrator's survey (Appendix F/1, 2) was administered to the principal of the Bay State Reading Initiative school and to the assistant principal at the Reading First school. The assistant principal's response needed to be utilized due to the non-response from the principal. When the Bay State Reading Initiative administrator was asked what they liked best about the reading program their reply was, "it differentiates its strategies of instruction options that actually allow teachers to instruct with a variety that has empowered more children to read." The Reading First administrated stated, "the ability to differentiate via leveled readers was helpful, along with the data gathered via DIBELS testing that helped pinpoint areas in need of more intensive instruction/intervention."

When the administrators where asked what would they would change about the reading program and why the Bay State Reading Initiative administrator replied, "if we lose funding that reduces our support staff, we will have a difficult time delivering interventions. The success of this program is dependent on interventions that are directed by an instructor and the classroom teachers are dependent on having the appropriate support." The Reading First administrator noted, "the timed aspect of the DIBELS is important but I'd like to be able to collect data timed and untimed and see what that data shows. Another area of weakness was the reading comprehension as opposed to being able to decode."

### C. Implications for Practice

The implications for practice that came out of this study include that School has a solid point of reference when establishing an effective reading program. Both programs utilized a 3 –

Tier Reading Model in delivering their reading program. The DIBELS assessment was used three times a year to determine fall, winter, and spring benchmarks. Students who were determined to be some risk or at risk received additional reading interventions for both programs. In addition monthly formative assessment was used to determine whether the interventions were effective of not. With the results of this study it will provide for administrators the elements that are needed to implement a reading program that will produce gains in reading scores. It will provide a framework of implementation to provide for them the guidance needed in establishing the pieces to assure results. Administrators will have a better understanding to the progression of how to teach reaching along with what needs to occur for students to provide best practices possible for students. Identifying best practices for administrators and teachers will take away any guess work in the process. This framework will also assist principals in becoming a strategic planner of reading. In understanding what elements need to be part of the program in addition to the 3 – Tier Reading Model principals can become the driving force in meeting the needs of all students.

Higher education should also take notice of this study when it comes to the teachers input via the teacher survey and interview process. Professional development that was provided by both programs prior to implementation mentioned by the teachers in the survey speaks of the gaps that occur for teachers in their own educational process. Which brings us back to the national debate on which method whole language or phonics produces the most effective way of teaching reading? A more defined road map needs to be a foundation for teachers on how to teach reading. When coming out of college without the methods of teaching reading under their belt teachers will struggle with this most important piece for establishing a successful academic career for a child especially in the primary grades.

There are clearly cost implications as well. Given the mixed results related to gain scores and educator satisfaction, the financial challenges facing all schools make it crucial to be good

stewards of resources. Therefore, when all else is equal – less expensive programs will create efficiencies that will enable funds to be allocated elsewhere for school improvement.

### D. Implications for Policy

If a national agenda could be established to address the reading needs of our nation's children it would allow all teachers working off the same frameworks in addressing student reading needs. A common language would at least allow teachers to build upon a framework that all teachers are working off of. If starting with the 3 – Tier Reading Model to build upon would at least assure that a core curriculum was being used with interventions to address reading gaps. Another part of the frameworks should include the use of data and how that data would drive instruction. Utilizing data to progress monitor students who are receiving interventions would also be a standard practice of teaching reading. What these interventions would look like would be the area that would have teacher/administrator discretion that is research based. All children learn in different ways, some being visual learners and some being auditory learners, teachers and administrators need to provide materials that work towards their strengths. Some students have a stronger reaction to whole language method and some need phonics to help them decode words. All students need to have an understanding of the written text and how for every letter there is a sound. For some letters the sounds have long or short sounds depending whether it follows a rule or not. Until a consensus is reached our future teachers in training will not be allowed the opportunity to learn how to teach reading to their students. It then becomes a school issue where the principal and co-teachers will need to assist their rookie colleagues in acquiring the skills needed to understand the five components of reading and the importance of utilizing data to drive instruction.

### E. Implications for Research

The implications for future research are a result of questions raised with completion of this study. The questions raised as future research include the following:

- Increasing sample size would allow for a more in depth understanding of the impact of the program.
- Even though the BSRI and Reading First program was implemented in grades K − 3 following these students across more years would allow insight into the impact the programs. It would determine if the programs had long term effects on students as they progressed into the upper elementary grades and beyond.
- study the impact of the building Literacy Coach. These individuals are guiding the teachers who are one the front line of direct instruction to students. If they do not have the capacity to lead, guide, and instruct their teachers then direct implications affecting students' outcomes will be documented. It is evident through the Teacher Survey Responses that a program can be driven through the guidance of the Literacy Coach and still document student gains in reading scores even with teachers' perception that they are working with a somewhat satisfied to not very satisfied principal.
- To determine whether teacher experience impacts students.
- To determine whether teacher perception impacts students.
- Comparing the BSRI or Reading First program to a whole language model to determine which produces the best results.

- Compare intervention groups between the BSRI and Reading First programs.
- To further study the significance of School and Special Education students.

These are only a few questions that were spawned from this study. Additionally, with School having such strong results when determining whether gender, free or reduced lunch, special education, and school affects reading scores this appears to be the beginning of a series of studies which should follow these results. These follow up studies should focus on the School variable to have a more in depth understanding of the impact that these programs have. With a clearer understanding of the elements of an effective reading program it then can be brought to other venues to produce similar results.

### F. Conclusion

The search continues for determining "what works" in education. The discourse of education reform persists within our nation not only within academic think tanks but also Hollywood is now getting involved as the film "Waiting for Superman" has brought the focus into movie theaters. The debate of who is to blame, what's wrong with our educational system and the dialogue about funding or lack thereof seems to be the main focus of discussion. It is time to start talking about what is working in education. There are programs and initiatives that are producing positive results, even if they are minimal, within our schools across the nation. It is time to focus on the positive. This study indicates that the specific program that is implemented may be less important than how it is implemented. There are clearly trade-offs to any program; and how educators use these tools is likely to be more telling than anything else.

Through studies similar to this one information needs to be taken from the results and acted upon. It is time to take research and convert it into action within our schools. Programs

need to have the capacity to adapt to meet the needs of students in order to produce the best possible results. This study speaks to finding educational practices that produce the greatest reading gains when comparing two schools in Western Massachusetts. Additionally, "money matters." We need to not only focus on impact, but also on how much the impacts costs us so that we can be efficient and responsible stewards of limited resources. As we seek to find solutions in narrowing the gaps in education sometimes we need a more concrete reason to why a particular program should be implemented and rather than merely implementing the educational fad of the moment.

### APPENDIX A/1

### READING FIRST TEACHER QUESTIONNAIRE

# TEACHER QUESTIONNAIRE

Thank you for completing this survey. Please complete both sides of the questionnaire.

**DEMOGRAPHICS**:

1.	How many years	s have you been teaching?			
2.	2. How many years have you been teaching in this school?				
3.	3. What grade level do you teach?				
4.	. How many years have you been teaching in this grade level?				
	5. Prior to implementation of the reading program did you have any formal training (pre-service &/or in-service) on how to teach reading? <b>Yes</b> / <b>No</b> (Circle One)				
<u>P1</u>	ROGRAM IMPI	LEMENTATION: (Circle O	ne)		
of	the reading prog	e following questions, please for ram at your school. The first t 903/04 to 2005/06.		0 1	
		red were you to implement the <b>Somewhat Prepared</b>	reading program? Not Very Prepared	Not at all Prepared	
		ere you with the training you r Somewhat Satisfied	received for the reading pro Not Very Satisfied	gram? Not at all Satisfied	
		ere you with the supplemental <b>Somewhat Satisfied</b>	materials you received? Not Very Satisfied	Not at all Satisfied	
	How satisfied wo	ere you with the role your prin	cipal played in the implement	entation of the	
•	ery Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at all Satisfied	
	. How satisfied vereading program	were you with the support that	was given to you over the f	first three years of	
V	ery Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at all Satisfied	
	11. How satisfied were you with the ongoing professional development that you received throughout the reading program?				
	•	Somewhat Satisfied	Not Very Satisfied	Not at all Satisfied	

12.	Overall what are the strengths of the reading program?
13.	Overall what are the weaknesses of the reading program?
14.	If you could do the reading program over again what would you change?
_	

### APPENDIX A/2

### BAY STATE READING INITIATIVE TEACHER QUESTIONNAIRE

# TEACHER QUESTIONNAIRE

Thank you for completing this survey. Please complete both sides of the questionnaire.

<u>DEMOGRAPHI</u>	<u>CS</u> :				
1. How many year	ars have you been teaching?				
2. How many year	rs have you been teaching in	this school?			
3. What grade lev	. What grade level do you teach?				
4. How many year	. How many years have you been teaching in this grade level?				
-	nentation of the reading prog n how to teach reading? Yes		al training (pre-service		
PROGRAM IMI	PLEMENTATION: (Circle	e One)			
of the reading pro	he following questions, plea. gram at your school. The fi was 2006/07 through 2008/	rst three years of implement			
6. How well prep Very Prepared	ared were you to implement Somewhat Prepared	0 1 0	Not at all Prepared		
7. How satisfied Very Satisfied	were you with the training yo Somewhat Satisfied	ou received for the reading pour Not Very Satisfied	program? Not at all Satisfied		
8. How satisfied Very Satisfied	were you with the supplement Somewhat Satisfied	ntal materials you received? Not Very Satisfied	Not at all Satisfied		
9. How satisfied program?  Very Satisfied	were you with the role your p	principal played in the imple  Not Very Satisfied	ementation of the  Not at all Satisfied		
•		•			
the reading progra		nat was given to you over tr	ie first three years of		
Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at all Satisfied		
	were you with the ongoing	professional development th	nat you received		
throughout the rea Very Satisfied	ding program?  Somewhat Satisfied	Not Very Satisfied	Not at all Satisfied		

12.	Overall what are the strengths of the reading program?
13.	Overall what are the weaknesses of the reading program?
14.	If you could do the reading program over again what would you change?

### APPENDIX B/1

### READING FIRST ADMINISTRATOR QUESTIONNAIRE

# ADMINISTRATOR QUESTIONNAIRE

Thank you for completing this survey. Please complete both sides of the questionnaire.

<b>DEMOGRAPHIC</b>	<u>CS</u> :				
1. How many year	1. How many years have you served as an administrator?				
2. How many year	rs have you served as an adn	ninistrator in this school? _			
3. How many year	rs were you a teacher prior to	o becoming an administrato	or?		
4. During your tea	4. During your teaching years did you have any formal training on how to teach reading?				
YES / N	YES / NO (Circle One)				
PROGRAM IMP	<u>LEMENTATION</u> : (Circle	e One)			
of the reading prog	ne following questions, pleas gram at your school. The fir 003/04 to 2005/06.		v -		
	ared were your teachers to in  Somewhat Prepared				
6. How satisfied v Very Prepared	vere you with the training yo Somewhat Prepared	our teachers received for the Not Very Prepared			
7. How satisfied v program?	vere you with the role your I	Literacy Coach played in the	e implementation of the		
	Somewhat Prepared	Not Very Prepared	Not at all Prepared		
	vere you with the support that	at was given to you over the	e first three years of the		
program? Very Prepared	Somewhat Prepared	Not Very Prepared	Not at all Prepared		
9. How did you go	et the teachers to buy into the	e initiative of taking part in	the reading program?		

10. How did you support your teachers and your Building Literacy Coach?
11. How often were you visited by the program's Literacy Coach/Principal's Coach?
12. What type of ongoing professional development did you personally receive?
12. What type of oligoing professional development did you personally receive:

13. What did you like best about the reading program?		
4.	What would you have changed about the reading program? Why?	

### APPENDIX B/2

### BAY STATE READING INITIATIVE ADMINISTRATOR QUESTIONNAIRE

# ADMINISTRATOR QUESTIONNAIRE

Thank you for completing this survey. Please complete both sides of the questionnaire.

<b>DEMOGRAPHIC</b>	<u>CS</u> :		
1. How many year	rs have you served as an adn	ninistrator?	
2. How many year	rs have you served as an adn	ninistrator in this school? _	
3. How many year	rs were you a teacher prior to	o becoming an administrato	r?
4. During your tea	aching years did you have an	y formal training on how to	teach reading?
YES / N	NO (Circle One)		
PROGRAM IMP	<u>LEMENTATION</u> : (Circle	e One)	
of the reading prog	ne following questions, pleas gram at your school. The fir was 2006/07 through 2008/0	st three years of implement	
5. How well prepared <b>Very Prepared</b>	ared were your teachers to in Somewhat Prepared	nplement the reading progra Not Very Prepared	nm? Not at all Prepared
6. How satisfied v Very Prepared	vere you with the training yo Somewhat Prepared	our teachers received for the <b>Not Very Prepared</b>	reading program?  Not at all Prepared
	vere you with the role your I	Literacy Coach played in the	e implementation of the
program? Very Prepared	Somewhat Prepared	Not Very Prepared	Not at all Prepared
8. How satisfied v program?	were you with the support that	at was given to you over the	e first three years of the
Very Prepared	Somewhat Prepared	<b>Not Very Prepared</b>	Not at all Prepared
9. How did you ge	et the teachers to buy into the	e initiative of taking part in	the reading program?

10. How did you support your teachers and your Building Literacy Coach?
10. How did you support your teachers and your Banding Energy Couch.
11. How often were you visited by the program's Literacy Coach/Principal's Coach?
12. What type of ongoing professional development did you personally receive?

13.	What did you like best about the reading program?
14.	What would you have changed about the reading program? Why?

### APPENDIX C/1

### TEACHING EXPERIENCE BAY STATE READING INITIATIVE

# <u>Teaching Experience Bay State Reading Initiative:</u> N=9 (Grade Levels Taught: K=2, 1=1, 2=1, 3=5)

	<u>Range</u>	<u>Average</u>
Total Years Teaching Years Teaching in that School	5-30 2-11	17.5 7.5
Previous Formal Training	No=0	Yes=9

### APPENDIX C/2

### TEACHING EXPERIENCE READING FIRST

<u>Teaching Experience Reading First:</u>
N=9 (Grade Levels Taught: K=2, 1=1, 2=3, 3=3)

	<u>Range</u>	<u>Average</u>
Total Years Teaching	13-34	27.78
Years Teaching in that School	8-34	21.11
Previous Formal Training	No=2	Yes=7

 $\label{eq:appendix} \mbox{ APPENDIX D/1}$  BAY STATE READING INITIATIVE RESPONSE TO TEACHER SURVEY ITEMS

	Very Prepared	Somewhat Prepared	Not very Prepared	Not at All Prepared
	4	3	2	1
How well prepared were you to implement the reading program?	5	4	0	0
	Very Satisfied	Somewhat Satisfied	Not very Satisfied	Not at All Satisfied
	4	3	2	1
How satisfied were you with the training you received for the reading program?	6	2	1	0
How satisfied were you with the supplemental materials you received?	4	2	3	0
How satisfied were you with the role your principal played in the implementation of the program?	4	2	3	0
How satisfied were you with the support that was given to you over the first three years of the reading program?	5	3	1	0
How satisfied were you with the ongoing professional development that you received throughout the reading program?	3	3	2	1

# APPENDIX D/2 READING FIRST TEACHER RESPONSE TO TEACHER SURVEY ITEMS

	Very Prepared	Somewhat Prepared	Not very Prepared	Not at All Prepared
	4	3	2	1
How well prepared were you to implement the reading program?	5	4	0	0
	Very Satisfied	Somewhat Satisfied	Not very Satisfied	Not at All Satisfied
	4	3	2	1
How satisfied were you with the training you received for the reading program?	6	3	0	0
How satisfied were you with the supplemental materials you received?	7	2	0	0
How satisfied were you with the role your principal played in the implementation of the program?	0	6	3	0
How satisfied were you with the support that was given to you over the first three years of the reading program?	5	3	1	0
How satisfied were you with the ongoing professional development that your received throughout the reading program?	6	3	0	0

### APPENDIX E/1

### OPEN-ENDED REPONSES OF TEACHERS BAY STATE READING INITIATIVE

### Open-Ended Reponses of Teachers Bay State Reading Initiative:

N=0

Open-ended question #12: Overall what are the strengths of the reading program?

### Number of <u>Times Teachers Who Responded</u> Small groups and center training 3 Reading Series (Scott Foresman) 3 Reading Coach 2 **Student Interventions** 2 **Summer Training** 2 **Ongoing Professional Training** 2 BSRI staff at meetings helpful 1 Open-ended Question #13: Overall what are the weaknesses of the reading program? Overall daily expectation too demanding/expectations 5 unrealistic "Sidewalks" are useless/weak intervention 2 2 Making sure there is enough staff to provide support No training for new teachers 1 Special Education teachers went out and got 1 their own training for interventions Interventions not focused enough on comprehension 1 1 Confusing spelling program

1

No differentiation of teachers' strengths & weaknesses

• No weaknesses 1

Open – ended Question #14: If you could do the reading program over again what would you change?

•	Change the "Big Brother" atmosphere/teachers don't feel supported	2
•	I would not change anything	2
•	More help on picking daily curriculum	1
•	BSRI staff deliver professional development instead of reading coach	1
•	Rather use guided reading series instead of reading core	1
•	One year of professional development prior to implementation	1
•	Feedback after BSRI staff walk-through	1

### APPENDIX E/2

### OPEN ENDED RESPONSES OF TEACHERS READING FIRST

## Open Ended Responses of Teachers Reading First:

N=9

Open-ended question #12: Overall what are the strengths of the reading program?

### Number of Times Teachers Who Responded **Professional Development** 4 **Assessment Tools** 4 Materials 4 Reading Coach 2 **Explicit and Systemic Instruction** 2 Three Tier Model 1 Continuity of skills from grade to grade 1 Delivered at student's level 1 Well integrated of five key reading components 1 Open-ended Question #13: Overall what are the weaknesses of the reading program? 3 Lack of writing 2 More staffing for support Reduction of money 2 More coaching within classroom 2 More time to become familiar with materials and instruction 1 1 Adding a comprehension component to the testing

A lot of information at one time
Too much testing
Not enough of phonics
Basal reader too repetitive and boring to teach

Open – ended Question #14: If you could do the reading program over again what would you change?

Integrate more writing 3 Implement "Walk to Read" model sooner 2 2 Comprehension piece Utilize coach more 1 Lack of grant information prior to implementation 1 My own personal mind-set to be more positive 1 Try to implement more supplemental materials 1 Variety of curriculums not scripted approach 1 Newer version of text to include comprehension piece 1 More information about interventions that work 1

### APPENDIX F/1

### ADMINISTRATOR EXPERIENCE BAY STATE READING INITIATIVE

### Administrator Experience Bay State Reading Initiative:

N=1

	<u>Range</u>	<u>Average</u>
Number of years served as an administrator	20	20
Number of years served as administrator in that school	5	5
Years as a teacher prior to being an administrator	16	16
Any formal training on how to teach reading as a teacher	Yes/Limited	

# Open-Ended Responses of Bay State Reading Initiative Administrator: (N=1)

Open-ended Question # 9: How did you get the teachers to buy into the initiative of taking part in the reading program?

"By making sure they had all the support in place for the programs implementation – materials, support staff, hand-holding during program change initiatives, classroom modeling by reading coach.

Open-ended Question #10: How did you support your teachers and your Building Literacy Coach?

"Covering classrooms so teachers could meet together to plan and strategize, go over data, discuss individual students and strategies."

Open-ended Question #11: How often were you visited by the program's Literacy Coach/Principal's Coach?

"Once a month when involvement began and for first couple of years. Less often after that, but whenever requested."

Open-ended Question #12: What type of ongoing professional development did you personally receive?

"Purposeful walk-through, analyzing data, leading grade level meetings to focus on difficult issues."

Open-ended Questions #13: What did you like best about the reading program? "It differentiates its strategies of instruction options that actually allow teachers to instruct with a variety that has empowered more children to read."

Open-ended Question #14: What would you have changed about the reading program? Why? "If we lose funding that reduces our support staff, we will have a difficult time delivering interventions. The success of this program is dependent on interventions that are directed by an instructor and the classroom teachers are dependent on having the appropriate support."

### APPENDIX F/2

### ADMINISTRATOR EXPERIENCE READING FIRST

### <u>Administrator Experience Reading First:</u>

N=1

	<u>Range</u>	<u>Average</u>
Number of years served as an administrator	15	15
Number of years served as administrator in that school	6	6
Years as a teacher prior to being an administrator	5	5
Any formal training on how to teach reading as a teacher	No	

# Open-Ended Responses of Reading First Administrator: (N=1)

Open-ended Question # 9: How did you get the teachers to buy into the initiative of taking part in the reading program?

"The initiative was begun the school year preceding my being hired. It was chosen to address poor student achievement in reading at the school."

Open-ended Question #10: How did you support your teachers and your Building Literacy Coach?

"I participated in the Read First Summer Workshops and collaborated with the Reading First Teacher/Coordinator regularly during Student Assistant Team meetings to address concerns around student progress in reading."

Open-ended Question #11: How often were you visited by the program's Literacy Coach/Principal's Coach?

"The Principal and Reading First Coordinator participated in training several times each year."

Open-ended Question #12: What type of ongoing professional development did you personally receive?

"Only the summer Reading First trainings.

Open-ended Questions #13: What did you like best about the reading program? "The ability to differentiate via leveled readers was helpful, along with the data gathered via DIBELS testing that helped pinpoint areas in need of more intensive instruction/intervention."

Open-ended Question #14: What would you have changed about the reading program? Why? "The timed aspect of the DIBELS is important but I'd like to be able to collect data timed and untimed and see what that data shows. Another area of weakness was the reading comprehension as opposed to being able to decode.

### APPENDIX G

### TEACHER INTERVIEW QUESTIONS

### **Interview Questions:**

- What is your philosophy about reading and why?
  - Did your present reading program have any impact on your philosophy? How has it changed?
  - Was your philosophy in line with the new reading program you were going to take part in? If not, how were you able to accept a program that was not in line with your philosophy?
- What has been the impact of your program?
  - o On students?
  - o On teachers?
- What was best about the program?
- What was most challenging about the program?
- What was most surprising about the program?
- How important do you think the role of the Literacy Coach played in the implementation of your program?
- Does the position of the Literacy Coach continue to play an important role in your program? Why of Why not?
- How did funding impact the implementation of your reading program?
- I funding were unlimited, what additional support would have been beneficial for your program?
  - o Did lack of funding create any problems for your program?

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