

THE IMPACT OF A MIDDLE SCHOOL TIERED MATHEMATICS PROGRAM ON
ACADEMICALLY OR INTELLECTUALLY GIFTED STUDENTS:
ONE SCHOOL DISTRICT'S RESPONSE TO HIGH STAKES ACCOUNTABILITY

A Dissertation
by
JOHN STEPHEN MARTIN, JR.

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ABSTRACT

THE IMPACT OF A MIDDLE SCHOOL TIERED MATHEMATICS PROGRAM ON ACADEMICALLY OR INTELLECTUALLY GIFTED STUDENTS: ONE SCHOOL DISTRICT'S RESPONSE TO HIGH STAKES ACCOUNTABILITY

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This study uses case study methodology to investigate the impact of a middle school tiered mathematics program on Academically or Intellectually Gifted (AIG) students. Four subquestions were utilized to guide the research process: (1) How did national, state, and local forces influence the development of the district's middle school tiered mathematics program? (2) What are the characteristics of the district's middle school tiered mathematics program? (3) What are the perceptions of district administrators, school administrators, and teachers of the impact of the middle school tiered mathematics program on AIG students? (4) In what ways do EOG test score data provide evidence of the impact of the middle school tiered mathematics program on AIG student achievement?

The study features an in-depth look at the Caldwell County, North Carolina, school district's response to high stakes accountability with particular emphasis on the No Child Left Behind legislation of 2001. The primary data sources used to examine the impact of the tiered mathematics program are (1) historical documents such as meeting minutes, implementation plans, teacher training agendas and manuals, written curriculum, and textbook adoptions; (2) interviews from 14 current mathematics teachers and each principal

at two middle schools in Caldwell County; (3) interviews from district office personnel; and (4) student achievement results from mathematics End-of-Grade testing data. Through the analysis of the middle school tiered mathematics program, a clear picture is provided of the successes and failures of the value of the district's initiative as it impacted AIG mathematics student achievement.

As a result of a task force study, the tiered mathematics program was created and implemented in the 2004-2005 school year in Caldwell County middle schools. At the same time, Algebra I was eliminated as a course option for eighth grade students. The components of the decision-making process are discussed with key elements providing insights into a small, rural school district in western North Carolina seeking to attend to the mandates of high stakes accountability and at the same time fulfill its mission of providing "quality instruction in a safe, caring environment." The study highlights the convergence of high stakes accountability, gifted education practices, middle grades mathematics education, and professional development in Caldwell County as the district evaluates programming in the face of national and state reform efforts. Implications and suggestions for further research are included in the study.

DEDICATION

To my wife, Heather, and son, Jackson, who demonstrated
love, patience, support, laughter, and encouragement through this process.

In memory of my mother, Linda Martin, my friend and ninth grade Algebra I teacher.