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The Effectiveness of *READ 180* Intervention for Struggling Readers in Grades 6-8

A Dissertation

Submitted in Partial Fulfillment of the Requirements for the

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Suzanne Hiller Brown

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DEDICATION

In loving memory of my father, Harlen Nichols Hiller *(1923-2005),* and in honor of my mother, Audrey Nancy MacMillen Hiller, I dedicate this dissertation. Your love of learning and your commitment to professionalism have always inspired me. Thank you for your unending belief in my potential. Insomuch as God blessed me with you, I pray that my life exemplifies your teachings for your grandchildren, my sons, Blair Merrifield Brown and Austin Geoffrey Brown.

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ABSTRACT

This study investigated the effect of *READ 180* on Tennessee Comprehensive Assessment Program (TCAP) percent proficient reading scores for Memphis City Schools' middle school participants during the academic year 2004-2005. The treatment sample included 2,198 students in grades 6-8 in 39 school settings. The participants whose gain scores were used for analysis were limited to those students who had 2004 and 2005 TCAP scores. This restricted sample was comprised of 16 sixth grade classes, 12 seventh grade classes, and 6 eighth grade classes. The total number of students with 2004 and 2005 TCAP scores was 925 or 44.1% of the treatment sample. Of the 925 student total, 456 (49.3%) were in sixth grade, 316 (34.2%) were in seventh grade, and 153 (16.6%) were in eighth grade. A paired samples *t*-test and a gain score analysis of variance (ANOVA) were used to identify the effect of *READ 180* on TCAP percent proficiency in reading. Results indicated that the reading intervention had a significant effect for the whole group; however, further investigation found the treatment not to be significant by class level. Additionally, this study used 34 paired sets of classroom observations to determine if the degree of *READ 180* implementation affected TCAP reading proficiency gains. A Pearson Correlation statistic showed the degree of implementation (time in class) was not significantly related to TCAP percent proficient differences on the reading subtest. Also, data was collected and analyzed from 34

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anonymous *READ 180* teacher surveys completed in Spring 2005 to determine if teacher perceptions had a significant effect on TCAP reading proficiency. An ANOVA showed there was no significant relationship between teacher perceptions of the *READ 180* program implementation and TCAP gains. The survey also provided qualitative responses from which common themes were identified for improving the program's design and implementation. Tables, graphs, and charts, as well as narratives, illustrate the statistical findings reported in Chapter 4. Supplemental documents supporting the findings are located in the appendices. Implications of the findings, recommendations for improving the program, and suggestions for future research on *READ 180* are presented in Chapter 5.

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CHAPTER 1

INTRODUCTION

Memphis City Schools' superintendent, Dr. Carol R. Johnson, stated, "Literacy is the most important aspect in education, upon which all other results and successes are based" (Memphis City Schools, 2004e, p. 2). To ensure all students were able to succeed academically, in the Fall of 2005 MCS implemented research-based interventions to help those students who were not performing at grade level. *READ 180*, an intervention strategy included in MCS Revised School Policy #5121, was a nationally proven literacy intervention program designed to help at-risk readers *turn around 180º* (Memphis City Schools, 2003). By emphasizing *READ 180* in middle schools, Memphis hoped to 'turn around' at-risk readers before they became high-school failure statistics.

Susan Frost, Alliance for Excellent Education president, quoted the federal Department of Education data stating, "Nationwide, 25 percent of the students arriving in ninth grade are unable to read well enough to take high school courses, let alone rigorous courses to prepare them for college" (Lewin, 2004, p. B11).

Hasselbring (2002) noted that adaptive technology in programs like *READ 180* offered promise for struggling readers. "What is now known about learning provides important guidelines for uses of technology that can help students and teachers develop the competencies needed for the twenty-first century" (Hasselbring, 2002, p. 9). For the

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millions of students across the United States who were not benefiting from traditional educational programs, Hasselbring included adaptive technology in *READ 180*.

Background of Study

A principal developer of the reading intervention program *READ 180*, Hasselbring noted the program used a type of pseudo-intelligence. "As a student works in *READ 180*, the program records data on factors such as the number and type of responses by the learner and the speed at which the student responds, among others," (College of Education Network, 2000, p. 3). The program adjusts the lessons based on the recorded data to meet the individual student's needs. Memphis' selection of *READ 180* to address the needs of struggling readers was research-based and validity-tested (Scholastic, 2004b). The research showed *READ 180* had been successful across America in urban school systems. Standing alone or in conjunction with other reading intervention strategies, at the time of this study *READ 180* was currently being used in over 5,000 classrooms serving at-risk students nationwide (Scholastic, 2004b).

Based on 10 years of research at Vanderbilt University and six years in schools, *READ 180* used whole group and small group direct instruction, independent leveled reading, and adaptive computer software to address student needs (Scholastic, 2003a). MCS middle schools had students in all four of *READ 180*'s categories identified for proven effectiveness: (a) delayed or failing readers; (b) at-risk students; (c) special education students; and (d) limited-English proficient students (Scholastic, 2003a). Although *READ 180* was being used in some MCS elementary and high schools prior to

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this study, this research focused on middle schools where the need for intervention was urgent and the potential for gain was significant (Corcoran & Christman, 2002).

Need for Research

> There is a crisis in American middle schools: one in four adolescents cannot read well enough to identify the main idea in a passage or understand informational text. This keeps them from succeeding in challenging high school coursework and from graduating from high school prepared for the option of post-secondary education (Kamil, 2003, p. 29).

Alliance for Excellent Education president Frost stated, "If you want a predictor of who will leave before twelfth grade, it's those 8th-grade reading scores" (Lewin, 2004, p. 1). Unable to do grade-level work, students became frustrated, which led to increased truancy, discipline problems, and high dropout rates. (Lewin, 2004). Failure to read well in early school years was a predictor of ancillary problems in later school years "such as defiance, truancy, and dropping out of school" (Davidson & Miller, 2004, p. 3).

Under the heading of Future Research, *Scholastic's READ 180: A Heritage of Research*, pointed out the need for continued research on "specific populations of *READ 180* students, as well as on variations of program implementation" (Davidson & Miller, 2002, p. 15). New data was used as the basis for making improvements to existing program components and creating new supplemental materials.

The research in this study was needed to document the effectiveness of *READ 180* for addressing the needs of MCS middle school participants. In *Adolescents and Literacy: Reading for the 21st Century*, Kamil (2003) mentioned that additional studies

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were needed to enhance current understanding of how literacy interventions work to promote program development. Data analyses highlighted which variations of the reading intervention worked best for different aspects of literacy and for which subgroups the interventions were most effective. "The notion that one size fits all for an entire ethnic or racial group seems egregious at best, and certainly not supported with any credible independent research evidence" (Cooter, 2004, p. 7).

Initially Orange County, Florida, public schools implemented *READ 180* in 1994 for over 10,000 students. Within the first year these students showed significant gains on Degrees of Reading Power tests, a standardized measurement used by the school district. Subsequently, multiple longitudinal studies by third parties of *READ 180* showed quantifiable gains across grade levels: elementary schools—AL, PA, TX, NY; middle schools—MA, TX, NY, WI, VA; and high schools—MN, FL, KS, TX, MT, KS (Scholastic, 2003a).

Research findings from this study provided data for determining the effectiveness of *READ 180* on reading skills for MCS struggling readers in the middle grades six through eight. MCS and other school districts will be able to use the results of the study to make data-driven decisions regarding *READ 180* and their reading intervention program needs. This paper studied and reported its findings on 34 *READ 180*, MCS middle school classrooms during the 2004-2005 school year. Students' gain scores aggregated at the classroom level on the reading subsection of the Tennessee Comprehensive Assessment Program (TCAP) for the years 2004 and 2005 were analyzed to determine if there were any significant correlations to variations in *READ 180* program implementation. Results, both quantitative and qualitative, were compared

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and analyzed to identify the effects of independent variables such as grade level, time in class, and level of teacher preparedness on the dependent variable TCAP reading subtest gain scores.

Statement of the Problem

The need for a proven reading intervention program for Memphis City Schools was documented. *The State of Tennessee Memphis Report Card 2004 Part III. TVAAS (Value Added) Elementary: Grade K-8, Growth Standard* (3-year average) reported a failing grade of "F" for Criterion Referenced Achievement Assessment (CRT) in Reading/Language. The Part IV: Adequate Yearly Progress (AYP) was marked with an "X" indicating the district did not meet the Federal Benchmarks for Reading, Language Arts, and Writing (Tennessee Department of Education, 2004). These low marks clearly demonstrated why Memphis City Schools was assessing and developing the district's strategic literacy plan. Superintendent Johnson stated, "Among the district's strategic plans, we've also revised our K-12 curriculum in Reading/Language Arts to align with state standards and NCLB demands, implemented a comprehensive professional development plan for all teachers, and placed reading intervention programs at seven high schools and 60 middle schools" (Myers, 2004, p. 3).

The National Commission on Excellence in Education (1983) published *A Nation At Risk: The Imperative for Educational Reform*. For America to remain competitive in a global community the report stated, "We must dedicate ourselves to the reform of our educational system for the benefit of all—old and young alike, affluent and poor, majority and minority. Learning is the indispensable investment required for success in the 'information age' " (National Commission on Excellence in Education,

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1983, p. 7). To graduate students equipped to meet the technological demands of a rapidly changing, global society, reform programs aimed at intervention had to be relevant and diversified. The number of students with special needs had been increasing steadily. Approximately one of six students had a "disability that impairs their ability to participate in classroom activities. Most had no obvious disability. They had problems that were primarily academic, emotional, social, or behavioral. Most were in elementary or middle school" (Hasselbring & Glaser, 2000, p. 103).

Research by RAND Reading Study Group (2002) reported that computer-assisted literacy instruction could help students read and understand text better. *READ 180* had the essential components recommended by adolescent literacy research: motivating, relevant literature; on-going professional instructor training; adaptive technology; ties to curriculum standards; continuous assessment; and parental involvement opportunities (RAND, 2000; National School Board Association 1995; Shields & Behrman, 2000; Snow, Burns & Griffin, 1998). The *READ 180* program "applies rigorous, systematic, and objective procedures to obtain valid knowledge relevant to reading development, reading instruction, and reading difficulties" (One Hundredth and Seventh Congress of the United States, 2001, p. 13). *READ 180* also provided intensive professional development for instructors to ensure program potential was attained. *READ 180* was aligned to NCLB essential elements for a reading intervention program which included text comprehension; phonemic awareness; phonics; fluency; and vocabulary (Scholastic, 2004a).

As the authors of *A Nation At Risk* forewarned, American society has paid a high price for an adult population incapable of competing in the global job market

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