MEASURING CHILDREN'S READING TREND LINES WITH THE MBSP: A LITERATURE REVIEW AND CRITICAL ANALYSIS

by

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ABSTRACT

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The acquisition of basic reading skills is necessary for children to be successful academically. More importantly, the failure to obtain such skills can have drastic repercussions on their adult life. All students must be given equal opportunity to learn to read. Research suggests that some children are at a greater risk for reading failure than others. Children that come from economically disadvantaged families typically score lower on reading tasks then children from more advantage families, known as the reading achievement gap. Furthermore, these students are more likely to experience summer

reading setback, due to their limited resources and opportunities when compared to their more affluent peers. Research suggests that reading achievement varies between students with differing socioeconomic status and with changes in the academic calendar. Curriculum-Based Measurement has been an effective tool in tracking changes in reading skills over time. Specifically, computer programs, such as the *Monitoring Basic Skills Progress* (MBSP), have made it possible to track the basic reading skills of larger groups of children over the course of the academic year.

This research project consists of a review and critical analysis of the literature pertaining to the importance of becoming literate, the reading skills of American children, the achievement gap, the impact of summer reading setback, and the importance of tracking reading skills over time. The paper concludes with a proposal for a study which would utilize the MBSP as a means to track the reading development of children. In the proposed study, the reading achievement of less advantage students will be compared to that of more advantaged students, and the reading achievement trend line of all students will be analyzed compared to changes in the academic calendar.

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CHAPTER I: INTRODUCTION

Introduction

The ability to read and read well is an invaluable skill in American society. Literacy has been described as a type of currency. Those with such a resource will be able to pursue their dreams whether they are social, political, civic, or economic (Kirsch, Jungeblut, Jenkins & Kolstad, 1993). Unfortunately, those who are less literate or, worse, illiterate all together will have less means to fulfill their aspirations. In addition to this, a number of social problems are linked to low reading achievement, including delinquency, dropping out of school, teenage pregnancies, unemployment, and homelessness (McGill-Franzen, 1987; McGill-Franzen & Allington, 1991). It is a shocking statistic that achievement levels at the end of first grade can predict quite accurately who will be successful in life (McGill-Franzen & Allington, 2001). Simply put, limited literary proficiency and low reading achievement are the apex of a downward spiral. Those who struggle to learn to read will struggle in school. Individuals who do not finish school or who have fewer skills will obtain lower-paying jobs, which mean less resources and opportunities (Gardener, 2001; Kirsch et al., 1993; National Center for Education Statistics, n.d.). Therefore, it is not hard to believe that reading ability and socioeconomic status are directly connected.

Studies have shown that children who come from low socioeconomic families may have the most to lose from the lack of resources and opportunity. These children tend to exhibit less developed reading skills than children that come from more affluent families (Bracey, 2003; Plisko, 2003; Lyon, 1999). This is known as the achievement gap. Nearly forty years ago the United States government believed that the achievement gap was a cause for national concern. Therefore, the Title I program was specifically created to provide supplemental funding for the

education of less advantaged students. Regardless of such efforts, it appears that Title I and other remedial programs have not been effective in closing the achievement gap. More affluent students continue to make gains in reading skills while less affluent students fall further and further behind (Plisko, 2003; PIRLS, 2001; Lyon, 1999).

Several researchers believe that they have found the cause of the reading achievement gap. They believe that the lack of resources and learning opportunities for less affluent students in the summer is detrimental. Where as more affluent students typically make gains during the summer time, less advantaged students typically remain idle or actually lose ground academically. This phenomenon is termed summer reading setback (Allington & McGill-Franzen, 2003; Entwisle, Alexander & Olson, 2001; Cooper, Nye, Charlton, Lindsay & Greathouse, 1996). This makes more sense when considering that less advantaged and more advantage students actually make comparable gains in reading achievement when school is in session (Cooper et al., 1996; Entwisle, Alexander & Olson, 1997; Entwisle et al., 2001). Likewise, most Title I programs do not run through the summer months, when additional resources and learning opportunities would be beneficial. Entwisle et al. (1997; 2001) refer to this as "The Faucet Theory." Not only are resources limited at home for low socioeconomic children, but the resources at school are shut off for such children during the summer months as well.

Researchers like Allington and McGill-Franzen (2003) have suggested that summer reading setback is a phenomenon that has been largely overlooked for too long. They criticize those in charge of programs, such as Title I, that have not taken this phenomenon into account. Seen in a different light, this lack of response could be interpreted as a need for more information on the reading trends of America's children and the impact of summer reading setback.

Regardless, continual tracking of the reading skill of American children appears necessary to understanding variation in reading trends.

New assessment techniques have been developed in the last twenty years to evaluate the attainment of skills such as reading. Created by Deno and his colleagues at the University of Minnesota, Curriculum-Based Measurement (CBM) has been acclaimed for its efficiency and ability to measure student standing and growth over time, especially short periods of time (Fuchs & Fuchs, 2002). CBM was originally used with special education students to assess progress and instruction. Researchers have found CBM to be more sensitive to academic growth than standardized tests (Marston, Fuchs, & Deno, 1986), and able to accurately determine changes in performance after academic breaks (Allinder & Fuchs, 1994). CBM tests in reading originally required one-on-one timed assessments of reading passages. A time consuming process if every student were to be assessed regularly in a classroom. More recent developments of computerized CBM tests, such as the Monitoring Basic Skills Progress (MBSP, 1997) Test by Fuchs, Hamlett and Fuchs, have made the collection and storage of data for all students a greater reality. Therefore, it seems that the use of CBM, especially the MBSP Test, would be ideal to track the reading trend lines of American children.

Rationale and Significance of the Proposed Study

This paper will examine the existing literature on American adult literary skills, the importance of becoming literate, and the reading skills of American children. It will also address the reading achievement gap that exits between more affluent and less affluent children, sources for closing the achievement gap, such as Title I, and the impact of summer reading setback. The importance of tracking reading skills over time will be discussed, as well as methods in which to do so, including Curriculum-Based Measurements and the Monitoring Basic Skills Progress

Test. The paper will conclude with a proposal for a study to examine two elements. One, it is proposed that a comparison of reading trend lines be conducted between children who are eligible for free and reduced-price meals and those who are not eligible. Two, it is proposed that an analysis of children's reading trend lines be conducted to trace variations in reading scores that coincide with breaks in the academic calendar, specifically the summer break. Data will be collected by using the computerized Monitoring Basic Skills Progress (MBSP) Test to assess student achievement in reading once every two weeks. Data collection will occur from fall to spring of the 2004-2005 school year, and then once again in the fall of the 2005-2006 school year. All data will be collected from a small school in central Wisconsin.

Proposed Research Questions

The following research questions are being proposed based on the preceding discussion.

1. How do the trend lines for reading achievement vary between students that are eligible for free and reduced-price meals and those who are not?
2. How do the trend lines for all students vary coinciding with breaks in the academic calendar, specifically over the summer break?

Definition of Terms

For clarity, the following definition of terms has been provided.

Achievement Gap: The difference in educational achievement gains made between more affluent and less affluent students.

Cloze Procedure: A method of systematically deleting words from a prose selection and then evaluating the success a reader has in accurately supplying the words deleted (McKenna & Robinson, 1980).

Curriculum-Based Measurement: Short, accurate, and easy-to-use formative evaluation tool used to assess a student's progress during the course of instruction.

Free and Reduced-Price Meals: Meals provided to children that come from a family with a household income less than 130% of the Federal Poverty Guideline, and meals provided at a lesser cost to children who come from families that have a household income that is between 130% and 185% of the Federal Poverty Guidelines.

Literacy: The ability "[to use] printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential" (National Center for Education Statistics, n.d., p. 1).

Maze Technique: A multiple choice cloze reading technique, which has been validated as a Curriculum-Based testing strategy (Shinn, 1998).

Summer Reading Setback: The phenomenon of children from lower socioeconomic status families experiencing an impediment in learning over the summer, when their peers from higher socioeconomic status families actually make gains in achievement while they fail to make such gains or actually lose ground academically.

Title I: A program created under the Elementary and Secondary School Act (ESEA) of 1965 and amended within the reauthorization of ESEA by the No Child Left Behind Act of 2001, providing financial assistance to educational agencies that serve a high percentage of low-income families.

CHAPTER II: LITERATURE REVIEW

This chapter will discuss the most recent literature on the literacy skills of American adults, the importance of becoming literate, and some of the most current information on the reading skills of American children. It will also discuss the achievement gap between more advantaged and less advantaged youth, Title I efforts to close the achievement gap, and the impact of summer reading setback. Furthermore, the importance of tracking children's reading skills will be addressed. A description is provided on the use of Curriculum-Based Measurement and, more specifically, the use of the Monitoring Basic Skills Progress Test to track such skills over time. Finally, there will be a critical analysis of the limitations of current research on the topic of summer reading setback and the use of standardized tests to assess this phenomenon.

The Literacy Skills of American Adults

The most current and thorough description of the literacy skills of American adults can be found in the results of the 1992 National Adult Literacy Survey (NALS). The NALS is sponsored by the United States Department of Education's National Center for Education Statistics (NCES). The findings of the 1992 NALS were obtained by randomly selecting nearly 13,600 Americans aged 16 and older representative of the adult population of the nation. Data was collected by using trained staff members to interview participants. According to this survey, literacy is defined as the ability "[to use] printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential" (National Center for Education Statistics, n.d., p. 1).

Unlike past measures of adult literacy, the NALS does not portray literacy as an all or none situation. Rather, to discuss the variation in ability levels five different literacy scales were created. Labeled as Levels 1 through 5, these scales represent an evolution of skills from Level 1

being the most basic to Level 5 being the most advanced. In addition to the levels of proficiency adults were evaluated in three areas of literacy, including prose, document and quantitative literacy. Prose tasks required participants to locate, integrate, and elaborate on written information, such as that from newspaper stories, written instructions and poems. Document tasks required participants to use short forms of graphically displayed information to function in everyday life, such as job applications, transportation schedules and graphs. Quantitative tasks required participants to locate, integrate, and perform operations with information presented numerically or on charts and graphs within prose and document tasks. Such tasks included balancing a checkbook, completing an order form and calculating interest. Those adults that scored in literacy Level 1 of the 1992 NALS demonstrated the lowest level of prose, document, and quantitative proficiency. Conversely, the adults that demonstrated the highest proficiency in these areas scored in literacy Level 5.

A summary of the 1992 NALS findings by Kirsch, Jungeblut, Jenkins, and Kolstad (1993) can be found at http://nces.ed.gov/naal/resources/resources.asp. Kirsch et al. (1993) reported that, according to the 1992 NALS, 40-44 million of the then 191 million adults in America, or approximately 21-23 percent, would score in literacy Level 1. Approximately 50 million, or 25-28 percent of American adults, would score in the next highest level of proficiency at literacy Level 2. This means that approximately half of the American adult population, 47-49 percent, would be expected to demonstrate the most basic or simple literacy skills and strategies. Comparatively, 57-67 million adults, 30-35 percent, would likely receive scores placing them in the Level 3 literary classification, and 34-40 million adults, 18-21 percent, would likely receive scores consistent with Literacy Levels 4 and 5.

The 1992 NALS depicted a strong correlation between the number of years of educational achievement and the level of literacy proficiency. Virtually two-thirds of the adults in literacy Level 1 had abandoned their education before finishing high school. Seventy-five to eighty percent of adults that had less than eight years of school were in literacy Level 1. In contrast, only 16-20 percent of adults that had finished high school were in literacy Level 1, and another 10-13 percent of adults that had received their high school diplomas were in the top two literacy levels. When education is furthered beyond high school literacy rates again increase drastically. Of those Americans with four year college degrees only four percent were in literacy Level 1, while 44-50 percent were in the two highest literary proficiency levels.

The Importance of Becoming Literate

Surprisingly, the roughly 90 million Americans in literacy Levels 1 and 2 reported that they did not necessarily believe that they were "at-risk" because of their literary proficiency. Sixty-six to 75 percent of adults in Level 1 and 93-97 percent of adults in Level 2 described themselves as being able to read or write English "well" or "very well," though the survey clearly demonstrated that their skills were much more limited (Kirsch et al., 1993). These adults who see themselves as able to effectively communicate in American society, obviously, do not see how their opportunities have been limited due to their lack of literary proficiency.

Many social problems are linked to low reading achievement, including delinquency, dropping out of school, teenage pregnancies, unemployment, and homelessness (McGill-Franzen, 1987; McGill-Franzen & Allington, 1991). The National Institute of Child Health and Development (NICHD) has gone as far as labeling reading failure as a significant public health problem because of its enormous psychological, social, and economic consequences (Lyon, 1999). Findings from the 1992 NALS indicates that American adults with higher literary

proficiency levels were more likely to have jobs, worked more weeks throughout the year, and earned a larger income than those in the lower proficiency levels. Likewise, American adults in literacy Level 1 were far more likely to receive food stamps and were far less likely to collect interest from a bank account than adults in literacy Levels 4 and 5 (Kirsch et al., 1993).

Literacy has been described as a type of currency in society. Those with it will have more resources to pursue their aspirations whether they are social, political, civic, or economic (Kirsch et al., 1993). Kirsch et al. (1993) go on to state that though more Americans are literate today than at any other time in our nation's history, technological advancements have created a larger demand for literate adults. In the article *Job Opportunities for the Next 30 Years* Gardner (2001) supports this position by stating, "to obtain a job in the new economy, young people will be required to be educated" (p. 2). Gardner (2001) adds that Americans will need a good education, training, and a commitment to learning in order to be successful and sustain employability. Evidence again affirms that those who do not possess these characteristics will be subject to lower paying jobs. Gardner (2001) asserts, "Society cannot afford poorly prepared youth . . . [therefore] the challenge is on all our shoulders to promote achievement and to support the aspirations of all of our youth" (p. 3). Gardner's assertion linking the academic achievement of youth to future employment deserves a closer look.

It is a shocking statistic that achievement levels at the end of first grade can predict quite accurately who will be successful in life (McGill-Franzen & Allington, 2001). McGill-Franzen and Allington (2001) state, "Children become adults; children who don't learn to read become adults who can't" (p. 86). It is important to realize that reading is a challenge that strikes fear in almost 60 percent of America's children, and for approximately 20-30 percent of these children learning to read will be the most difficult assignment that they ever attempt (Lyon, 1999).

achievement, habits, and attitudes of the nation's fourth graders. Results of the 2001 PIRLS have been viewed in both a positive and negative light in America. Some feel that a ninth place finish is less than stellar and indicates that American children are struggling to learn to read. Others take a different stance. Considering statistical significance, only three other countries scored higher than the United States (Bracey, 2003). The PIRLS (2001) International Report itself claims that the United States "performed well" and scored as high as or higher than all the other countries in the study. According to Bracey (2003), concern about the United States performance should not focus on how America's students compared to other countries' students, but on how America's students compared to one another.

Bracey (2003) noted that poor students, those considered eligible for free and reduced-price meals, scored considerably lower on the 2001 PIRLS Reading Assessment. As the percentage of students eligible for free and reduced-price meals increased, the average score on the reading assessment decreased. With an international average score of 500, American schools with only 10-24.9 percent of students receiving free and reduced-price meals scored an average of 567. Those schools with 25-49.9 percent, 50-74.9 percent, and 75 percent or more students receiving free and reduced-price meals obtained average scores of 551, 519, and 485 respectively (Bracey, 2003).

Similar findings can be found in the 2003 National Assessment of Educational Progress. Since 1969, the United States government has periodically tracked and published the educational progress of American students. The National Assessment of Educational Progress (NAEP), also known as "The Nation's Report Card," monitors fourth and eighth graders achievement in key academic areas. Based on performance in each area, the NAEP divides students into three different achievement levels, including Basic, Proficient, and Advanced. An analysis of the

findings of the 2003 NAEP Reading and Mathematics Assessment by Valena W. Plisko, Associate Commissioner of the NCES, can be found at http:nces.ed.gov/commissioner /remarks2003/11_13_2003.asp.

Results of the 2003 NAEP Reading Assessment depicted that nationally fourth graders average reading scores were not measurably different than scores from 1992 or 2002. In contrast, the 2003 NAEP Reading Assessment results for eighth graders showed a slightly different trend. Though eighth graders' 2003 average reading scores were higher than those in 1992, they were slightly lower than those from 2002. A commonality when considering national statistics from the 2003 NAEP Reading Assessment is that a greater percentage of students are increasing their reading achievement levels than in the past. More of America's fourth graders were at or above the Proficient level in reading in 2003 than in 1992. Likewise, the percentage of eighth grade students at or above the Basic and Proficient levels in reading had increased from 1992 to 2003. The amount of progress can be measured by other means as well.

Reading scores can also be analyzed by states and jurisdictions. Forty-two states and jurisdictions were involved in the fourth grade reading assessment. When compared with results from 1992, 13 of the 42 states and jurisdictions exhibited increases in their average score, five exhibited decreases, and there were no measurable differences for 24. Thirty-nine states and jurisdictions were involved in the eighth grade reading assessment. When compared with results from 1998, eight of the 39 states and jurisdictions exhibited increases in their average reading score, seven exhibited decreases, and there were no measurable differences for 24. This means that only 31 percent of fourth-grade and 21 percent of eighth-grade states and jurisdictions considered in the 2003 NAEP actually demonstrated progress in reading achievement. The interesting aspect of these findings is the students who are actually making gains.

Though a greater percentage of students are attaining higher levels of reading achievement, percentile scores paint another picture. The NAEP results verify that only those fourth grade students already reading at the 75th percentile, meaning those students already reading as well or better than three-fourths of their same-aged peers, had higher reading scores compared to their peers in 2003 than in 1992. Comparatively, all eighth-graders had made improvement in reading achievement, except the 90th percentile, from 1992 to 2003. However, eighth-graders in the 10th and 25th reading percentiles demonstrated lower achievement levels in reading from 2002-2003. This suggests that students who are already performing well on reading tasks are making gains, where as those who struggle to learn to read remain idle or actually lose ground when it comes to reading achievement. The Associate Commissioner of the NCES draws another connection, as she reports, "Students from lower-income families have lower scores than students from higher-income families" (Plisko, 2003, p.2). Children from economically disadvantaged homes predominantly participate in the Federal lunch program, receiving free and reduced-price meals, and also score in the lowest quartile for early reading skills (Lyon, 1999). In fact, when students who are eligible for free and reduced-price meals are compared to those who are not eligible, gaps in scores can be noticed. The results of the 2003 NAEP showed that the gaps in scores for both fourth and eighth graders in the eligible and non-eligible groups stayed the same from 1998 to 2003. In addition, the gap in reading scores for eighth graders actually increased between 2002 and 2003.

The Achievement Gap

Results of the PIRLS (2001) and the NAEP (2003) exemplify a social adversity that has been a concern for many years. There is a significant difference in the academic achievement of students with more financial resources and those with less. This difference is known as the

achievement gap. The achievement gap may not seem so shocking when considering the downward spiral of events for those adults in the lower literacy levels. It is believed that earning less money affords limited resources and opportunities to the children of those less literate. Due to this fact, these children are less likely to become proficient readers and are more likely to be at-risk of reading failure themselves.

The United States Department of Education (2002) released a brief fact sheet based on the NAEP 2002 that suggests the achievement gap will get worse before it gets better. Two key pieces of evidence were cited. First, long-term trends support that the gap is widening. From the late 1980's to 1999, NAEP scores in low-poverty schools increased while NAEP scores in high-poverty schools decreased. Secondly, fourth-grade scores on the NAEP 1998 revealed that twice as many low-income students, those eligible for free and reduced-meals, were in the Basic level of reading proficiency than those who were not low-income, and significantly less low-income students achieved at the Proficient level (Allington & McGill-Franzen, 2003).

The achievement gap is not a new public education concern. Lyon (1999) labeled the reading difficulties that economically and socially disadvantaged children in the United States face as an epidemic. It is unfortunate to think that this issue of inequality was first addressed nearly four decades ago, and that it is still one of the largest educational issues to date.

Title I: Improving the Academic Achievement of the Disadvantaged

The Elementary and Secondary Education Act (ESEA) of 1965, Public Law 89-10, appears to be the first attempt by the United States government to address the issue of the achievement gap. Title I of the ESEA authorized grants to fund elementary and secondary school programs for children from low-income families. With the reauthorization of the No Child Left Behind (NCLB) Act by President Bush in 2001, which became Public Law 107-110 in 2002, the

achievement gap has again come to the forefront of public policy. As part of the reauthorization of ESEA through NCLB Title I was amended and given a new subtitle, Title I: Improving the Academic Achievement of the Disadvantaged. A description of Title I can be obtained on the United States Department of Education website at http://www.ed.gov/programs/titleipartalegislation.html.

Title I addresses many educational concerns including the opportunities allotted to low-income families. Title I's stated purpose, "to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments" (United States Department of Education, n.d., p. 1). Some of the central goals of Title I were to: meet the educational needs of low-achieving children, especially those in America's highest-poverty schools; provide reading assistance to young children in need; close the achievement gap between advantaged and disadvantaged children; and hold educators and states responsible for the academic achievement of all students, particularly those in low-performing schools.

Title I provides financial assistance to educational agencies that serve a high percentage of low-income families. Schools that receive funding must focus Title I services on those children specifically who are either failing or at-risk of failing academically. Schools with a student-body population comprised of at least 40 percent of children from low-income families may run school-wide Title I programs with the ESEA subsidy. The issue of funding for this program has not been a small matter for the American people. In 2002 alone 10.4 billion tax dollars went into serving those in Title I, and the budget request for 2003 was 11.4 billion dollars (United States Department of Education, 2002). Though Title I funds may be used for children from preschool through the twelfth-grade, 77 percent of Title I funds provide assistance to

children preschool through the sixth grade. It seems logical that services would be centered on building basic reading skills before weaknesses in these skills became an insurmountable detriment in all other areas of education. Entwisle et al. (2001) advise that children's cognitive development around the age of six proceeds twice as fast as it will by age eight or nine. Several Reading initiatives for young children have been created under Title I, such as the Reading First and Early Reading First programs, Even Start, and Improving Literacy through School Libraries (United States Department of Education, 2004). One may ask why then, after forty years of commitment to equity in education, billions upon billions of dollars in funding, and numerous educational programs for young child, is the achievement gap growing.

Research shows that current programs are not enough to address and combat the prevailing literacy issues concerning children (PIRLS, 2001; Plisko, 2003). Lyon (1999) affirms, "Despite the existence of educational programs supported through Title I funding, the proliferation of reading failure among disadvantaged children continues, in the main, unabated" (p. 2). Regardless of these findings, the Unites States government continues to raise standards for America's children and educators. In the next five years or by year 2009, all 52 states are expected to increase the number of low-income students that score in the Proficiency or Advanced categories on the NAEP (United States Department of Education, 2004). Before standards are raised again for those already struggling, key elements of the widening achievement gap and current program failures must be identified and managed. Some researchers believe that they have already pinpointed one crucial factor in this complex equation.

The Impact of Summer Reading Setback

Many researchers believe that it is not necessarily what happens during the school year that causes differences in academic achievement between disadvantaged and more advantaged

children, but more so, what happens in the summer (Allington & McGill-Franzen, 2003; Cooper et al., 1996; Entwisle et al., 2001). Considering most school calendars are nine months long, summer break corresponds with roughly one third of the academic year. For some students, especially the disadvantaged, such a long break may be more than they can afford (McGill-Franzen & Allington, 2001). Too often these children return to school in the fall with fewer reading skills than what they left with in the spring (Allington & McGill-Franzen, 2003). This phenomenon is termed summer reading setback, also known as summer reading loss. Therefore, programs such as Title I that allocate reading resources just during the school year may not be doing enough to tackle the reading gap between disadvantaged children and their more advantaged peers (Allington & McGill-Franzen, 2003).

Cooper et al. (1996) provides a thorough history of the study of summer reading setback. It is believed that the first study to address summer loss was performed by William White in 1906 concerning mathematical skill. It was not until 1924 that Brueckner and Distad performed the first empirical test to determine if summer loss occurred in the reading skills of children with different abilities. Brueckner and Distad did not find a general loss. However, their attempts spurred several other efforts through the 1920's to study this phenomenon. Regrettably, the findings of these studies were inconsistent. Through the 1930's and 40's studies of reading setback dwindled. Those who did take up this cause tended to focus on the relationship between intelligence and summer setback. It was not until 1969, that Hayes and Grether made a discovery when comparing the number of students who received free lunches in various schools. It was found that poorer schools demonstrated losses in reading over the summer and richer schools made gains. Heyns' 1978 study on summer reading setback with Atlanta school children is one of the most notable. Heyns compared changes in word recognition test scores from when school

was in session to scores when it was not in session. Similar to Hayes and Grether's 1969 study, Heyns found that going to school improved achievement, but when not in school parental status was a better predictor of learning. Her study showed that summer vacation widened the achievement gap between the rich and the poor. Additionally, a study by Entwisle and Alexander in 1992 reportedly compared the reading comprehension setback among samples of Baltimore school children over the span of two summers. These students where divided by racial grouping, Black and White, as well as by whether they attended an integrated or segregated school. Entwisle and Alexander showed that the children of parents who had dropped out of high school lost more ground in reading than those children of parents who had not dropped out. They also found that Black students in segregated schools experienced more reading setback than Black students from integrated schools. In total, Cooper et al. (1996) performed a meta-analytic review of 39 different studies on the effects of summer vacation on achievement. They used two different methodologies to determine effect size. First, they calculated a standardized mean difference of the sample's average achievement score in the spring from the average achievement score in the fall. Secondly, when possible, they calculated the simple difference of a sample's average fall grade-level equivalent score to the spring grade-level equivalent score. Overall, Cooper et al. (1996) concluded that summer reading loss, measured by achievement test scores, occurred with lower class-students while middle-class students made gains in reading achievement.

Some studies have found that all students, regardless of their financial resources at home, make similar gains during the school year (Cooper et al., 1996; Entwisle et al., 1997; Entwisle et al., 2001). A study by Entwisle et al. (2001) used the results of standardized test scores to compare the performance of disadvantaged first graders to their more affluent peers. Students

were tested once in the fall and then again in the spring to measure their educational attainment during the school year. It was found that less advantaged children gained 57 standardized points in reading. Likewise, their more advantaged peers gained a comparable 61 points in reading.

Unfortunately, it seems that comparative gains may not be maintained throughout the summer months. Entwisle et al. (2001) continued their study through the summer, evaluating the students' performance in the spring to that in the fall. They found that the more affluent first graders gained 15 standardized points in reading over summer, where as their less advantaged classmates actually lost four standardized points. The findings of Entwisle et al. (2001) represent "The Matthew Effect," taken from the gospel of Matthew 25:29. Literally meaning that the rich get richer and the poor get poorer. Because less affluent students fail to make gains while their more affluent peers make considerable gains in achievement, the less affluent students continue to fall further and further behind academically.

Entwisle et al. (1997; 2001) make sense of the change in reading achievement scores of the disadvantaged by means of "The Faucet Theory." Simply put, when children are in school the faucet is turned on and numerous reading resources are available to them. When they are not, such as during the summer months, resources are turned off and reading achievement suffers. Allington and McGill-Franzen (2003) report that the best predictor of whether or not a child will read over the summer months is if he or she owns books. Because low-income families are on restricted budgets, they have less financial resources to buy books. Therefore, many disadvantaged children count on school libraries to obtain reading material. When these facilities are closed for summer, finding transportation to public libraries and fear of fines can inhibit low-income families from taking advantage of other opportunities (McGill-Franzen & Allington, 2003).

The negative impact of "the faucet being shut off" only becomes more predominate over time. The Entwisle et al. (2001) study supports that the gap in students' reading achievement occurs because more-advantaged students continue to make gains throughout the summer, but those who are less-advantaged fail to further develop or even lose reading skills. Furthermore, Entwisle et al. (2001) point out that because of summer reading loss poor children start from a lower skill level in the fall, and though they make comparable gains as their peers during the school year, continued summer loss and peer gain further expands the achievement gap from year to year. Through the course of the first five summers of elementary school, Entwisle et al. (2001) recognized that less advantaged students in their study gained less than one point in reading, while the more advantaged gained forty-seven points. Cooper et al. (1996) estimates that an annual achievement gap of three months occurs between disadvantaged and more advantaged students in the summer. This would mean that between Kindergarten and the end of fifth-grade less advantaged students fall, on average, one and a half years behind their peers. Cooper et al. (1996) further estimates that when the reading gap is considered with the achievement gap many low-income students may be two to three years behind their peers by the time they enter middle school.

The Importance of Tracking Reading Skills over Time

Allington and McGill-Franzen (2003) suggest that summer reading setback is a phenomenon that has been largely overlook for too long. They criticize those in charge of programs such as Title I, which have largely not changed programming to provide services to disadvantaged youth during the summer months. This raises an important question. Does more evidence need to be collected on the reading trends for America's children and the impact of summer reading setback?

Tracking the reading skills of children seems to be a crucial element to understanding how the reading trends of children change throughout the course of the school year and summer. The more children have practice reading the more their reading skills develop. Children that are not provided opportunities to practice reading skills are less likely to have well-developed skills, and are more likely to be unmotivated to read (Lyon, 1999). The No Child Left Behind Act of 2002 defines the last element of reading to be "the development and maintenance of the motivation to read" (United States Department of Education, 2004). Lyon (1999) declares that one way to combat the decline in the motivation to read, and likewise help those children with limited reading skills is prevention and early intervention. Fortunately, developments in education have given rise to early intervention methods to track the reading skills of children. One such method is known as Curriculum-Based Measurement.

Curriculum-Based Measurement

Curriculum-Based Measurement (CBM) is a set of techniques used to measure academic competence and progress (Deno, Fuchs, Marston & Shin, 2001). CBM was developed by Dr. Stanley Deno and his colleagues at the University of Minnesota in the 1980's in an attempt to find an alternative measurement system for students receiving special education (Fuchs & Fuchs, 1991). CBM is noted for the efficient manner in which it obtains accurate, meaningful information to determine academic standing and growth; answers questions about the effectiveness of programs by measuring learning; and assists in the development of better instructional programs (Fuchs & Fuchs, 2002). Since the 1980's CBM has been used to monitor students in remedial programs such as Title I, and is currently starting to be used in general education classrooms (Shinn, Shinn, Hamilton & Clarke, 2002).

Assessments like CBM aim to measure student growth over time, especially short periods such as weeks or months, and are known as formative evaluations (Shinn et al., 2002). Formative evaluations are meant to "inform" teaching and, on the same note, are based on the idea that learning is a dynamic activity. An example of CBM in the domain of reading would be taking a one minute sampling of a reading passage and counting the number of words that a student reads correctly. A score of the number of words read correctly (WRC) can be viewed as a performance indicator. When WRC are graphed over time they create a trend line, which represents a student's rate of progress. Thus, trend lines can be used as a performance indicator to produce a spread of scores across individuals of the same age or students in the same classroom, and then may be used to rank students based on performance. By these means interindividual differences and intraindividual improvements in scores can be detected (Shinn et al., 2002). CBM can be used to compare students to one another, their relative standing, and when sampling is done across time it can also be used to compare a student's performance to his or her past performance.

CBM has been given attention because it integrates standardized measurement as well as behavioral and observational assessment methods, by incorporating the use of repeated performance sampling, fixed time recording, graphic displays of time series data, and qualitative descriptions of performance (Deno et al., 2001). More importantly, CBM has been found to be sensitive to academic change. A study by Marston, Fuchs, and Deno (1986) found that CBM measured more academic growth in students during a ten week period than traditional achievement tests. Allinder and Fuchs (1994) have also found CBM useful to determine changes in academic performance after breaks by measuring slopes.

As was previously mentioned, CBM is a set of techniques. As a result, there are a number of ways that academic domains can be assessed using this method. In the domain of reading two techniques are most common, the Reading-CBM (R-CBM) and the Maze-CBM. Described earlier, the R-CBM is the primary measure of reading ability. Students are asked to read connected text aloud from their general education curriculum for one minute and the number of words read correctly is counted (Shinn et al. 2002). The Maze-CBM technique uses the cloze procedure. Maze-CBM requires that a student read connected text silently for a period of two and a half minutes. However, in the text every seventh word is deleted and the child must chose one of three or four words to fill in the blank, while at the same time preserving the meaning of the text (Shinn et al., 2002). Just as there are many techniques in which to implement CBM, so too have a number of devices been developed to make CBM an efficient tool. One such device is the *Monitoring Basic Skills Progress* measurement programs.

The Monitoring Basic Skills Progress Measurement Programs

Developed by Lynn Fuchs, Carol Hamlett, and Douglas Fuchs in 1990, the *Monitoring Basic Skills Progress* (MBSP) is a computer software program consisting of a series of three computer administered and scored versions of CBM. The programs include measures for *Basic Reading*, *Basic Spelling*, and *Basic Math*, and are based on the research compiled by Dr. Stanley Deno and his colleagues over the past 20 years (Fuchs, Hamlett & Fuchs, 1997). The primary purpose of the development of the MBSP was to help facilitate the use of CBM (Fuchs et al., 1997). Since its original publication, both the *Basic Reading* and *Basic Math* programs have been updated from the Apple to the MAC format (McLellan, n.d.).

The *Basic Reading* program utilizes the Maze-CBM approach. The student reads a passage from the computer screen and within the passage approximately every seventh word is

deleted. The student then uses the mouse, clicking on the blank, to select one of three possible words to fill the blank. This is known as a cloze procedure. Much like a maze, the student must understand the provided words, the context of the sentence, as well as the context of the passage in order to select the correct word provided. The MBSP can be used with students in first through seventh grade. There are a total of 30 reading passages, ranging from 350 to 400 words long, for each grade level and reading ability, which is determined by Fry's Readability formula (McLellan, n.d.). Each *Basic Reading* task lasts for two and one half minutes. At the end of this time, the computer automatically scores the session. Then, the computer screen changes and provides the student with feedback on his or her performance. Finally, the MBSP saves student scores in its database. These records can then be assessed by the teacher so that individual or group trend lines can be assessed.

The MBSP is considered to be psychometrically adequate. Measures of reliability calculated by assessing the stability of scores with alternate forms and over multiple administrations were found to range from .73 to .99 (McLellan, n.d.). It should be noted that even though the aim of the MBSP is to track small groups of people, some have criticized the MBSP because its reliability measures are based on only a small number of tests and very small sample sizes (Smith, n.d.). Adequate criterion validity has also been reported for the MBSP (McLellan, n.d.). In addition, it has been stated that the MBSP is a good measure of reading comprehension, as students must understand the passage in order to select the correct word that is provided. However, Smith (n.d.) cautions that educators should not "teach to the test" per se or overlook the broader language-arts approach to literacy.

Critical Analysis

It has been established that there is a direct connection between reading ability and socioeconomic status. Numerous studies support that adults who are less literate are more likely to have lower educational attainment, and in turn, obtain jobs that pay less (Gardener, 2001; Kirsch et al., 1993; National Center for Education Statistics, n.d.). Similarly, studies support that children from low socioeconomic families exhibit less developed reading skills than children that come from more affluent families, known as the achievement gap (Bracey, 2003; Plisko, 2003; Lyon, 1999). For nearly forty years the United States government has funded Title I, a program that was meant to specifically address this concern. However, it appears that Title I and other remedial programs have not been effective in closing the achievement gap. More affluent student continue to make gains in reading skills while less affluent students fall further and further behind (Plisko, 2003; PIRLS, 2001; Lyon, 1999).

Many researchers believe that the cause of the reading achievement gap is due to a lack of resources and learning opportunities for less affluent students in the summer, termed reading setback (Allington & McGill-Franzen, 2003; Entwisle et al., 2001; Cooper et al., 1996). However, there is not a vast amount of information pertaining to the occurrence of summer reading setback. Beside this, several key studies linking the phenomenon of summer reading setback and low socioeconomic status are largely outdated and main pieces of literature are based on outdated information (Cooper et al. 1996, Allington & McGill-Franzen, 2003). In addition, almost every study to date, including the most recent (Entwisle et al., 2001), tends to rely on standardized achievement tests to assess summer reading setback. There appears to be inadequate information on the use of newly supported assessments, such as CBM, to evaluate summer reading setback.

It would be very beneficial to use CBM to assess children's reading trends. Because CBMs are very efficient to administer, they are more conducive to a greater number of administrations and are meant to be used to chart reading growth over time. Past studies that have used standardized tests only provide a snapshot of a student's performance at the end of the year and the beginning of the next school year. It could be suggested that CBM techniques would provide a more thorough depiction of a student's acquisition of reading skills throughout the course of the entire school year, and how such skills may vary over time, specifically with changes occurring over the summer break. It is believed that CBM may be more effective at measuring summer reading setback for all students, especially those from low socioeconomic status families. In conclusion, use of CBM in the school system can be viewed as a means of emphasizing how assessment can be utilized to prevent and take early intervention steps to combat early reading failure.

CHAPTER III: METHODOLOGY

This chapter will begin by examining the implications of past research as it pertains to the proposed study. Next the methodology of the proposed study will be explained, including the selection of subjects, instrumentation, and data collection procedures. Then data analysis, the significance of the research, and the anticipated findings will be described. Lastly, assumptions and potential limitations of the proposed study will be discussed.

Implications of the Current Literature for Future Research

Recent research suggests that the development of children's basic reading skills is fundamentally important. Being able to read, and read well, is a good predictor of a child's academic success, as well as overall success in life. It has been found that many social problems are linked to low reading achievement, including delinquency, dropping out of school, teenage pregnancies, unemployment, and homelessness (McGill-Franzen, 1987; McGill-Franzen & Allington, 1991). Furthermore, current research suggests that some students are more at-risk for reading failure than others.

Children who come from economically disadvantaged families face a greater risk of reading failure than their more advantaged peers. Findings from the 2001 PIRLS Reading Assessment and the 2003 NAEP have indicated those students from low socioeconomic status families, specifically those who are considered eligible for free and reduced-price meals, scored lower on reading tasks then their more affluent peers. This phenomenon is known as the reading achievement gap. The United States Department of Education (2002) released a report that suggests the achievement gap is growing. Combined knowledge of this information has led some researchers to question why such a gap exists.

Some researchers have come to the conclusion that the achievement gap is due to summer reading setback. Summer reading setback, or summer reading loss, occurs when more affluent students continue to make gains during the summer months while their less advantaged peers do not (Allington & McGill-Franzen, 2003; McGill-Franzen & Allington, 2001). Research by Entwisle et al. (1997) suggests that the reason low socioeconomic status students fail to make comparable gains during the summer months is due to limited opportunities. Not only do children from these families face more economic strife, but access to school resources is also limited when school is out of session. Entwisle et al. (1997) define this as "The Faucet Theory." The more children have practice reading the more their reading skills develop. Children that are not provided opportunities to practice reading skills are less likely to have well-developed skills, and are more likely to be unmotivated to read (Lyon, 1999).

Due to the drastic repercussions of low reading achievement it is necessary to track children's acquisition of basic reading skills. New assessments techniques such as CBM, designed specifically for measuring student growth over time, are ideal ways in which to monitor the development of reading skills. Additionally, the development of computerized reading CBMs, such as the MBSP, have made the possibility of using CBM with larger groups of students a reality. Based on this discussion, the following research questions are posed:

1. How do the trend lines for reading achievement vary between students that are eligible for free and reduced-price meals and those who are not?
2. How do the trend lines for all students vary coinciding with breaks in the academic calendar, specifically over the summer break?

Proposed Future Study

Participants

The participants in the proposed study will be second, third, fourth, fifth, and sixth graders from a small rural school district in central Wisconsin. The participating classes will be chosen based on school district agreement and teacher willingness. The students in the study will be separated into one of two groups to differentiate between low and high socioeconomic (SES) status. This will be determined by using eligibility for free and reduced-price meals as a means of identifying students coming from low SES families. Confidentiality will be maintained by the use of a number system to code each student. Each student will be assigned a number code that will represent his or her grade, sex, and free and reduced-price meal eligibility status. Parents and teachers will be informed of the planned study via a letter sent home with each student delineating the use of CBM and the MBSP in the child's classroom.

Instrumentation

All students will be assessed using the *Monitoring Basic Skill Progress* (MBSP) *Basic Reading* computer software designed by Fuchs, Hamlett, and Fuchs (1997). The *Basic Reading* portion of the MBSP is a computer administered and scored version of a Maze-CBM. A Maze-CBM is a multiple choice cloze reading technique, which requires a student to complete a passage containing omissions by selecting one of third words provided for each blank. This program can be used to assess students in grades 1-7. The computer administers a reading passage to the student depending on his or her grade level and reading ability, which is determined using Fry's Readability formula (McLellan, n.d.). This ensures that students progressively take tests that appropriate in difficulty for

them. There are a total of 30 reading passages for each grade level, and each passage ranges from 350 to 400 words in length. The student has two and one half minutes to complete each reading task, at which time the computer automatically scores the student's responses.

Data Collection

Each student will complete a *Basic Reading* task once every two weeks. Each reading task will require two and one half minutes to finish. Once the student completes the task the computer will automatically save his or her scores in its database. The MBSP then creates a graph of the student's progress over time, which can be used as a performance indicator. The progress line on the graph can also be referred to as a trend line. The trend line will be a continuous line from the first date that a *Basic Reading* passage was administered to the last date a passage was administered. Trend lines can be analyzed in numerous ways, including weekly, monthly, or yearly. It is possible to compare an individual's trend line over time or to compare the trend lines of multiple individuals at a specific point in time or over a specified time period.

Data Analysis

The information gathered will be analyzed using descriptive statistics. Frequency data, such as means, standard deviations and percentages will be obtained. Averages and percentages will be used to compare the reading trend lines of those students receiving free and reduced- price meals to those who do not, as well as to analyze how reading trend lines vary in regards to the academic calendar.

Significance of Research

This study is significant because more information needs to be collected on the phenomenon of summer reading setback. Several prominent studies linking the phenomenon of summer reading setback and low socioeconomic status are largely outdated and key pieces of literature are based on outdated information (Cooper et al., 1996; Allington & McGill-Franzen, 2003). In addition, almost every study to date, including the most recent (Entwisle et al., 2001), tends to rely on standardized achievement tests to assess summer setback. There appears to be inadequate information on the use of newly supported assessments, such as CBM, to evaluate summer reading setback. Assessment techniques such as CBM, especially the MBSP, are specifically designed to illustrated student growth and reading trends and seem to be the best measure to-date to assess the variation in children's reading skills. Because these tests are also more sensitive to academic changes, it is believed that if variation in reading skill occurs at other key points throughout the course of the school year, such as winter break, the MBSP would be able to determine these trends.

Anticipated Findings

The MBSP Test will likely provide a more detailed and thorough depiction of children's attainment of reading skill over time than have been previously obtained by means of achievement tests. Supporting previous studies (Cooper et al., 1996; Entwisle et al., 1997; Entwisle et al., 2001), I believe that all students, regardless of socioeconomic status, will make comparable gains in reading achievement when school is in session. This will be determined by comparing the slopes of reading trend lines. Conversely, it is believed that the reading attainment of high socioeconomic status students will surpass that of low socioeconomic status students during the summer, supporting the premise of previous research by Entwisle et al. (2001) and

Cooper et al. (1996). This will be determined by comparing spring performance at the end of the school year to fall performance when students return from summer break. It is also expected that more variation in reading skill will occur when academic breaks are longer, such as the summer break, and more specifically for less advantaged students.

Assumptions and Potential Limitations of the Proposed Study

Assumptions of the proposed study include the accurate participation of both teachers and students. Though not being assessed, teacher participation is crucial in ensuring that appropriate paperwork is sent home to parents. It is also very important that teachers are willing contributors to the proposed study, and that they allow and help remind the students to complete the MBSP assessments. It will also be assumed that the students compute the MBSP tasks honestly and to the best of their ability, even though they will not be receiving credit for their work.

Limitations of the proposed study could include teachers not wanting to implement the program in their classrooms, inconsistent collection of data, or parents not allowing their children to complete the MBSP assessments. The use of computer software to store data could also be a limitation, as the system could crash or data could be lost. The largest limitation of the study is the limited size and location of the sample group. Since the information will only be coming from a small region in Wisconsin it will be difficult to generalize the finding to larger and more diverse populations.

REFERENCES

Allinder, R. M., & Fuchs, L. S. (1994). Alternative ways of analyzing effects of a short school break on students with and without disabilities. *School Psychology Quarterly,* 9, 145-160.

Allington, R. L., & McGill-Franzen, A. (2003). The impact of summer setback on the reading achievement gap. *Phi Delta Kappan,* 85(1), 68-75.

Bracey, G. W. (2003). Pirls before the press. *Phi Delta Kappan,* 84(10), 795. Retrieved June 3, 2004, from Ebscohost.

Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The effects of summer vacation on achievement test scores: A narrative and meta-analytic review. *Review of Educational Research,* 66(3), 227-268.

Deno, S. L., Fuchs, L. S., Marston, D., & Shin, J. (2001). Using curriculum-based measurements to establish growth standards for students with learning disabilities. *School Psychology Review,* 30(4). Retrieved May 12, 2004, from Ebscohost.

Entwisle, D. R., Alexander, K. L., & Olson, L. S. (1997). *Children, schools, and inequality.* Boulder, Colorado: Westview Press.

Entwisle, D. R., Alexander, K. L., & Olson, L. S. (2001). Keep the faucet flowing: Summer learning and home environment. *American Educator,* 25(3), 10-15, 47.

Fuchs, L. S., & Fuchs, D. (1991). Curriculum-based measurements: Current applications and future directions. *Preventing School Failure,* 35(3), 6-11.

Fuchs, L. S., & Fuchs, D. (2002). Curriculum-based measurements: Describing competence, enhancing outcomes, evaluating treatment nonresponders. *Peabody Journal of Education,* 77(2). Retrieved June 3, 2004, from Ebscohost.

Fuchs, L. S., Hamlett, C. L., & Fuchs, D. (1997). *Monitoring basic skills progress: Basic reading* (2nd ed.). Austin, TX: Pro-ed.

Gardner, P. D. (2001). Job opportunities for the next 30 years. *Black Collegian,* 31(3). Retrieved June 8, 2004, from Ebscohost.

Kirsch, I. S., Jungeblut, A., Jenkins, L., & Kolstad, A. (1993). Executive summary of adult literacy in america: A first look at the results of the national adult literacy survey. *National Center for Education Statistic.* Retrieved May 30, 2004, from http://nces.ed.gov/naal/resources/execsumm.asp

Lyon, G. R. (1999, July). Hearing on Title I (education of the disadvantaged) of the elementary and secondary education act. *Statement presented to the Committee on Education and the Workforce of the United States House of Representatives.* Washington, DC. Retrieved June 3, 2004, from http://www.nichd.nih.gov/crmc/cdb/r_disad.htm

Marston, D., Fuchs, L. S., & Deno, S. L. (1986). Measuring pupil progress: A comparison of standardized achievement tests and curriculum-related measures. *Diagnostique,* 11, 71-90.

McGill-Franzen, A. (1987). Failure to learn to read: Formulating a policy problem. *Reading Research Quarterly,* 22(4), 475-490.

McGill-Franzen, A., & Allington, R. L. (1991). Every child's right: Literacy. *The Reading Teacher,* 45(2), 86-90.

McGill-Franzen, A., & Allington, R. (2001). Lost summers: For some children, few books and few opportunities to read. *Back to School!,* 4(9). Retrieved June 3, 2004, from www.ascd.org

McGill-Franzen, A., & Allington, R. (2003). Bridging the summer reading gap. *Instructor,* 112(8). Retrieved June 3, 2004, from Ebscohost.

McKenna, M. C. & Robinson, R. D. (1980). *An introduction to the cloze procedure: An annotated bibliography.* Newark, Delaware: International Reading Association.

McLellan, M. J. (n.d.) Review of monitoring basic skills progress – second edition [Electronic version]. *Mental Measurements Yearbook.* Retrieved May 20, 2004.

National Center for Education Statistics. (n.d.). Defining and measuring literacy. United States of America: Author. Retrieved May 30, 2004, from http://nces.ed.gov/naal/defining/defining.asp

Progress in International Reading Literacy Studies. (2001). Pirls international report. Retrieved May 31, 2004, from http://timss.bc.edu/pirls2001i/

Plisko, V. W. (2003, November). The release of the national assessment of educational progress (naep) the nation's report card: Reading and mathematics 2003. *National Center for Education Statistics.* Retrieved May 30, 2004, from http://nces.ed.gov/commissioner/remarks2003/11_13_2003.asp

Shinn, M. R. (ed.) (1998). *Advanced application of curriculum-based measurement.* New York, NY: Guildford Press.

Shinn, M. R., Shinn, M. M., Hamilton, C. & Clarke, B. (2002). Using curriculum-based measurement in general education classrooms to promote reading success. In M. R. Shinn, H. M. Walker, & G. Stoner (Eds.), *Interventions for academic and behavior problems II: Preventative and remedial approaches* (pp.113-142). Bethesda, MD: National Association of School Psychologists.

Smith, J. K. (n.d.). Review of monitoring basic skills progress – second edition [Electronic version]. *Mental Measurements Yearbook.* Retrieved May 20, 2004.

United States Department of Education. (n.d.). Title I: Improving the academic achievement of the disadvantaged. United States of America: Author. Retrieved May 27, 2004, from http://www.ed.gov/programs/titleiparta/legislation.html

United States Department of Education. (2002, August). Fact sheet on Title I, part a. Retrieved May 31, 2004, from http://www.ed.gov/rschstat/eval/disadv/title1-factsheet.doc

United States Department of Education. (2004). Title I grants for schools: Esea 2004. United States of America: Author. Retrieved May 27, 2004, from http://www.ed.gov/about/reports/annual/2004plan/edlite-titleigrants.html