

ACADEMIC ACCELERATION IN FLORIDA ELEMENTARY SCHOOLS:
A SURVEY OF ATTITUDES, POLICIES, AND PRACTICES

by

KERI M. GUILBAULT

B.A. The Florida State University, 1994

M.A. University of South Florida, 2006

Ed.S. University of Central Florida, 2007

A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Education
in the Department of Educational Research, Technology and Leadership
in the College of Education
at the University of Central Florida
Orlando, Florida

Fall Term
2009

Dissertation Chairs: Walter J. Doherty
William Bozeman

© 2009 Keri M. Guilbault

ABSTRACT

The focus of this research was to provide recent descriptive information about acceleration policies and practices in Florida elementary schools. District, school, and personal demographic variables were investigated to determine the extent to which they affected school-based acceleration options provided for students. Also, school district policies were examined to determine which types of research-based acceleration options were more frequently used and what procedures were in place to guide the decision-making process. Results from this study indicated that extant acceleration policies only included grade skipping and limited procedures for referral, screening and decision-making in the schools. The most common types of acceleration offered in Florida elementary schools were subject acceleration in the Language Arts and Mathematics provided outside of the regular classroom, continuous progress, and curriculum compacting. The most frequently selected reason for not accelerating a student listed by both school principals and district administrators of gifted education programs was concern over a student's social and emotional development. No relationship was found to exist between schools' or principals' personal demographic variables and types of acceleration offered in elementary schools. No relationship was found between elementary school principals' knowledge of gifted learners and the types of acceleration implemented in their schools.

To Noah and Alex

ACKNOWLEDGMENTS

I would like to sincerely thank my dissertation chairs and committee members for all of their patience and time. I could not have completed this research without their help and guidance. I would like to thank Dr. William Bozeman and Dr. Walter Doherty for serving as my dissertation chairs. I would like to thank my committee members: Dr. Mary Little, Dr. Barbara Murray and Dr. Kenneth Murray for their expertise.

I also thank Dr. Mary Ann Lynn who spent countless hours editing my chapters. Her constructive feedback and encouragement were greatly appreciated.

I would like to thank the school districts that allowed me to contact their employees for participation in this study. Without their approval, this research would not have been possible. I would like to thank the principals and district administrators of gifted education programs who took time out of their busy schedules to respond to my questionnaire. I also appreciate the cooperation from my colleagues at the University of South Florida, the Florida Association for the Gifted, the Florida Gifted Network, WOGI, and American Mensa who helped me with the pilot study of my questionnaire. Their time and feedback was greatly appreciated.

Florida's Department of Education Gifted Program Specialist, Donna Jo Smith also deserves thanks for her time and assistance that contributed to this research.

Finally, I'd like to thank Dr. Maureen Marron and the Institute for Research and Policy on Acceleration for permitting me to modify their national questionnaire for this study.

TABLE OF CONTENTS

LIST OF TABLES	ix
CHAPTER 1 THE PROBLEM AND ITS CLARIFYING COMPONENTS.....	1
Introduction.....	1
Conceptual Framework.....	4
Purpose of the Study.....	7
Significance of the Study.....	8
Statement of the Problem.....	9
Definition of Terms.....	11
Delimitations.....	14
Assumptions.....	16
Research Questions.....	16
Methodology.....	17
Participants.....	17
Instrumentation.....	18
Data Collection and Analysis.....	19
Organization of the Study.....	20
CHAPTER 2 REVIEW OF THE LITERATURE	21
Introduction.....	21
History of Gifted Education in the United States	22
Sputnik and the National Defense Education Act.....	25
A Nation at Risk.....	26
Jacob K. Javits Gifted and Talented Students Education Act.....	27
National Excellence: The Case for Developing America's Talent.....	27
A Nation Deceived.....	29
History of Gifted Education in Florida	30
Grade-Based Acceleration	33
Whole-Grade Acceleration	39
Content-Based Acceleration	40
Subject Acceleration	41
Curricular Modifications and Enrichment	45
Ability Grouping.....	45
Curriculum Compacting.....	46
School Wide Enrichment Model.....	47
Differentiated Instruction.....	48
Social and Emotional Effects of Acceleration.....	49
Barriers to Acceleration	52
Summary.....	55
CHAPTER 3 METHODOLOGY	57

Introduction.....	57
Research Questions.....	58
Population.....	59
Data Collection.....	60
Instrumentation.....	62
Data Analysis.....	63
Summary.....	68
CHAPTER 4 ANALYSIS OF DATA.....	69
Introduction.....	69
Population and Sample Characteristics.....	70
School and District Demographic Variables.....	72
Research Question 1.....	76
Research Question 2.....	77
Research Question 4.....	87
Research Question 5.....	91
Research Question 6.....	94
Referral and Screening.....	95
Assessment and Decision Making.....	96
Menu of Services.....	99
Research Question 7.....	102
Summary.....	103
CHAPTER 5 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	104
Introduction.....	104
Problem Statement.....	104
Methodology.....	105
Population and Data Collection.....	105
Instrumentation.....	106
Analysis of Data.....	108
Summary and Discussion of Findings.....	109
Research Question 1.....	109
Research Question 2.....	110
Research Question 3.....	114
Research Question 4.....	116
Research Question 5.....	117
Research Question 6.....	117
Research Question 7.....	118
Conclusions.....	120
Implications and Recommendations for Practice.....	122
Recommendations for Future Research.....	124
APPENDIX A UNIVERSITY OF CENTRAL FLORIDA INSTITUTIONAL REVIEW BOARD APPROVAL.....	126

APPENDIX B DISTRICT ACCELERATION POLICIES AND PRACTICES SURVEY OF PROGRAM ADMINISTRATORS	128
APPENDIX C DISTRICT ACCELERATION POLICY DOCUMENT REVIEW FORM	138
APPENDIX D NATIONAL ASSOCIATION FOR GIFTED CHILDREN PROGRAM STANDARDS.....	141
APPENDIX E ELEMENTARY SCHOOL ACCELERATION POLICIES AND PRACTICES SURVEY OF ELEMENTARY SCHOOL PRINCIPALS	144
APPENDIX F CONTACT MESSAGES WITH PARTICIPANTS	154
APPENDIX G DISTRICT ACCELERATION POLICIES.....	159
LIST OF REFERENCES	164

LIST OF TABLES

Table 1	Timeline of Significant Events in Gifted Education in the United States	30
Table 2	Timeline of Significant Events in the History of Gifted Education in Florida...	32
Table 3	Total Number of Elementary Schools in 10 Florida School Districts	59
Table 4	Research Questions, Instrumentation and Sources of Data	67
Table 5	Response Rates for School Principal Questionnaires	71
Table 6	School District Demographic Variables for 2008-2009	72
Table 7	Principals' Highest Levels of Education And Gifted Endorsement.....	73
Table 8	Size of Respondents' Schools	74
Table 9	Percentage of Students Receiving Free or Reduced Lunch	75
Table 10	Gifted Learners at Responding Elementary Schools	76
Table 11	Forms of Acceleration Reported by District Administrators and Principals	77
Table 12	Subject Acceleration in the Content Area.....	80
Table 13	Programming Options and Curricular Modifications	80
Table 14	Location of Subject Acceleration	83
Table 15	Principals' Reasons for not Accelerating Students	84
Table 16	District Administrators' Reasons for not Accelerating Students	85
Table 17	Descriptive Statistics for School and Principal Demographics	88
Table 18	Descriptive Statistics for Multiple Linear Regression Using Demographic Variables	89
Table 19	Model Summary of Multiple Linear Regression	90
Table 20	Analysis of Variance (ANOVA).....	90
Table 21	Total Variance Explained: Principal Component Analysis	92
Table 22	Factor Analysis	93
Table 23	Model Summary: Predictors (Constant) Attitude Toward Gifted	94
Table 24	Forms of Acceleration Offered in Districts and Schools	101

CHAPTER 1

THE PROBLEM AND ITS CLARIFYING COMPONENTS

Introduction

Gifted learners have unique social, emotional, academic, and intellectual needs (Neihart, Reis, Robinson, & Moon, 2002; Silverman, 2002). They require academic rigor and challenge delivered at a pace commensurate with their ability, interest, and readiness level if they are to achieve their potential (Clark, 2007; Delisle & Galbraith, 2002). For gifted learners in public schools, much of their time is spent in classrooms where the curriculum is delivered at a slow, repetitive pace, often several years below their ability (Gallagher, 2004; Loveless, Farkas & Duffett, 2008; U.S. Department of Education, Office of Educational Research and Improvement, 1993). When gifted learners are not provided an appropriately challenging education at an appropriate pace, they can develop poor study habits, behavior problems, and may eventually drop out of school (Hansen & Toso, 2007; Renzulli & Park, 2000; Rimm, 2008).

Although the necessary research base to support various forms of academic acceleration has been in place, these accelerative strategies have been underutilized in American public schools (Gallagher, 2004; Southern, & Jones, 1991). According to the National Association for Gifted Children's 2006-2007 State of the States report (2007), only 11 states had formal policies in place that provided guidelines for academic acceleration. Without a policy for acceleration, personal values and beliefs might take precedence over research in the decision-making process, and the needs of some advanced students might not be met (Marron & Gerling, 2007). In some studies of gifted

education policy, researchers found fewer comprehensive programs in states that did not have written policies in place suggesting that policy plays an important role (Landrum, Katsiyannis, & DeWard, 1998; Shaunessy, 2003; Stephens, 2000).

Positive results have been obtained when acceleration has been used as an intervention for carefully selected students, and there has been sufficient research to support the belief that it does not cause social-emotional harm. Still, there exists a huge gap between research and practice (Colangelo, Assouline, & Gross, 2004). One of the purposes of this study was to examine possible obstacles and philosophical beliefs about gifted learners and acceleration held by school administrators who have the decision-making authority to allow forms of acceleration to take place in schools. Borland (1989) wrote,

Acceleration is one of the most curious phenomena in the field of education. I can think of no other issue in which there is such a gulf between what research has revealed and what most practitioners believe. The research on acceleration is so uniformly positive, the benefits of appropriate acceleration so unequivocal, that it is difficult to see how an educator could oppose it (p. 185).

Various forms of academic acceleration could be used by school administrators and educators to ensure that the needs of advanced learners are being met along with the groups targeted under the current high-stakes testing and accountability system.

Acceleration has proven to be an affordable intervention and easy to implement with little or no cost to schools (Colangelo et al., 2004; Davidson, 2004; Rogers, 2002). For instance, a second grade student could visit a fourth grade classroom in the same building for reading instruction. However, without the support of federal legislation, state

legislation, local school boards, teachers, or school administrators, gifted learners may not receive an appropriate education to reach their potential. The loss of potential can be detrimental to both the gifted child and to society (Davidson, Davidson, & Vanderkam, 2004).

The research conducted on acceleration has been extensive and spans over 80 years, (Brody & Benbow, 1987; Colangelo et al., 2004; Daurio, 1979; Gross, 1993; Kulik, 2004; Pressey, 1949; Southern & Jones, 1991; Stanley, 1991; Tannenbaum, 1953, 1983; Terman, 1925). There has been, however, little focus on policies that support or impede its practice in school. The current study will provide an overview of the extent to which such policies and practices have been implemented in a sampling of school districts in the state of Florida. Such information was intended to contribute to the body of knowledge on acceleration policies and practices and to serve as a guide for states and school districts that are considering developing or modifying their own acceleration policies.

In this quantitative study, data were gathered about policies and practices related to 11 forms of academic acceleration in elementary schools from elementary school principals and district-level administrators of gifted education programs. These 11 forms of acceleration included: (a) early admission to kindergarten, (b) early entrance to first grade, (c) whole-grade acceleration, (d) continuous progress, (e) self-paced instruction, (f) subject acceleration, (g) curriculum compacting, (h) telescoping curriculum, (i) mentoring, (j) extracurricular programs, and (k) distance learning. Additional data were gathered about the knowledge school principals held regarding acceleration and gifted

learners. The data were then analyzed to determine if there was a statistically significant difference between the school-based acceleration interventions offered by principals with the highest combined knowledge about gifted learners and acceleration and the elementary school principals with the lowest combined knowledge about gifted learners and acceleration and if any district, school, or personal demographic variables accounted for such differences.

Conceptual Framework

Acceleration is a means of moving a student through an educational program at a faster rate or at an earlier age than typical (Colangelo, Assouline, & Lupkowski-Shoplik, 2004). The purpose of acceleration has been to match a student's readiness, ability level and motivation with the level and pace of instruction. This strategy acknowledges that there are different levels of ability, intelligence, and rates of learning in the typical heterogeneously grouped classroom. Acceleration has been viewed as a way of providing equity to advanced students as it allows them to progress and learn new things rather than be exposed to unnecessary repetition of material that they have already mastered.

Acceleration is an inexpensive method of providing appropriate educational opportunities for students who might not otherwise reach their potential or who might become disengaged from school and even drop out (Hansen & Toso, 2007; Renzulli & Park, 2000; Rimm, 1995, 1997, 2008).

Principals, district administrators, and school boards can nurture or inhibit the development of gifted learners in their districts by the decisions they make for schools.

When resources are allocated for student programs and services, the needs of the gifted should also be considered. In the typical elementary school with identified gifted learners, most of these gifted learners have been receiving instruction in a heterogeneous classroom with just a few hours per week of enrichment in a pull-out setting (Gallagher, 2004; U.S. DOE, 1993). This means that the majority of the gifted students time 'has been spent in classrooms with regular education teachers who may not have had any training during their undergraduate coursework on the needs of exceptional students. In the *National Excellence: A Case for Developing America's Talent* report (U.S. DOE, 1993), it was cited that approximately 80% of teachers admitted that they provided the same work for all students with very little modification for bright learners. In a more recent study, Lovelass, Farkas, and Duffett (2008) found that only 23% of teachers in a national questionnaire reported that the needs of advanced students were a top priority at their schools. Even well-intentioned teachers have been unable to meet the needs of advanced learners when they are working with extreme variance in ability level in the regular classroom. Ruf (2005) estimated that there could be up to twelve grade levels of ability difference in a heterogeneous classroom by third grade when one considers students from the bottom and top ranges of ability.

In January of 2002, President George W. Bush signed into law the No Child Left Behind Act of 2001 (P.L. 107-110). The No Child Left Behind Act (NCLB) was a revision of the Elementary and Secondary Education Act (1965), and its purpose was to ensure accountability measures in schools and continue the principles of inclusion established by the Civil Rights Act (Hardy, 2002). Considering the external pressure for

states to show growth for the lowest quartile of students under NCLB legislation, the situation for gifted education has been further compounded. At the time of the present study, there were no sanctions or penalties for schools in Florida that did not show growth for students who were already above proficiency levels (Florida Department of Education, 2009). School principals, reacting to NCLB pressures have been faced with difficult choices as school leaders when it comes to budget decisions and instructional focus. The benefit of some students, however, should not be at the cost of others if the United States wants to ensure it has a pipeline of talent to be competitive in the future.

In 2009, there was no federal law in the United States that required the identification of gifted learners or mandated service for gifted learners (Stephens, 2008). Each state has been left to create its own definition of a gifted learner, determine what appropriate services may be, and provide funding for special programs for the gifted. Some states have categorized gifted learners with other students who receive special education services under the Individuals with Disabilities Act (Shaunessy, 2003), or IDEA. IDEA has not protected gifted students. Without the protection of law, services and provisions for identified gifted learners have varied widely from state to state, and funds for these students are often at risk during times of economic hardship (Shaunessy, 2003; Stephens, 2008).

In 1988, Congress passed the Jacob K. Javits Gifted and Talented Students Education Act. This bill, which was part of the reauthorization of the Elementary and Secondary Education Act, reminded policy makers and education professionals that gifted children were an important national resource and, therefore, their intelligence and

talents should be identified and nurtured. This bill also recognized the needs of underrepresented populations of gifted learners such as economically disadvantaged students and others who were limited in English proficiency. The Javits Act called for government to lead by financially supporting research and professional training to improve the identification and services for all gifted learners (U.S. DOE, 2006). At the time of the present study, the Javits Act remained the only federal funding source for gifted education. This source has, however, often been at risk for elimination or reduction during legislative budget sessions (NAGC, 2008; Stephens, 2008).

Purpose of the Study

The purpose of this study was to provide recent descriptive information about administrators' knowledge of acceleration and the needs of gifted learners, current acceleration policies, and accelerative practices in Florida elementary schools. District, school, and personal demographic variables were investigated to determine the extent to which they affected school-based acceleration options provided for gifted learners. Also, school district policies related to academic acceleration for elementary school students were examined to determine which types of research-based acceleration options were more frequently used and what procedures were in place to guide the decision-making process. This information was intended to be used to inform administrators and policy makers about acceleration and guide policy initiatives that are undertaken in support of advanced learners.

Significance of the Study

This study was significant for three reasons. First, it provided a snapshot of acceleration policies and practices in the state of Florida in the first decade of the 21st century. Such information could aid administrators and advocates as they draft acceleration policies for the state and at the local district level. According to the Florida Program Specialist for Gifted Education, the state of Florida was working on an acceleration policy and during this time period that would require all districts to have a written policy in the near future (D. Smith, personal communication, November 1, 2008). This study was intended to provide a database of district practices regarding acceleration.

Second, this study enabled the presentation of a state-wide perspective from district administrators of gifted education on factors that influence or inhibit academic acceleration in Florida elementary schools and types of acceleration that have been implemented. Examining current policies in the 67 Florida school districts was intended to provide a view of accelerative options for advanced learners within the context of No Child Left Behind. In this way, the study has contributed to the body of knowledge about gifted education policy and acceleration.

Third, this study resulted in a state-wide perspective on how state-level acceleration policies have aligned with the *NAGC Pre-K-12 Gifted Program Standards* (NAGC, 2000). In the era of accountability and research-driven decision-making, such data should be important to educational decision-makers at the state and local level.

Statement of the Problem

Unlike the Individual with Disabilities Act (P.L. 94-142, 1975) that protects students with other disabilities, there has been no federal law that mandates service or identification of gifted learners in the United States (Stephens, 2008). The identification of gifted learners, funding for gifted education, and programming decisions for gifted learners have been dependent upon each state's legislative body, local school boards, and school principals. Education policy has been bound by administrative rules, court decisions, and statutes, which have been interpreted through codes and regulations written by state departments of education and, finally, implemented by local policies approved by local school districts. Researchers on policy development in gifted education have shown that states without strong policies and mandates for gifted students are often at-risk for elimination of funding, programs and identification of gifted learners (Purcell, 1992; Shaunessy, 2003). With the emphasis on high-stakes testing under NCLB, many states have seen the elimination of programs and services for gifted learners as funding and resources shift to address the needs of lower-performing students in order to meet the specific mandates of the legislation (Loveless et al., 2008). After examining National Assessment of Educational Progress (NAEP) data, researchers found that since 2000, the lowest performing students have made tremendous gains in achievement, but performance among the highest performing students has remained largely stagnant (Loveless et al., 2008). Under such circumstances, states should begin to look at how they are serving their most able learners.

The National Association for Gifted Children (NAGC) has been the primary advocacy organization for gifted education in the United States. The NAGC introduced its Pre-K-12 Gifted Program Standards in 1998. Curricular provisions were identified that included various forms of acceleration as critical components to gifted education services (NAGC, 2000). The guiding principles contained in the NAGC standards included belief statements about differentiation, adaptations of regular classroom curricula, accelerated options, and the need for varied approaches to meeting the needs of gifted learners (Landrum & Shaklee, 1998). The NAGC program standards were, at the time of this study, considered best practices in gifted education.

Acceleration has been an empirically validated yet often underused intervention in schools (Gallagher, 2004; Southern, & Jones, 1991; Van Tassel-Baska, 1986.) With NCLB, the emphasis has been placed on meeting the needs of lowest performing students, often leaving out the needs of students who are already at or above grade level (Loveless et al., 2008). Acceleration can take many forms and over 80 years of research has supported its careful use with advanced students. Accelerative options such as flexible ability grouping, subject acceleration, and grade skipping cost schools nothing and, in the long run, save schools money because students can progress through the system in a shorter amount of time (Colangelo et al., 2004). These strategies can also benefit bright students from low income areas that do not offer gifted program services or enrichment opportunities. Implementation of acceleration can be aided or impeded by policy and attitudes held by those in administrative positions. Therefore, the problem addressed in this quantitative study was the knowledge of gifted learners' needs

possessed by elementary school principals and district-level administrators of gifted education programs and the accelerative options that were provided for these students in their schools and supported by school district policy.

Definition of Terms

The following definitions were included to clarify terms used throughout this study:

Ability Grouping--Students of like ability or interest are grouped together on a regular basis during the school day for pursuit of advanced knowledge in a specific content area (Rogers, 2002).

Acceleration--Acceleration is a means of moving a student through an educational program at a faster rate or at an earlier age than typical (Colangelo, Assouline, & Lupkowski-Shoplik, 2004).

Accelerant--This terminology refers to a student who has received some form of academic acceleration.

Cluster Grouping--Cluster grouping consists of small groups of gifted learners (usually 4-8) of the same grade level are placed in the same mixed-ability, general education classroom with a teacher who is qualified to work with gifted learners (Rogers, 2002).

Continuous Progress--A student is provided more challenging content as prior content is completed and mastered (Colangelo et al., 2004).

Curriculum Compacting--A student is provided reduced drill and practice. Instruction may include fewer objectives compared to the general curriculum. Time gained may be

used for more advanced content instruction or to participate in enrichment activities (Reis, Burns, & Renzulli, 1992).

Differentiation--Differentiation is the practice of adjusting the curriculum, teaching strategies, and classroom environment to meet the needs of all students (Thomlinson, 2003).

Distance Learning--A student enrolls in coursework delivered outside of normal school instruction. Examples are Internet-based instruction or televised courses.

Early Admission to Kindergarten or First Grade--A student enters kindergarten or first grade prior to achieving the minimum age for school entry as set by district or state policy (Colangelo et al., 2004).

Extracurricular Programs--A student enrolls in coursework, after school programs, or summer programs that confer advanced instruction and/or credit.

Gifted Learner--Florida legislation defines a gifted learner as “One who has superior intellectual development and is capable of high performance” (FL DOE, 2009). Students are eligible for the gifted program in Florida if they meet one of the following criteria:

1. The student demonstrates need for a special program, has a majority of characteristics of gifted students according to a standard scale or checklist, has superior intellectual development as measured by an intelligence quotient of two standard deviations or more above the mean on an individually administered standardized test of intelligence; or

2. The student is a member of an under-represented group and meets the criteria specified in an approved school district plan for increasing the participation of under-represented groups in programs for gifted students.

General Education--Regular education classrooms that are not considered part of an Exceptional Student Education program or program for the gifted are considered to be general education classrooms.

Independent Study--Independent study is a self-directed learning strategy where the teacher acts as guide or facilitator and the student plays a more active role in designing and managing his or her own learning (NAGC, 2009).

Mentoring--A student is paired one-to-one with a personal instructor, expert, or tutor who provides advanced or more rapid pacing of instruction in a specific topic area, subject or career (Rogers, 2002).

Pull-Out--In this method of gifted service, a group of gifted students receive instruction outside of the regular classroom in a resource setting for a specified number of hours per week (Rogers, 2002). Students engage in enrichment or extension activities which may or may not relate to what they are learning in the regular classroom.

Self-Paced Instruction--A student proceeds through learning and instructional activities at a self-selected pace. In this form of continuous progress or independent study, the student has control over all pacing decisions (Colangelo et al., 2004).

Special Education--This method of instruction is specially designed instruction that meets the unusual needs of exceptional students (Hallahan & Kauffman, 2003).

Single-Subject Acceleration--A student is placed in a class or classes with older peers for part of the day or works with advanced grade-level materials in one or more content areas.

Talent Development--Individual students with demonstrated high performance or potential in a specific area are provided experiences either through individual work or with a group of students with like talent (Rogers, 2002).

Talent Search Programs--Highly talented students are provided highly challenging, accelerated learning experiences, usually on a college campus, in a specific talent area. (Rogers, 2002).

Telescoping Curriculum--A student is provided instruction that entails less time than is normal, e.g., completing a one-year course in one semester, or three years of middle school in two. Telescoping differs from curriculum compacting in that time saved from telescoping always results in advanced grade placement.

Whole-Grade Acceleration--A student is given a grade-level placement ahead of chronological-age peers. This is also referred to as “grade-skipping” and may occur at the beginning of or during the school year (Colangelo et al., 2004).

Delimitations

There are several delimitations to this study that might limit or preclude the generalizability of the results:

1. The questionnaire that was sent to district administrators of gifted education assumed that those persons had at least a basic knowledge about gifted

education, the needs of gifted learners and the research and terms related to academic acceleration. There may have been variance among questionnaire respondents in regard to their knowledge base and training in gifted education.

2. The nature of self-reporting measures and return rates for questionnaires create limitations. It is possible that district gifted education administrators with exemplary policies and practices did not return the questionnaires or copies of their written acceleration policies. It is also possible that district administrators who did not have a gifted education background or knowledge base about acceleration might be biased against acceleration practices. Their questionnaire responses might reflect such bias.
3. The participant sample for the questionnaires was limited to the elementary school principals in 10 of Florida's 67 school districts. Given the nature of the sample, the researcher was not able to make generalizations about non-respondents or about districts not included in the sample.
4. The questionnaire was pilot tested only once due to financial and time constraints of the researcher. The majority of items on the questionnaire were modified from a national questionnaire created by the Institute for Research and Policy on Acceleration which did not publish information about its validity or norming process.
5. Finally, the researcher analyzed written acceleration policy documents from school districts. In this process, the researcher created her own criteria to evaluate their effectiveness in comparison to the national standards.

Assumptions

It was assumed that elementary school principals and district-level administrators in charge of gifted education programs responded to the questionnaires with accurate and current information. It was also assumed that administrators who were new to their positions at the time of the study had access to relevant data from the 2008-2009 school year for their district or school.

Research Questions

The research questions were selected based on the review of literature on the acceleration needs of gifted learners, gifted education policy, and barriers to acceleration practices. The following research questions guided this study:

1. Which of the types of acceleration listed in *A Nation Deceived* that are applicable to students in grades K-5 are addressed in school board policies?
2. What are the most common types of acceleration implemented in elementary schools in Florida?
3. What are the most common reasons for not accelerating a student according to district administrators and school principals?
4. What relationship, if any, exists between school or principals' personal demographic variables and types of acceleration offered in elementary schools?

5. What relationship, if any, exists between elementary school principals' knowledge of gifted learners and the types of acceleration implemented in their schools?
6. What relationship, if any, exists between district-level acceleration policies and actual acceleration practices in elementary schools in the districts?
7. What process is utilized in each district to help make decisions about acceleration for students?

Methodology

District level administrators of gifted education programs and elementary school principals were surveyed to examine their knowledge of academic acceleration and the needs of gifted learners. Types of acceleration utilized in elementary schools and outlined in district school board policy were compared to national standards provided by the National Association for Gifted Children and the research on acceleration in *A Nation Deceived*.

Participants

Participants in this study included the entire population of gifted program administrators in the 67 school districts in the state of Florida and a random sampling of 291 elementary school principals from nine school districts in Florida. A questionnaire was sent to the individual in each school district designated as responsible for gifted education programs through the Florida Department of Education's Gifted Education

Specialist. A questionnaire was also sent to a stratified random sampling of elementary school principals in Florida. The contact information for these individuals was also obtained from a list of schools on the Florida Department of Education website.

Instrumentation

Instrumentation for this study included two versions of a questionnaire and a District Acceleration Policy Document Review Form developed by the researcher. The questionnaire utilized information from *A Nation Deceived* report on acceleration (Colangelo et al., 2004), the *NAGC Pre-K- Grade 12 Gifted Program Standards* and the *Questionnaire on Acceleration Attitudes and Practices* (Institute for Research and Policy on Acceleration, 2007) to create items that addressed best practices for acceleration, types of acceleration, and attitudes toward the gifted.

The questionnaire was pilot tested to ensure clarity of questions and content validity. The researcher distributed 20 questionnaires to persons having expert knowledge and experience in gifted education. Included were district-level administrators of gifted education programs and university professors of gifted education programs. These individuals responded to an online questionnaire and provided feedback which was used to modify the final questionnaire

The 25-item questionnaire was divided into four sections with closed-ended and open-ended questions. Section I was designed to elicit information about types of acceleration implemented in schools. Section II was designed to request information about the decision-making process and tools used in schools. This section also addressed

factors that support or impede the acceleration process in schools. Section III was designed to assess personal beliefs and attitudes toward the gifted and barriers to acceleration implementation. Section IV requested personal demographic information about the participant and participating school or district.

Data Collection and Analysis

The current descriptive study had three phases. First, a questionnaire was sent to the district administrator in charge of gifted education programs in all 67 school districts in the state of Florida. Second, a copy of the district's written acceleration policy (if there was one) was requested for review and analysis. The researcher created a District Acceleration Policy Document Review Form to compare components of each district's plan to standards set forth by the National Association for Gifted Children and the research on acceleration outlined in *A Nation Deceived* (Colangelo et al., 2004). A deductive analysis was performed on the school districts' written acceleration policies, rules, and regulations.

The third phase of the research included the distribution of a questionnaire to a stratified random sampling of elementary school principals in nine districts in Florida. Districts selected for inclusion in this study were from a convenience sample of 10 Florida school districts that had an existing relationship with the University of Central Florida (UCF) through the UCF-Progress Energy Leadership Institute. Of the 10 districts selected for this research, nine gave permission to survey their employees and were included in this study. These districts contained elementary schools from small, medium,

and large sized districts from rural and suburban geographic regions of Florida. The districts had sufficient diversity in student demographics to be representative of all 67 districts in Florida.

The questionnaire was used to investigate (a) administrator perceptions as to why students were not accelerated and (b) barriers to acceleration procedures. Other items included in the questionnaire were used to query respondents regarding individuals having decision making authority over student acceleration in local school districts and the most common type of acceleration for elementary learners in schools.

Items were analyzed using SPSS version 16.0. Frequencies and descriptive statistics were used to report types of acceleration included in district policies. Relationships between principal knowledge about acceleration and types of acceleration provided to students in their schools were analyzed using t-tests. A one-way ANOVA was used to examine relationships between school and principal demographic variables and types of acceleration offered in schools.

Organization of the Study

Chapter 1 introduced the problem and provided an overview of the study. Chapter 2 will present a comprehensive review of the literature related to academic acceleration that is relevant to the current study. Chapter 3 contains the methodology implemented for data collection and analysis. Chapter 4 provides an analysis of the data. Chapter 5 summarizes the findings and discusses implications for practice and recommendations for future research.

CHAPTER 2 REVIEW OF THE LITERATURE

Introduction

Gifted learners have unique social, emotional, academic, and intellectual needs (Neihart, et al., 2002; Silverman, 2002). They require academic rigor and challenge delivered at a pace commensurate with their ability, interest, and readiness level if they are to achieve their potential (Clark, 2001; Delisle & Galbraith, 2002). When gifted learners are not provided a rigorous education delivered at an appropriate pace, they can develop poor study habits, behavior problems, and may eventually drop out of school (Hansen & Toso, 2007; Renzulli & Park, 2000; Rimm, 2008).

A total of 18 different forms of academic acceleration have been used to meet the diverse needs of gifted learners (Colangelo et al., 2004). Researchers have found positive results when acceleration has been used as an intervention with carefully selected students. There have also been sufficient research results to support the belief that acceleration does not cause social-emotional harm (Colangelo et al.). In this chapter, the researcher examined the results of research on grade-based acceleration options, content-based acceleration options, enrichment, curricular modifications for gifted learners, effects of acceleration, barriers to acceleration, and the beliefs, attitudes, and knowledge of teachers and administrators regarding gifted education. Since the current study focused on academic acceleration policies and practices related to gifted students during the elementary school years, acceleration options only available to secondary students were not included in this review of literature.

The review of literature was divided into eight sections: (a) History of Gifted Education in the United States, (b) History of Gifted Education in Florida, (c) Grade-Based Acceleration, (d) Content-Based Acceleration, (e) Effects of Acceleration on Gifted Learners, (f) Curricular Modifications and Enrichment, (g) Barriers to Acceleration, and (h) Teacher and Administrators Beliefs, Attitudes, and Knowledge of Gifted Education and Acceleration.

History of Gifted Education in the United States

There is a history of ambivalence and often hostility toward gifted education in America (Davidson & Davidson, 2006; Tannenbaum, 1983; U.S. DOE, 1993). In discussing the cyclical pattern of periods of federal interest and neglect of gifted learners in the United States, Tannenbaum stated, “No other special group of children has been alternately embraced and repelled with so much vigor by educators and laypersons alike” (p. 16). The perennial debate about gifted education stemmed from the seemingly competing values of excellence and equity. America was founded on the ideals of equity, and to some, gifted education has always been equated with elitism (Del Siegle, 2008).

Although Americans have valued excellence in athletics and achievement in the arts, achievement in intellectual pursuits and excellence in academics have not always been favored (Davidson & Davidson, 2006; MacDonald, 1994). The myth has prevailed that gifted learners will succeed regardless of intervention or appropriate instruction and that gifted learners are already advantaged in some way (Davidson & Davidson; Van Tassel-Baska, 1997). Van Tassel-Baska stated “improvement of educational quality

requires that educational planners and facilitators be sensitive to the needs of all learners, and that they plan educational experiences suited to those learners” (p. 69). Using the equity argument, advocates have called for gifted learners to be taught at a rate and pace that is commensurate with their ability, motivation and readiness levels like their non-gifted classmates, they would learn new things each day (Del Siegle, 2008; Van Tassel-Baska). According to several researchers, lack of intellectual challenge can lead to underachievement, disengagement, and even dropping out of school (Hansen & Toso, 2007; Renzulli & Park, 2000; Rimm, 2003). The Institute for Research and Policy on Acceleration provided the following viewpoint on this debate:

Educational equity might mean remedial efforts for some at-risk students and acceleration for some academically able students. Just as a low achieving student could be hurt by lack of access to remedial instruction, a high achieving student could be hurt by lack of access to an appropriately matched curriculum. (IRPA website, 2009)

Acceleration is not a new concept in America. Early American schools used various forms of acceleration and frequently grouped students in multi-age one-room school houses and accelerated them through the curriculum quicker in order to allow students to enter the agricultural or industrial work force (Kulik, 2004). In 1862, the first documented program of acceleration for rapid learners was initiated in St. Louis, Missouri (Kulik). The program called for “frequent assessment of student progress and rapid promotion of quick learners” (Kulik, p. 13). The school system in Cambridge, Massachusetts became one of the first to implement the accelerative strategy now referred to as “telescoping” by condensing six years of work into four years for advanced learners (Kulik).

Results from research on the nature of intelligence in the early 20th century resulted in the development of special programs and interventions for the most able learners. French researchers Binet and Simon developed a series of tests to help identify students with low intelligence so that schools could separate them and place them into special classrooms. The Binet-Simon test produced a method of calculating a child's mental age by determining at which age typical children were able to complete certain tasks. This assessment tool provided a credible, empirical method for educational researchers and psychologists to investigate intelligence. Terman used the Binet-Simon scales to choose participants for his longitudinal study of giftedness. Beginning in 1921, Terman followed the lives and development of over 1,400 children with IQ scores of 135 or greater. In *Genetic Studies of Genius*, Terman stated that gifted learners differed qualitatively and quantitatively from non-gifted peers (Terman, 1925). He also concluded that gifted learners were emotionally stable and that there was no single profile for gifted students as they had diverse traits.

In 1922, Hollingworth opened a special school for the gifted in New York City. Hollingworth conducted research on gifted students with IQs between 132 and 180 and profoundly gifted students with IQs 180 and above. In 1926, Hollingworth published what has been considered the first textbook on gifted education, *Gifted Child: Their Nature and Nurture* (NAGC website, 2009). Like Terman, Hollingworth discovered that gifted learners showed unique learning styles and emotional development that differed from their non-gifted peers (Colangelo & Davis, 2002; Hollingworth, 1942). Terman's and

Hollingworth's works were widely published and led to grouping of children together in classrooms based on ability rather than age (Grossberg & Cornell, 1988.)

Sputnik and the National Defense Education Act

Following the launch of the Russian satellite *Sputnik* in 1957, there was some interest in nurturing talent among gifted learners in math and science (Karnes & Nugent, 2003). During times of crisis and military conflict, the United States has historically shown an interest in gifted learners as natural resources (NAGC, 2009). As a result of this interest in closing the achievement gap between U.S. and Russian students, the National Defense Education Act (NDEA) was established in 1958. The NDEA led to a positive climate for gifted education, as federal funding was provided for increased programming in math and science (Cooper, 2008; Peterson, 2003). The NDEA also benefited gifted learners because it brought increased attention to their needs at the state level. Prior to the NDEA, only six states had laws addressing gifted students' needs (Stephens, 2000).

Marland Report

In 1972, U.S. Commissioner of Education Marland gave a report to Congress that exposed the state of education of gifted learners in America. In this report, Marland stated that provisions for students in the United States were inadequate and that America was failing its brightest students. These students were cited as the very children who would be needed to lead America in the future as scientists, engineers, and inventors. This report showed that only a small percentage of the approximate 2.5 million potentially gifted

students in the United States were receiving special education services (Marland, 1972). The report also provided a broad, federal definition of gifted learners, documented the type of education these students needed in order to excel, described the apathy from society and education professionals towards gifted students' needs, and discussed the consequences and psychological damage that gifted children who were not appropriately served could suffer. This report led to the creation, in 1974, of the Office of the Gifted and Talented.

Just after the Marland Report, the Education for all Handicapped Children Act became law in 1975. Public Law 94-142 (Individuals with Disabilities Educational Act or IDEA) established a federal mandate to serve children with special education needs but did not include gifted learners (P.L. 94-142). Some states were able to use IDEA to justify special services for gifted students (Stephens, 2000).

A Nation at Risk

In 1983, a report by the National Commission on Excellence in Education was released. *A Nation at Risk* (U.S. DOE, 1983) called for major educational reform and revealed that many of America's brightest students were lagging behind students from other nations in academic areas. The report included the state of current policies and practices in gifted education and called for the raising of academic standards as well as promoting appropriate curriculum for gifted learners. Of significance to gifted education, *A Nation at Risk* stated that schools must recognize the diversity of their students which included differences in cognitive ability. The report purported that such diversity in

classrooms meant that different approaches to education and to content were required in order to meet student needs. The report mentioned the need for both enrichment and acceleration for gifted learners and that the most gifted students may require acceleration that is beyond the needs of other bright learners (U.S. DOE).

Jacob K. Javits Gifted and Talented Students Education Act

In 1988, Congress passed the Jacob K. Javits Gifted and Talented Students Education Act. This bill, which was part of the reauthorization of the Elementary and Secondary Education Act, referred to gifted children as an important national resource whose intelligence and talents should be identified and nurtured. This bill also recognized the needs of underrepresented populations of gifted learners such as economically disadvantaged students and others who were limited in English proficiency. The Javits Act called for government to lead by financially supporting research and professional training to improve the identification and services for all gifted learners (U.S. DOE, 2006). As of 2009, the Javits Act remained the only federal funding source for gifted education (NAGC, 2008; Stephens, 2008).

National Excellence: The Case for Developing America's Talent

Approximately 20 years after the Marland Report, the United States Office of Educational Research and Improvement published the report *National Excellence: The Case for Developing America's Talent* (U.S. DOE, Office of Educational Research and Improvement, 1993). This report revealed a continuing crisis in gifted education and

stated that America's most talented students were not meeting their potential because they were not being appropriately challenged in America's public schools (U.S. DOE, 1993). The report also stated that while raising minimum standards for achievement, the United States must also raise the ceiling.

In *National Excellence: The Case for Developing America's Talent*, the authors asserted that neglect of gifted students would make it impossible for America to compete in a global economy (U.S. DOE, 1993). The report also stated that the lowering of standards had impacted gifted learners to the greatest extent of all student groups because of the gap between what was being taught and what gifted students were capable of learning. The good news from this report was that there had been an increase in programs for the gifted across all states since the Marland Report, and many of those states had enacted legislation that encouraged school districts to serve gifted and talented students (U.S. DOE, 1993).

The neglect of diverse gifted learners was described in the National Excellence Report. The report's authors stated that gifted curriculum had helped improve expectations for all students; however, the problem was still most severe among economically disadvantaged and minority students who continued to be overlooked and underserved in gifted education programs. The definition of gifted learners that was most accepted across the United States was that which was provided in *National Excellence: The Case for Developing America's Talent* (U.S. D. O.E. 1993) as follows:

Gifted children are those children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment. These children and youth exhibit high performance capability in intellectual, creative

and/or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools (p. 26).

A Nation Deceived

In 2004, the Templeton Foundation released a national report on acceleration. Authors of *A Nation Deceived: How Schools Hold Back America's Brightest Students* emphasized the gap between theory and practice in regard to acceleration policies and practices for gifted learners (Colangelo et al., 2004). This report provided a collection of meta-analyses of research on different types of acceleration, academic benefits of acceleration, and social-emotional benefits of acceleration for gifted learners. The authors stated that the report “provided a wake-up call to America about the enormous loss of potential to schools, families and the nation when academically precocious students are denied access to opportunities for academic advancement” (IRPA website, 2007). A direct outcome of the report was the formation of the Institute for Research and Policy on Acceleration (IRPA) at the University of Iowa’s Belin-Blank Center for Gifted Education. At the time of the present study, IRPA served as a clearinghouse of information on acceleration research and policies, conducted research on acceleration, and provided consultation on policy issues for schools (IRPA, 2007). Table 1 provides a timeline of the significant events in the history of gifted education in the United States.

Table 1
Timeline of Significant Events in Gifted Education in the United States

Date	Event
1862	First documented program of acceleration for rapid learners was initiated in St. Louis, Missouri (Tannenbaum, 1958)
1905	Binet and Simon develop a series of tests that provide a mental age
1921	Louis Terman begins his longitudinal study of 1,500 gifted children
1922	Leta Stetter Hollingworth opened a special school for the gifted in New York City
1925	Louis Terman publishes <i>Genetic Studies of Genius</i>
1957	Sputnik was launched
1958	National Defense Education Act (NDEA) was established
1964	Civil Rights Act passes and includes equal opportunities to education
1972	Marland Report to Congress
1975	Public Law 94-142 The Education for all Handicapped Children Act
1983	<i>A Nation at Risk</i>
1988	Congress passes the <i>Jacob K. Javits Gifted and Talented Students Education Act</i>
1993	<i>National Excellence: The Case for Developing America's Talent</i>
2002	<i>No Child Left Behind</i>
2004	<i>A Nation Deceived</i>

History of Gifted Education in Florida

Florida is one of 26 states that require both the identification of gifted learners and that service be provided for these students according to the 2006 NAGC State of the

States Report (NAGC, 2007). The first state and local funds for gifted education were authorized by the State Board Rule 6A-6.03019(3) in 1956. In 1968, gifted was included in Exceptional Student Education programs per Florida Legislature and in 1975, a mandate for gifted education was established (FLDOE & WOGI, 2008). Table 2 provides a timeline of events in the history of gifted education in Florida.

As of 2009, gifted students in Florida were still included under the umbrella of Exceptional Student Education. Rule 6A-6.03019, Florida Administrative Code, defines a gifted student as “one who has superior intellectual development and is capable of high performance.” According to the Florida Department of Education website, students are eligible for the gifted program if the student meets one of the following criteria:

1. The student demonstrates need for a special program, has a majority of characteristics of gifted students according to a standard scale or checklist, has superior intellectual development as measured by an intelligence quotient of two standard deviations or more above the mean on an individually administered standardized test of intelligence.
2. The student is a member of an under-represented group and meets the criteria specified in an approved school district plan for increasing the participation of under-represented groups in programs for gifted students.

Florida statutes have mandated that all public school districts identify students who are eligible for ESE services, determine the students’ educational needs, and provide an appropriate program of special instruction, facilities, and services for exceptional students, including the gifted (FL DOE, 2009).

Table 2

Timeline of Significant Events in the History of Gifted Education in Florida

Date	Event
1956	The first state and local funds for gifted education were authorized by State Board Rule 6A-6.03019(3)
1975	Mandate for gifted education is established
1977	Rule implemented: Special Instructional Programs for Students who are Gifted 6A-6.03019
1983	Challenge Grant Program and Governor's Summer Program initiated and funded by the Legislature
1991	Gifted Rule Extended: The Florida gifted rule was extended to include specific attention to students in groups traditionally underrepresented in gifted programs
1992	First attempt at draft rule revision; Rule implemented, Specialization Requirements for the Gifted Endorsement - Academic Class Beginning July 1, 1992 , 6A-6.4.01791
1994	Greater Accountability in Gifted Education (GAGE) published; Development of Gifted Endorsement Modules
1996	OPPAGA Review of Gifted Programs: Publication of OPPAGA Report 95-45 Information Brief of Florida's K-12 Gifted Program. The purpose was to provide the Legislature with information about the gifted program in Florida's public schools
2002	Rule change: Race and ethnicity were deleted from the rule language defining under-represented populations. Groups eligible under optional district-developed Plan Bs were thus identified as those from families determined of low socio-economic status or those who are limited English proficient.

The Florida Department of Education published a technical assistance paper supporting the use of acceleration for gifted learners in 2003. This technical assistance paper provided a definition of acceleration, a summary of the research on forms of

acceleration and benefits, and stated that published research had debunked the myth that acceleration causes social or emotional harm to carefully selected gifted learners.

Although acceleration has been permitted in the state of Florida, such decisions have been left to the discretion of individual school principals under site-based management. In Florida, programs for secondary students such as Advanced Placement, International Baccalaureate, and dual enrollment have often been referred to as acceleration (FLDOE, 2009; OPPAGA, 2008.)

At the time of the present study, Florida law prohibited two forms of academic acceleration for elementary students that have been supported by researchers. These two forms of acceleration were early entrance to kindergarten and early entrance to first grade. According to Florida State Board Rule 6A-6.024, children are eligible for admission to kindergarten if they have attained the age of five years on or before September 1 of the school year. For admission to first grade, Rule 6A-6.024 stated that the student:

shall be six years old on or before September 1 of the school year and shall satisfy one of the following requirements: (a) Previous enrollment and attendance in a Florida public school; (b) Satisfactory completion of kindergarten requirements in a nonpublic school; (c) Previous attendance in an out-of-state school to which the student was admitted on the basis of the age requirement established by the state of residency. (FLDOE website, 2009)

Grade-Based Acceleration

Schools have been able to use at least 18 different types of acceleration to meet the needs of high ability learners (Colangelo et al., 2004; Southern & Jones, 1991). These forms of acceleration have been classified as either grade-based or content-based

(Rogers, 2002) and as administrative procedures or curriculum models (Rogers, Schiver & Maker, 1997; Southern, Jones, & Stanley, 1993). Of the 18 forms of acceleration listed in *A Nation Deceived*, 11 of these forms have been applicable to elementary school students: (a) early admission to kindergarten, (b) early entrance to first grade, (c) whole-grade acceleration; (d) continuous progress, (e) self-paced instruction, (f) subject acceleration, (g) curriculum compacting, (h) telescoping curriculum, (i) mentoring, (j) extracurricular programs, and (k) correspondence courses.

Some of these 11 forms of acceleration, such as whole-grade acceleration and subject acceleration, have required administrative decision-making. Others, such as curriculum compacting and self-paced instruction, can be implemented by classroom teachers. The remaining seven forms of acceleration, e.g., Advanced Placement and dual enrollment, have been available to gifted and advanced learners at the secondary level. (Southern & Jones, 2004).

Grade-based acceleration has had the effect of shortening the number of years that a student spends in the K-12 school system. In contrast, content-based acceleration has provided access to advanced content at an earlier age than typical (Rogers, 2003).

Administrative procedures have included decisions to allow early entrance to kindergarten or first grade, to grade skip a student, or to allow subject acceleration in one or more content areas. These administrative decisions have moved a child from a setting with age-peers to one with students who are chronologically older. The purpose of these forms of acceleration has been to place students in a setting that more closely matches their demonstrated or potential cognitive ability. Experts have emphasized that this form

of acceleration is not an attempt to hurry a child who is not ready, but to acknowledge the child's mastery of certain skills and knowledge and to more closely match his or her motivation, readiness and cognitive ability with instruction (Rogers, 2002; Southern & Jones, 1992).

Early Entrance

Students enter school with varying levels of readiness, motivation and ability (Reis et al., 2004). Gifted kindergarteners may enter school already reading at a fifth grade level or beyond (Ruf, 2004). These students arrive at school excited and ready to explore and learn new things only to find themselves retained by the pace of a classroom where all students sit in a circle and are taught the letters of the alphabet. Teachers who recognize this difference in ability are limited by either a lack of time to effectively plan for differentiated learning experience for these children or by their personal beliefs in the myth that acceleration can harm the child's development (Reis et al., 2004).

Researchers such as Reynolds (1993), Rogers (1991), and Sankar-DeLeeuw (2002) have supported early entrance to kindergarten or first grade as an effective and necessary intervention for gifted children. At the time of the present study, however, many states, including the state of Florida (NAGC, 2007), had laws preventing its use. The National Association for Gifted Children has listed early entrance to kindergarten or first grade as one of the most critical and research-based components to any state or district gifted education program (NAGC, 2009). Gifted children who have been allowed to enroll in school early have performed as well or better than their older classmates.

Early entrance to kindergarten has proven to be one of the least disruptive options and can save both parents and schools money in the long run (Robinson & Weimer, 1991).

A review of the literature related to early entrance to kindergarten and first grade revealed problems with samples and experiment design in several of the studies. Some researchers compared groups of children with different ability and did not provide a control group (Robinson & Weimer, 1991). Some researchers did not use effect sizes (Rogers, 1991; Robinson & Weimer). In reviewing empirical research in peer reviewed journals, four groups of research on early entrance were found. One group of researchers examined teacher and administrator attitudes toward early school entrance. Another group looked at young children who entered school early but were not identified as gifted. Yet a third group examined children who were selected for early school entrance based on cognitive ability and school readiness. The fourth and final group focused on early entrants looked at the students' intellectual development over time (Robinson & Weimer).

Gagné and Gagnier (2004) conducted a study on the social emotional and academic impact of early entrance to school. The researchers asked kindergarten through second grade teachers who had at least one early entrant to rate all of their students on several scales. These scales included student conduct, social integration, academic maturity and academic achievement. Students were divided into cohorts according to birthdates and compared to the early entrants. Students who were granted early entrance were rated as being significantly better adjusted than the youngest cohort of students. The early entrants' mean academic achievement score by grade 2 was significantly higher

than all four cohorts of regularly admitted students. The authors concluded that the early entrants showed no evidence of being more at risk for adjustment problems than their older peers. Gagné and Gagnier (2004) also found positive adjustment differences between early kindergarten entrants and their same-age classmates.

Rogers (1991) conducted a thorough review of the literature on acceleration for her doctoral research. Her review of the literature on early entrance to school included 68 empirical studies. Of these 68 studies, Rogers selected eight of them as providing appropriate design and effect size to accept them as best evidence for determining academic outcomes of carefully selected early entrants. Rogers computed an effect size of .49 in favor of accelerants and found positive academic outcomes for this group of gifted learners. She also computed small effect sizes of .20 for positive social outcomes of early entrants. These students performed as well or better than their older classmates on standardized achievement tests, grades, teacher rating scales of student performance, and in attitudes toward learning (Rogers, 1991, 2002).

Proctor, Black and Feldhusen (1988) found that administrators as a whole were not in favor of early entrance to school because it was difficult to implement from an administrative standpoint and required expensive and time consuming assessments. Administrators surveyed also reported caution in regard to early entrance due to possible demands from parents whose children would not be selected. Other researchers found negative attitudes toward early entrance held by teachers and administrators (Jackson, Famiglietti, & Robinson, 1981; Southern, Jones, & Fiscus, 1989). These objections were

attributed to personal experiences, intuitions, and the literature on school readiness for general education students (Jones & Southern, 1987).

In a study by Southern et al. (1989), the researchers found more negative attitudes toward early entrance and acceleration held by teachers and school principals than by school psychologists and coordinators of programs for the gifted. Again, reasons for these beliefs were attributed to fear of harmful social and emotional issues. Personal experience was found to be critical in shaping personal opinions over research and teacher training.

Some researchers of early entrance to kindergarten and first grade reported negative results for unselected, younger children (DiPasquale, Moule, & Flewelling, 1980; Shepard & Smith, 1986), although those effects tended to diminish over time. These results may have had some influence on the negative opinions held by some early childhood educators about early entrance. In these studies, younger children who were permitted early school entrance, not on the basis of advanced academic or cognitive ability, tended to demonstrate more social immaturity and behavior challenges than their older classmates.

In contrast to the research on early school entrance for non-selected students, the literature on early school entry for carefully selected students revealed positive outcomes (Braga, 1971; Daurio, 1979; Proctor, Black, & Feldhusen, 1986). Proctor et al. examined 21 studies of early entrants and found only one study that revealed negative effects. Though Obrzut, Nelson, & Obrzut (1984) found a lack of social and emotional maturity among some early accelerants that placed them at risk, they supported early entrance for advanced children as beneficial by providing them with academic stimulation. In their

study, Obrzut et al. included combined samples of students who were provided early school entrance, and they relied on teacher rating scales as judgment of student social adjustment rather than standardized, objective tools for measuring achievement and adjustment of students.

Whole-Grade Acceleration

Grade-based acceleration, such as whole-grade acceleration, often requires an administrative decision. Such decisions can be impeded by demands of paperwork, time and cost of testing. In contrast to forms of acceleration such as subject acceleration, grade skipping is a change in placement and in the state of Florida has required many principals to document the process and provide due process for accelerants. On the positive side, a student who receives whole grade acceleration will spend fewer years in the public schools and thus will cost schools less to educate.

Colangelo, Assouline, and Lupkowski-Shoplik stated in *A Nation Deceived* that “We have the evidence and mechanisms to make whole-grade acceleration a low risk/high-success intervention for qualified students” (2004, p. 3). The authors referred to the *Iowa Acceleration Scale* as a tool to help administrators and teacher make objective decisions regarding whole grade and subject acceleration. The *Iowa Acceleration Scale* (Assouline, Colangelo, Lupkowski-Shoplik, Lipscomb, & Forstadt, 2003) was a research-based, validated tool that provided a numerical index on several key factors that can predict the success of candidates for acceleration and provide guidelines for decision-making.

According to some researchers, teachers and administrators have often expressed opposition to grade skipping, as they believe it can cause social or emotional harm and that students will have gaps in knowledge (Jackson, Famiglietti, & Robinson, 1981; Southern et al., 1989). These fears have not been justified by the research. Feldhusen, Proctor and Black (1986) concluded that “there is no empirical basis for the belief that grade advancement will result in either social-emotional maladjustment or gaps in learning” (p. 26).

Content-Based Acceleration

The second category of acceleration is in the form of curricular provisions such as curriculum compacting, telescoping, independent study, subject acceleration, continuous progress and flexible ability grouping within a classroom. These types of content-based acceleration are characterized by the modification to pace of instruction and by the fact that they typically keep the advanced student with chronological peers (Rogers, 2002). With content-based acceleration, the student typically remains with same age peers but works on material for a higher grade-level. This can occur in the regular classroom or in a higher grade classroom for just a portion of the school day. Content-based acceleration allows the student to access advanced curriculum or materials at an earlier age than typical or at an earlier grade than typical. Problems with these options, according to researchers, have been that they often require specialized training for teachers, additional time for planning, and additional resources (Rogers, 1992).

Subject Acceleration

For moderately gifted students, approximately half of the curriculum could be eliminated in one of the content areas (Reis, Westberg, Kulilowich & Purcell, 1998; Ruf, 2004). Gifted learners begin the school year already knowing most of what will be taught that school year and yet without curricular modifications or acceleration, they are required to participate in instruction that is below their ability and that is repetitious (Ruf, 2004). In fact, Rogers (2002) found that 75%-85% of elementary school students of average to above average ability were able to pass subject area pre-tests given at the beginning of the school year or unit with 92-93% accuracy. For gifted learners who have shown uneven development and for whom whole-grade acceleration is not the best option, subject acceleration can provide exposure to advanced content while keeping them with their age-peers for the majority of the school day. Studies have shown that students who were accelerated in content areas achieved more than one and three-fifths year's educational growth for every year that they received subject acceleration (Rogers). Students who might be good candidates for subject acceleration include those advanced learners who show aptitude two or more years above their current grade placement and who have intense interests in specific domains (Rogers; Ruf).

Most of the literature on subject acceleration has dealt with acceleration in mathematics. Long-term studies of the effects of acceleration on math achievement and attitudes among gifted students have revealed positive results (Kulik, 2004; Kulik & Kulik, 1992; Ma, 2003). In Ma's ex-post facto study, a sample of 3,116 students drawn from the *Longitudinal Study of American Youth* conducted from 1987-1992 were used to

determine student attitudes and anxiety towards math. Major findings included similar attitude development among gifted and honors students who were accelerated compared to non-accelerated peers. The regular students who were accelerated in math showed a faster decline in attitude compared to regular non-accelerated students. The math anxiety of gifted accelerated students did not increase over time. Accelerated honors students showed significant anxiety over time but at a rate similar to that of non-accelerated honors students in math.

According to Ma, motivation and student interest were conditions critical to successful early math acceleration among gifted learners. Students who were most at-risk for this form of early acceleration were those who had negative attitudes towards math and high anxiety prior to acceleration.

Ma also found that cultural values played a large role in students' attitudes and anxiety levels in math. These results are important for school administrators to consider when placing gifted and high-achieving students into accelerated math programs, especially culturally diverse learners who may benefit from additional counseling or mentoring to support them and contribute to success and retention in such programs.

Rotigel and Lupkowski-Shoplik (1999), found in their study that mathematically gifted learners required a more linear approach to mathematics instruction as opposed to the traditional spiral approach and that these students also needed access to advanced materials and curricula if they were to reach their potential. The researchers recommended using the EXPLORE test for above-level testing in the elementary school years followed by the SAT or ACT in middle school. Other major findings from this

study included the fact that gifted children who were exceptionally talented in math were able to learn much more quickly and with fewer repetitions when compared to non-mathematically gifted students. Rotigel and Lupkowski-Shoplik concluded that a different teaching approach was needed for these students and that content must be adapted, compacted and accelerated in pace.

Similar results were obtained in other studies of mathematics acceleration. In a longitudinal study of mathematically talented learners that followed 5,000 gifted students over 35 years, Lubinski and Benbow (2006) noted that specific special education opportunities, such as an accelerated or a compacted mathematics program, contributed significantly to the development of innate talent. Mathematically talented students, therefore, were deemed to require special provisions in order to reach their potential. Lubinski stated that by appropriately measuring student abilities, one could discover a vast range of talent among diverse groups. This, in turn, could assist in the design of appropriate educational opportunities. The authors also concluded that in order to identify those students who had the most potential in math and science careers, it was critical to assess individual differences in the top 1% of cognitive abilities. Even within this seemingly small population, there existed a wide range of ability (Lubinski & Benbow). These results support the purpose of talent searches with above-level testing and accelerated instruction.

The Stanley Model of Talent Identification and Development is a method of providing a diagnostic-prescriptive approach for subject acceleration (Van Tassel-Baska & Brown, 2007). This model was named after the father of the Talent Search Model,

Professor Julian Stanley, who began his work at Johns Hopkins University. The *Study of Mathematically Precocious Youth* (SMPY) is a longitudinal study initiated by Stanley that as of 2009 was being continued by Lubinski and Benbow at Vanderbilt University. Results of the SMPY study have provided positive support for accelerative options such as subject acceleration.

Stanley (1991) discovered that mathematically talented students were significantly more likely to accurately retain mathematics instruction when it was presented two to three times faster than the regular pace of a heterogeneously grouped class. According to Stanley, moderately gifted children with an IQ of 130 were able to learn new materials eight times faster than students with IQs below 70 (Stanley). These vast ability ranges have often existed in a regular classroom setting. Highly gifted students have been able to learn new material with little or no repetitions. Stanley also found that these gifted learners were actually more likely to forget or mis-learn math content if it was presented repeatedly with review and drill more than two or three times (Stanley). This information should be of significant concern to classroom teachers who work with highly talented students. The drill and repetition that average or below-average ability learners need to master concepts could be damaging to gifted learners. Highly gifted students grouped into heterogeneous classrooms for most of their instruction are exposed to such repetition on a daily basis.

Curricular Modifications and Enrichment

When a change in placement is not feasible or appropriate for an individual student, there are still other methods that can be employed in the classroom to provide acceleration for gifted learners. Some curricular modifications such as curriculum compacting, ability grouping, telescoping, continuous progress and independent study can be facilitated in the regular classroom and provide both acceleration and enrichment.

Ability Grouping

Kulik (1993) conducted a meta-analysis on ability grouping and found positive effects for acceleration over enrichment in conjunction with flexible ability grouping for instruction. Kulik and Kulik (1991) reported that gifted learners who were grouped by ability for instruction learned better than did their non-grouped peers of similar ability. Kulik (1992) found that gifted and talented students who were grouped and provided with accelerated instruction outperformed non-accelerants of the same age and ability by almost one full year on achievement tests. Kulik also recommended that ability grouping be used in conjunction with acceleration or enrichment because without curricular adjustments, students did not show differences in achievement. Kulik also found that all groups of students (low, medium, and high) benefited from homogenous grouping for instruction when the curriculum was adapted to the ability level of the group.

Ability grouping allows teachers to provide appropriate instruction for students because it reduces the gap between the ability level of all students in the class (Slavin, 1986). Ability grouping also allows the teacher to adjust the pace according to student

readiness level and can lead to more individual attention, repetition and review for low achievers (Slavin). When ability grouping is combined with acceleration of pace, gifted learners can gain one year or more on achievement tests (Swiatek, 2001).

Rogers (1998) found that gifted learners did not benefit from mixed ability grouping and that cooperative learning using heterogeneous grouping should be used sparingly for gifted learners. She suggested using it for social skills and not for academic instruction (1991).

Curriculum Compacting

The United States Department of Education's *National Excellence Report* (1993) found that gifted and talented elementary school students knew 35-50% of the entire curriculum in the five major subject areas at the very beginning of the school year. Renzulli and Reis (1992) directed a comprehensive national study that included 436 elementary school teachers and 783 students from 27 school districts in the United States. The authors examined the types and amount of curriculum that could be eliminated for gifted learners by teachers who received staff development in curriculum compacting. Results indicated that elementary teachers could eliminate 40-50% of the regular curriculum for the top 10-15% of students with no negative effects on their achievement.

Reis and Purcell (1993) examined differing levels of curriculum compacting used by 470 elementary school teachers who taught gifted learners in heterogeneously grouped regular education classes. The authors found that teachers could eliminate 24-70% of the

curriculum across content areas, but that teachers required assistance in developing appropriate activities to replace the general curriculum that had been eliminated.

Another study conducted by Reis, Westberg, Kulikowich, & Purcell (1998) included 336 advanced learners in grades 2-6. In this study, the effects of curriculum compacting on the achievement test scores of students who were grouped together in heterogeneous classrooms in rural, suburban, and urban settings were investigated. Teachers were able to eliminate between 40% 50% of curricula for two to three advanced learners in their classrooms who already had advanced knowledge in certain content areas. Students were given pre and post tests using above grade-level Iowa Test of Basic Skills. Results from this study showed that students who received curriculum compacting still achieved at high levels on the above-level test. Thus, curriculum compacting was determined not to have a negative effect on gifted learners' achievement.

School Wide Enrichment Model

The School Wide Enrichment Model (SEM) was developed by Renzulli and Reis in 1985. It has since been used in school districts across the United States as a curricular model for talent identification and enrichment. In the SEM model, the top 15%-20% of students are selected based on achievement tests, teacher nomination, task commitment and creativity. Identified students are then provided various levels of service through the SEM model. Students are given interest and learning style inventories, and the curriculum is also compacted for them. The tiers of enrichment activities are given to students who show high levels of ability, interest and motivation.

There were several research studies found in the literature that referenced SEM. Of these studies, several sought to examine its impact on underachieving students with high potential, bright students with learning disabilities, and minority students. Inferences were made on the SEM as offering opportunities for creative problem solving as a solution to underachievement for diverse populations of students (Ford, 1999; Johnsen, 2000). Evaluation studies of the SEM model in 29 school districts across the United States were conducted, and the authors concluded that teachers and administrators showed positive changes in attitudes toward student work in this enrichment model (VanTassel-Baska & Brown, 2007).

Differentiated Instruction

According to Tomlinson (1999), differentiated instruction is a method used to accommodate learning differences in students by identifying their strengths and using appropriate strategies to address a variety of abilities, preferences, and styles (1999). Differentiation allows individual students, small groups of students and whole classes to participate in varied curriculum enrichment and acceleration opportunities (Tomlinson, 1999). Differentiated instruction is a strategy that classroom teachers can employ to meet the needs of a large range of cognitive ability and learning preferences in one heterogeneously grouped classroom. Differentiated experiences can require more planning on the part of the teacher but can meet some of the needs of gifted learners when combined with curriculum compacting.

Reis et al. (2004) conducted a study using observations in 12 third and seventh grade reading classrooms in both urban and suburban school districts. The focus of the observations was to determine whether or not gifted readers (those reading at least two years above grade level) received differentiated reading curriculum or differentiated instruction. Results indicated that gifted readers received some differentiated reading instruction in one fourth of the classrooms, but gifted readers in the other three fourths of the classrooms did not receive differentiated instruction or access to differentiated materials.

Westberg, Archambault, Dobyms, & Salvin (1993) observed 46 teachers and 96 third and fourth grade students in five different content areas to determine the level of differentiation that students received. Gifted learners experienced no differentiation of instruction or curriculum 84% of the time. When considering the importance of an optimal match between a student's ability and difficulty level of instruction, students in the Westberg et al. study, and in many cases according to the literature, did not receive learning opportunities or nurturance of their cognitive development.

Social and Emotional Effects of Acceleration

Social and emotional needs of gifted learners have often been cited as one of the main reasons parents, teachers, and administrators are against acceleration. They fear that acceleration means hurrying the child or placing the child with older classmates who will not accept the younger student (Colangelo et al., 2004). These myths have prevailed in spite of the research showing that gifted learners are not harmed socially or emotionally

from acceleration and in some cases, show emotional benefits from acceleration (Gross, 1993; Kulik, 2004; Southern & Jones, 1991).

In a review of the literature on social and emotional consequences of acceleration, many of the concerns reported have been associated with placement of a younger student with older classmates than in an advanced class with same-age peers (Southern et al., 1989; Vialle, Ashton, Carlon, & Rankin, 2001). Evidence from numerous studies (Gross, 1993; Janos & Robinson, 1985; Kulik & Kulik, 1984; Rogers, 2002; Swiatek, 2000) supports the positive social adjustment of accelerants. These studies have shown that in social maturity, gifted learners have related more closely to students of similar mental age rather than chronological age, and that gifted learners typically have preferred older peers who share common interests.

Gross (2003) traced the cognitive, social-emotional and academic development of 15 Australian students with IQs above 160 using longitudinal, qualitative case studies. Data gathering procedures were both qualitative and quantitative and included tests of general ability, standardized tests of achievement, self-esteem inventories and moral development, parent and student questionnaires and interviews. Participants were selected based on their age (5-13 years old) at the beginning of the study, having an IQ score above 160 on the Stanford-Binet L-M and having resided in Australia during their elementary school years. Gross' sample included ten males and five females from South Australia, Victoria, and the Australian Capital Territory. Triangulation of data was ensured using multiple methods of data collection such as tests of reading achievement, reading logs and parent interviews. Multiple interviews were conducted over a period of

10 to 11 years for most subjects. According to Gross' longitudinal study of these exceptionally to profoundly gifted learners, those who had been radically accelerated (by two or more years) displayed greater positive self-esteem on the Coppersmith Self-Esteem Inventory (12 with z-scores above + 1.00) and reported more positive peer relationships on the social self-peers subscale (z-score greater than +1.00) compared to non-accelerants. She concluded that, of the accelerants and non-accelerants who had IQs above 160, those who had been grade skipped more than one year showed the healthiest social self-concept. In this longitudinal study of radical accelerants, students were more likely to obtain Master's and Doctoral degrees than were equally gifted learners who either were retained with same-age-peers or who were only allowed a one-year grade-skip (Gross, 2003).

Research on acceleration of gifted learners has shown generally positive results for both academic achievement and social emotional development of gifted learners (Clark, 1997; Colangelo et al., 2004). Gifted learners who have been accelerated have reportedly outperformed their non-accelerated peers academically, reported positive self-concepts, and obtained graduate degrees and honors at a higher rate (Brody & Stanley, 1991). Although a concern for the social and emotional well-being of bright learners has been one of the most frequent reasons given for not accelerating a student, researchers have found no evidence to support the notion that such problems occur among carefully selected and well-monitored accelerants (Southern & Jones, 1991; Southern et al., 1989; Swiatek, 2000). In fact, researchers have shown that interventions such as acceleration can enhance students social development (Clark, 1997; Gross, 1993; Swiatek, 2000;

Swiatek & Benbow, 1992). Highly gifted children who have been accelerated more than one year have reported higher self-concepts than have non-accelerated highly gifted peers and highly gifted peers who received only a one year grade skip (Gross 2000).

Barriers to Acceleration

With so many empirical studies supporting various forms of academic acceleration, one must investigate reasons why it has not been widely implemented in schools. Two factors that have affected the use of acceleration options for students in the United States have been politics and funding. The accountability and standards-driven focus in the United States has led to higher academic standards for some public school students, yet other students already at proficiency levels or beyond, have often been ignored (Gallagher, 2004). Gallagher wrote of the unintended consequences of NCLB and described the effects that drill and practice for state mandated testing had on the level of instruction in the classroom. He stated that teachers were required to spend a majority of time preparing students for tests, disregarding the needs of gifted learners who were already above proficiency levels.

During times of economic recession, states have experienced funding reductions that have often led to the reduction or elimination of special programs for the gifted (Davidson & Davidson, 2002; Loveless et al., 2008). The myth has prevailed that gifted learners will succeed on their own regardless of intervention. During times when funds have been scarce and sanctions have been high for schools that do not show all students reading at grade level, it has not been surprising to see a lack of priority regarding the

needs of gifted learners. As of 2009, the only source of federal funding for gifted education were the Javits grants. States could apply for funding to support research or projects for traditionally underrepresented gifted populations including gifted learners from low socio-economic backgrounds, limited English proficiency or who are disabled. (U.S. DOE, 2009).

In a review of literature on acceleration policies, one study was found. Reis and Westberg (1994) examined acceleration policies from 105 school districts for middle and high school students. Of the respondents, 15% of districts had formal policies in place that addressed grade skipping and 57% had informal policies that prohibited grade skipping. No studies were found that included policies that impacted gifted learners during the elementary school years. Researchers on policy development in gifted education have shown that states without strong policies and mandates for gifted students have often been at risk for elimination of funding for programs and identification of gifted learners (Purcell, 1992; Shaunessy, 2003). As of 2009, more research is needed on specific state policies, rules and regulations for academic acceleration and the extent to which these are carried out by local school districts in the United States.

Other barriers to acceleration include the beliefs and attitudes often held by school administrators and teachers. Southern et al. (1989) surveyed 554 school employees including teachers of the gifted, school psychologists, principals, and teachers. All adults surveyed expressed concern over the use of acceleration and thought it could be potentially harmful to gifted learners. Participants who had personal experience with acceleration showed more positive attitudes toward acceleration. Cornell, Callahan, Basin

and Ramsay (1991) provided three reasons why educators are uncertain about acceleration: (a) They are not aware of the research, (b) policies are determined by tradition and personal sentiment, (c) fear that the researchers did not sufficiently take into consideration the social and emotional problems that could occur.

The Templeton Foundation's national report on acceleration (Colangelo et al., 2004) cited six factors that researchers had provided as reasons why schools do not encourage their gifted learners. These include: (a) Schools are not familiar with research on acceleration, (b) schools believe that children must be kept with their age peers, (c) schools believe that acceleration "hurries" children out of childhood, (d) schools are concerned that acceleration hurts students socially, (e) schools are concerned with "equality" for all, and (f) schools are concerned that other students will be offended. The review of literature expanded upon these concerns and provided empirical research that did not support many of the misconceptions held about acceleration. The challenge has been to work to change mental models held by school administrators, educators and parents in regard to acceleration. Senge (2006) described mental models as "deeply ingrained assumptions, generalizations, or even pictures and images that influence how we understand the world and how we take action" (p. 8). Gallagher (2002) encouraged advocates to try to influence those who establish policy by providing access to the research data through mainstream media on a regular basis. He stated that it is the attitudes of policymakers that must change for acceleration to be accepted.

Summary

Research on eminent scholars, scientists, musicians and mathematicians has shown that their greatest contributions and breakthroughs occurred early in their careers, often in their 20s (Benbow, Lubinski, Shea, Eftekhari-Sanjani, 2000; Janos, 1987; Stanley, 1985). By providing acceleration to students who show great promise in these areas, students have been able to continue on to graduate programs and into practice at an age when their peers are completing their undergraduate degrees, thus allowing them to have more productive careers and potentially contribute significant works to society.

The review of literature showed how accelerative options for advanced learners are dependent upon federal and local policy, accountability legislation, and ultimately, school principals. There exists a strong and decades-long research base supporting 18 types of acceleration. A gap between research and practice has existed and remained at the time of the present study in regard to acceleration. It was suggested in the literature that high-stakes accountability measures may have a negative impact on services, including forms of acceleration, for gifted learners. Researchers have observed that these students, left underserved, may eventually drop-out of school, develop poor study habits, and not reach their potential (Hansen & Toso, 2007; Renzulli & Park, 2000; Rimm, 2003).

The school principal can ensure that all children learn new things each day. He or she can directly impact the quality of education that gifted learners receive by holding high expectations for all teachers to differentiate instruction and to provide research-based strategies and interventions with these students, such as acceleration. The beliefs

that teachers and principals hold about gifted learners also impacts their students.

Attitudes based on myths and misconceptions instead of on research and best practices can impede the education of gifted learners who require accelerative options in order to succeed.

Chapter 2 has provided a review of the literature about acceleration options for gifted learners, effects of acceleration, and barriers to acceleration. Chapter 3 will discuss the methodology of the study and the statistical procedures used to examine acceleration policies and practices in Florida elementary schools.

CHAPTER 3 METHODOLOGY

Introduction

The purpose of this chapter is to describe the methodology and statistical procedures used to determine the academic acceleration policies and procedures utilized in elementary schools in Florida. Also, personal demographic variables of elementary school principals and demographic variables of elementary schools were analyzed to determine if any factors contributed to the types of acceleration offered in schools. Both quantitative and qualitative research methods were employed. Primary sources of data included online questionnaires and policy documents. Other sources of data utilized were local and state education websites and reports. This study was initiated in the spring semester of 2009. The final analysis of data, conclusions and recommendations for future research were presented during the fall semester of 2009.

This chapter is divided into five sections. The first section lists the research questions that guided this study. The second section describes the population in this study and the sample selection process. The third section explains the data collection process used in this study. The fourth section of this chapter provides a description of instrumentation used in the study and the fifth section is used to explain the analysis of the data.

Research Questions

Questions that guided the research are as follows:

1. Which of the types of acceleration listed in *A Nation Deceived* that are applicable to students in grades K-5 are addressed in school board policies?
2. What are the most common types of acceleration implemented in elementary schools in Florida?
3. What are the most common reasons for not accelerating a student according to district administrators and school principals?
4. What relationship, if any, exists between school or principals' personal demographic variables and types of acceleration offered in elementary schools?
5. What relationship, if any, exists between elementary school principals' knowledge of gifted learners and the types of acceleration implemented in their schools?
6. What relationship, if any, exists between district-level acceleration policies and actual acceleration practices in elementary schools in the districts?
7. What process is utilized in each district to help make decisions about acceleration for students?

Population

The population for this study was elementary school principals in the state of Florida and district-level administrators in charge of gifted education programs in Florida. Participants in this study included the entire population of gifted program administrators in the 67 school districts in the state of Florida and a random sampling of 291 elementary school principals from eight school districts in Florida. Districts were selected from a convenience sample based on a partnership between the University of Central Florida and Progress Energy. The distribution of elementary schools in each district and the number of schools that were surveyed in each district are displayed in Table 3.

Table 3
Total Number of Elementary Schools in 10 Florida School Districts

School District	Total Elementary Schools	Sample
District 1	57	29
District 2	9	5
District 3	140	72
District 4	20	10
District 5	111	57
District 6	22	11
District 7	43	22
District 8	80	41
District 9	37	19
District 10	46	24
TOTAL	565	291

A sample size of 291 elementary school principals was determined to be appropriate for this study. This sample was obtained by first adding the number of total

elementary schools in all 10 Florida school districts selected for participation to determine the population size. The population for this study was 565 elementary schools. Next, proportionality was determined by dividing the number of schools in each district by the total number of schools in the population. A percentage of the total was found for the number of schools per district compared to the total number of schools, $N = 565$. The sample was then drawn by multiplying the total number of schools in a district by the percentage of the population that each district represented. This number equaled the number of surveys that were sent to principals in each of the 10 districts.

Data Collection

The researcher first obtained approval for this study through the University of Central Florida Institutional Review Board (Appendix A). Permission to survey school district employees was then requested from all school districts taking part in this study prior to the distribution of a questionnaire. Nine of the 10 districts granted the researcher permission to contact the school principals in their districts. One district did not grant permission to contact their principals. A total of 67 district level administrators of gifted education were contacted for participation in this study through the Florida Department of Education's Gifted Education Program Specialist. The final sample size for this study was 240 Florida elementary school principals and 43 district level administrators of gifted education programs.

The current descriptive study had three phases. First, a questionnaire was sent to the district administrator in charge of gifted education programs in all 67 school districts

in the state of Florida (Appendix B). Second, a copy of the district's written acceleration policy (if there was one) was requested for review and analysis. The researcher created a District Acceleration Policy Document Review Form (Appendix C) to compare components of each district's plan to meet standards set forth by the National Association for Gifted Children (Appendix D) and the research on acceleration outlined in *A Nation Deceived* (Colangelo et al., 2004). A deductive analysis was performed on the school districts' written acceleration policies, rules, and regulations.

The third phase of the research included the distribution of a questionnaire (Appendix E) to a stratified random sampling of elementary school principals in nine school districts in Florida. Districts selected for inclusion in this study were a convenience sample of Florida school districts that had an existing relationship with the University of Central Florida (UCF) through the UCF-Progress Energy Leadership Institute. These districts contained elementary schools from small, medium, and large size districts from rural and suburban geographic regions of Florida. The districts had sufficient diversity in student demographics to be representative of all 67 districts in Florida.

The researcher utilized Dillman's (2000) tailored design method for contacting participants. Data were collected via an electronic questionnaire over the Internet using SurveyMonkey.com. A letter was sent through the U.S. Postal Service to introduce participants to the study. A waiver of consent form and a copy of the school district's approval to contact employees for the study were included in this first mailing. A few days later, participants were contacted through email with a link to the questionnaire. If

the participant had not responded to the questionnaire after a week, a second contact message was sent via email with a link to the questionnaire. A third request and copy of the survey were sent to non-respondents by U.S. Postal service a week later. A self-addressed, stamped envelope was included for ease of return. Finally, a fourth and final request to complete the questionnaire was sent via email to those participants who had not responded after two more weeks. A thank you message was delivered to all participants who responded to the questionnaire. Copies of the contact messages sent to participants are included in Appendix F.

Instrumentation

Instrumentation for this study included two versions of a questionnaire and a District Acceleration Policy Document Review Form, both developed by the researcher. The questionnaire utilized information from *A Nation Deceived*, a report on acceleration (Colangelo et al., 2004), the *NAGC Pre-K- Grade 12 Gifted Program Standards*, and the *Questionnaire on Acceleration Attitudes and Practices* (Institute for Research and Policy on Acceleration, 2007) to create items that addressed best practices for acceleration, types of acceleration, and attitudes toward the gifted.

The questionnaire was used to investigate administrator perceptions as to why students were not accelerated and barriers to acceleration procedures. Other items included in the questionnaire were used to query respondents regarding individuals having decision making authority over student acceleration in local school districts and the most common type(s) of acceleration for elementary learners in schools.

The questionnaire was comprised of 25 items divided into four sections with closed-ended and open-ended questions. Section I was designed to elicit information about types of acceleration implemented in schools. Section II was designed to request information about the decision-making process and tools used in schools. This section also addressed factors that support or impede the acceleration process in schools. Section III was designed to assess personal beliefs and attitudes toward the gifted and barriers to acceleration implementation. Section IV requested personal demographic information about the participant and participating school or district.

The questionnaire was pilot tested to ensure clarity of questions and content validity. The researcher distributed 20 questionnaires to persons having expert knowledge and experience in gifted education. Included were district-level administrators of gifted education programs and university professors of gifted education programs. These individuals responded to an online questionnaire and provided feedback which was used to modify the final questionnaire. Items were analyzed for content validity using SPSS version 16.0. This resulted in the revision of some items to improve clarity and the removal of some items prior to finalizing the questionnaire.

Data Analysis

Survey items were analyzed using Statistical Package for Social Sciences (SPSS) version 16.0. School board policies were compared to national standards using a District Policy Document Review form to check off items that were evident or not evident in

written policy. Table 2 displays the research questions, the instrumentation used in gathering data, and the sources of data.

Research Question 1: Which of the types of acceleration listed in *A Nation Deceived* that are applicable to students in grades K-5 are addressed in school board policies? To answer this research question, data were collected from district acceleration policies and reported as frequencies using the researcher's District Policy Document Review form..

Research Question 2: What are the most common types of acceleration implemented in elementary schools in Florida? In responding to this research question, items 3, 4, and 8 from the principals' questionnaires and items 7, 8, and 9 from the district administrator's questionnaires were reported as frequencies, and each applicable acceleration type was ranked from most frequent to least frequent. Results from the elementary school principals' responses and from district administrators of gifted programs were ranked separately, and casual comparisons were made to see if rankings are similar.

Research Question 3: What are the most common reasons for not accelerating a student according to district administrators and school principals? To respond to this research question, survey item 11 was analyzed for common themes among respondents. Survey item 13 was analyzed separately for principals' and district administrators' surveys. Each reason was assigned a value for its ranking. The highest number represented the respondent's primary reason for not accelerating a student and the lowest score represented the respondent's last choice among the possible reasons for not

accelerating a student. A mean score was then provided for each reason. To add additional strength to the analysis, Friedman's Test, which is a nonparametric statistical test designed to analyze ranked data of this nature, was utilized for the small number of respondents who were district administrators.

Research Question 4: What relationship, if any, exists between school or principals' personal demographic variables and types of acceleration offered in elementary schools? The variable representing types of acceleration was accounted for by combining the total number of items selected from items 3 and 4. There were 10 possible selections for item 3 and 8 possible selections for item 4, creating a continuous variable with values ranging from 0 to 18. In designing the analysis in such a manner, the relationship between the extent to which diverse acceleration forms are offered in elementary schools and demographic factors was tested. A multiple linear regression was performed with this newly created variable as the dependent variable. Independent variables included: (a) number of gifted students at a school; (b) number of total students at a school; (c) percentage of students receiving free or reduced lunch; (d) level of education of the principal; (e) number of years experience as a school principal; and (f) principal's certification or endorsement status in gifted education.

Research Question 5: What relationship, if any, exists between elementary school principals' knowledge of gifted learners and the types of acceleration implemented in their schools? This question was analyzed using a linear regression. The same dependent variable used in Research Question 4, derived from items 3 and 4, was used for Research Question 5. Items 15-20 used a 5-point Likert-type scale and were combined to form a

scale variable. In performing a factor analysis to determine the validity of conceptual groupings, the goal was to create a single variable from these six questions that addressed the same concept of knowledge of gifted learners. This single variable had a minimum value of 6, a maximum value of 30, and a range of 24.

Research Question 6: What relationship, if any, exists between district school board acceleration policies and actual acceleration practices in elementary schools in the districts? This research question was answered using data from the District Acceleration Policy Document Review form and from items 7-11 on the District Administrator of Gifted Education Programs Questionnaire. For each acceleration practice, the matching survey item was identified. A total of 10 of 15 acceleration practices on the District Acceleration Policy Document Review form were matched to a survey item on the questionnaire. For each of these pairings, the researcher ran the McNemar Test for Significance of Changes. This is a variant of the 2x2 Chi-Square Test for Independence. Unlike the Chi-Square Test, which simply tests for the relationship between two variables as a whole, the McNemar test analyzes for a difference in a single binary variable with a “before-and-after” type matched setup. By matching the policy document to the survey, greater analytical ability to determine whether there were disconnects between each practice on paper and each practice as it was actually applied to the district was allowed.

Research Question 7: What process is utilized in each district to help make decisions about acceleration for students? In answering this question, both the District Acceleration Policy Document Review form (Sections I and II) and questionnaire items 9-12 were analyzed using descriptive statistics to report counts and frequencies.

Table 4

Research Questions, Instrumentation and Sources of Data

Research Questions	Instrumentation	Source of Data
1. Which of the types of acceleration listed in <i>A Nation Deceived</i> that are applicable to students in grades K-5 are addressed in school board policies?	Questionnaire: Section I; District Acceleration Policy Document Review Form; Copies of district acceleration policies	67 district-level administrators of gifted programs in Florida; copies of written school board policies
2. What are the most common types of acceleration implemented in elementary schools in Florida?	Questionnaire: Section I	67 District gifted program administrators; 291 school principals
3. What are the most common reasons for not accelerating a student according to district administrators and school principals?	Questionnaire: Items 11 and 13	67 District gifted program administrators; 291 school principals
4. What relationship, if any, exists between school or principals' personal demographic variables and types of acceleration offered in elementary schools?	Questionnaire: Sections I and IV	291 school principals
5. What relationship, if any, exists between elementary school principals' knowledge of gifted learners and the types of acceleration implemented in their schools?	Questionnaire: Sections I and III	291 School principals
6. What relationship, if any, exists between school board acceleration policies and actual acceleration practices in elementary schools in the districts?	District Acceleration Policy Document Review Form; Questionnaire: Section I; Item #14	10 District gifted program administrators; 291 school principals
7. What process is utilized in each district to help make decisions about acceleration for students?	District Acceleration Policy Document Review Form; Questionnaire: Section II	10 District gifted program administrators; 291 school principals

Summary

This chapter has presented the methods and procedures used to determine the types of acceleration used in Florida elementary schools, administrators knowledge of acceleration and educational policies that prohibit or permit academic acceleration to students in grades K-5. Procedures were described that were used to determine what demographic variables, if any, were common among school principals, school populations, and the types of acceleration used in their schools.

This chapter began with the research questions addressed by the study and the population used for the current study. Next, methodology used to collect the data was discussed along with the development of the questionnaire and policy document review form. Finally, data analysis methods used to answer each of the research questions were provided.

The methodology implemented for data collection and analysis has been presented in Chapter 3. Chapter 4 contains an analysis of the data.

CHAPTER 4 ANALYSIS OF DATA

Introduction

This study was conducted to gather data about policies and practices related to 11 forms of academic acceleration in elementary schools in the state of Florida. Additional data were gathered about the knowledge of school principals regarding acceleration and gifted learners. The data were analyzed to determine if there was a statistically significant difference between the school-based acceleration interventions offered by elementary school principals with knowledge about gifted learners and acceleration and if any district, school, or personal demographic variables accounted for such differences.

District level administrators of gifted education programs and elementary school principals were surveyed to examine their knowledge of academic acceleration and the needs of gifted learners. Types of acceleration utilized in elementary schools and outlined in district school board policy were compared to national standards provided by the National Association for Gifted Children and the research on acceleration in *A Nation Deceived* (Colangelo et al., 2004). Principals' knowledge of gifted learners and acceleration were measured using an online questionnaire entitled *Elementary School Acceleration Policies and Practices Survey of Elementary School Principals* (created by the author based on a national survey conducted by the Institute for Research and Policy on Acceleration, current research on acceleration, and national standards established by the National Association for Gifted Children).

Chapter 4 has been organized into eight sections. The first section describes the population and sample used for this study. The following sections describe data analysis methods used for each of the seven research questions that guided the current study. Data were collected using an electronic questionnaire and from a review of relevant district policy documents.

Population and Sample Characteristics

The population for this study was elementary school principals in the state of Florida and district-level administrators in charge of gifted education programs in Florida. Participants in this study included the entire population of gifted program administrators in the 67 school districts in the state of Florida and a random sample of 240 elementary school principals from nine school districts in Florida. Districts were selected from a convenience sample based on a partnership between the University of Central Florida and Progress Energy. Of the 240 principals contacted for participation in this study, 152 responded. Of the principals contacted, 12 did not wish to participate in this study. Of the remaining 140 responses, 83.6% (n = 117) were completed online and 16.4 % (n = 23) were completed using a pencil and paper questionnaire and returned via U.S. Postal Service. Ten of the participants who completed written versions of the questionnaire worked in a school district that prohibited the researcher from contacting its principals electronically. The remaining 13 participants completed a pencil and paper version that was sent to them via U.S. Postal service when emails bounced or after they were reported as having opted out from the online questionnaire tool. The completed

questionnaires yielded a 58.33% response rate from the elementary school principals. The response rates ranged from 35% to 90% from each district with a mean of 71.6%. Table 5 shows the response rate for the school principal questionnaires for the nine school districts.

Table 5
Response Rates for School Principal Questionnaires

School District	Principals Surveyed	Questionnaires Returned	
		N	%
District 1	29	24	82.8
District 2	5	4	80.0
District 3	63	22	35.0
District 4	10	9	90.0
District 5	57	33	58.0
District 6	11	5	45.5
District 7	22	13	59.0
District 8	19	10	52.6
District 9	24	20	83.3
Total	240	140	58.3

A questionnaire was also sent to all 67 school district administrators in charge of gifted education programs. Of the 67 district administrators contacted, 47.8% (n = 32) responded. Nine of the participating district administrators were matched to the nine school districts that were included in the elementary school principal surveys and their responses were used for comparisons between district and school policies and practices.

School and District Demographic Variables

District administrators of gifted education programs from the same school districts as the elementary school principal participants reported on several demographic variables. These demographic variables included total elementary school enrollment, total number of gifted learners in grades K-5, and district size. Of the nine districts, 22.2% (n = 2) were medium sized school districts (10,000-24,999 students) and 77.8% (n = 7) were large districts (25,000-99,000). The total enrollment in grades kindergarten through 5 ranged from 6,632 to 85,000. The total number of gifted learners were reported for the nine districts (100 %) and ranged from 222 to 3,325 students. The percentage of each participating school district's total elementary population that were gifted ranged from 1.3% to 5.8%. Table 6 provides a summary of these data.

Table 6
School District Demographic Variables for 2008-2009

School District	Total Number of Students		
	Grades K-5	K-5 Identified as Gifted	% Gifted
District 1	28,219	1,180	4.2
District 2	78,774	3,325	4.2
District 3	25,000	1,450	5.8
District 4	85,000	1,400	1.6
District 5	6,632	225	3.4
District 6	17,875	304	1.7
District 7	32,617	1,608	4.9
District 8	17,000	222	1.3
District 9	28,400	995	3.5

Elementary school principals reported personal and school demographic variables. The personal demographic variables included number of years as a principal, level of education, and certification or endorsement held in gifted education. A total of 130 (93%) principals responded to the question regarding years of experience as a principal. The average number of years of experience as a principal was 7.79 with a minimum of zero and a maximum of 30 years (s.d. = 5.78).

Elementary school principals were also asked to report their highest level of education. Table 7 displays their responses. Of the respondents, 88 respondents reported having obtained a master’s degree (62.9%), 16 principals reported having an education specialist degree (11.4%), and 26 principals held doctoral degrees (18.6%).

Table 7
Principals' Highest Levels of Education And Gifted Endorsement

Education	Number of Principals	% of Total
Master’s Degree	88	62.9
Education Specialist Degree	16	11.4
Doctoral Degree	26	18.6
Certified or Endorsed in Gifted	10	7.1
Total	140	100.0

Elementary school principals reported on school demographics including percent of students receiving free or reduced lunch, total enrollment, and total number of gifted learners. Of the 140 responses received, 126 principals (90%) reported their total school enrollment. Of the respondents, 90 (71.4%) reported that they worked in a small school with fewer than 800 students, 35 (28.6%) worked in a medium-sized elementary school

with 800 to 1,200 students. One principal (.8%) reported working in a large elementary school with more than 1,200 students in grades K-5. Total school enrollment was not readily available through an internet search. Therefore, only data collected from the questionnaire was included. See Table 8 for a summary of these data.

Table 8
Size of Respondents' Schools

	School Size	Number of Schools	% of Respondents
Small	< 800	90	64.3
Medium	800-1,200	35	25.0
Large	> 1,200	1	0.7
Total		126	90.0

A total of 126 elementary school principals reported the percentage of students receiving free or reduced lunch in their schools during the 2008-2009 school year. Summary data are presented in Table 9 for these data. Reporting of free and reduced lunch counts was used as an indicator of socio-economic status. Of the respondents, 16 (12.7%) reported that less than 25% of the students in their school received free or reduced lunch, 42 (33.3%) reported that from 25% to 49% of their students received free or reduced lunch, 41 (32.5%) reported that 50 to 74% of the students in their school received free or reduced lunch, and 27 (21.4%) reported that between 75% and 100% of their students received free or reduced lunch.

Table 9
Percentage of Students Receiving Free or Reduced Lunch

% of Students	Number of Schools	% of Respondents
<25	16	12.7
25-49	42	33.3
50-74	41	32.5
75-100	27	21.4
Total	126	99.9

Note. Totals may not = 100% due to rounding.

The next variable described the population of gifted learners who attended each school. Of those responding, 126 principals (90%) reported the approximate number of gifted learners in grades K-5 at their school during the 2008-2009 school year. Of the respondents, 34 (27%) reported having fewer than 10 gifted learners in grades K-5 at their schools, 50 (39.6%) reported having between 11 to 25 gifted learners at their school sites, 23 (18.3%) reported having 26 to 50 gifted learners at their school, 12 (9.5%) reported having between 51 to 75 gifted learners in their school, 2.4% (n = 3) reported having between 76 to 100 gifted learners. Only 3 (2.4%) reported having 101 to 150 gifted learners, and finally 1 (0.8%) reported having more than 150 gifted learners at their elementary school. Table 10 provides a summary of these data.

Table 10
Gifted Learners at Responding Elementary Schools

Gifted Learners	Number of Schools	% of Total
<10	34	27.0
11-25	50	39.6
26-50	23	18.3
51-75	12	9.5
76-100	3	2.4
101-150	3	2.4
>150	1	0.8
Total	126	100.0

Research Question 1

Which of the types of acceleration listed in *A Nation Deceived* that are applicable to students in grades K-5 are addressed in school board policies in the state of Florida?

To answer this research question, descriptive information from the District Acceleration Policy Document Review Form (Appendix C) were used and reported as counts. Six of the nine districts surveyed (66.7%) reported that they had a policy on academic acceleration. These districts shared portions of their district pupil progression plans that contained reference to academic acceleration and retention. The plans were reviewed and checked against the District Acceleration Policy Document Review Form. No official school board policies were found other than the language in the district pupil progression plans. Of the plans analyzed, the only form of acceleration that was explicitly described was grade skipping (n = 6) which was listed in 100% of the plans analyzed. Portions of the pupil progression plans that included reference to student promotion included academic acceleration as a form of promotion. Some language was unclear and

did not provide specific guidelines or procedures for the accelerative process. Refer to Appendix G for the policy language.

Research Question 2

What are the most common types of acceleration implemented in elementary schools in the state of Florida?

Elementary school principals and district administrators of gifted education indicated which of the 11 forms of academic acceleration listed in *A Nation Deceived* (Colangelo, et al., 2004) were used in their schools or districts during the 2008-2009 school year. In responding to this research question, items 3, 4, and 8 from the principals' questionnaires and items 7, 8, and 9 from the district administrator's questionnaires were reported as frequencies, and each applicable acceleration type was ranked from most frequent to least frequent. These questionnaire items are displayed in Table 11.

Table 11
Forms of Acceleration Reported by District Administrators and Principals

Acceleration Forms	Principals		District Administrators	
	n	% of Total	n	% of Total
Subject Acceleration	108	77.1	24	77.4
Continuous Progress	79	56.4	9	29.0
Curriculum Compacting	63	45.0	20	64.5
Above Level Extra-Curricular	54	38.6	8	25.8
Grade Skipping	35	25.0	26	83.9
Independent Study	28	20.0	12	38.7
Other form of acceleration	19	13.6	0	0.0
Private tutor or mentor	17	12.1	4	12.9
Virtual school	12	8.6	15	48.4
Telescoping	2	1.4	3	9.7

Results from the elementary school principals' responses and from district administrators of gifted programs were ranked separately, and casual comparisons were made to see if rankings were similar. Table 11 shows the types of acceleration as reported by both district administrators and elementary school principals.

All 140 school principal participants selected at least one form of acceleration from the choices provided. The most common form of acceleration selected was subject acceleration (n = 108). Subject acceleration was taking place outside of the classroom rather than within the grade-level classroom in most cases with 66 principals (61.7%) selecting this other location compared to 41 (38.3%) principals who reported that subject acceleration takes place in the regular classroom in their schools. In addition, principals selected the content areas in which they offered subject acceleration to their students. More than half of the respondents (52.9%) indicated that they offered this form of acceleration in language arts, 59 (42.1%) listed mathematics, 13 (9.3%) listed science and two principals wrote in responses: (a) social studies, and (b) PRIMES mathematics classes (sixth grade curriculum for advanced fifth grade students).

The second most frequently reported form of acceleration reported by school principals was continuous progress (56.4%). Curriculum compacting was selected as the next most common form of acceleration uses with 45% of the respondents selecting this option. Other options selected included above-level extra-curricular programs (38.6%), grade skipping (25%), independent study (20%), "other" (13.6%), private tutor or mentor (12%), virtual school (8.6%), and telescoping (1.4%).

Principals who selected other forms of acceleration not listed wrote in the following seven types of enrichment or acceleration: (a) six respondents listed gifted or enrichment classes, (b) three respondents listed computer programs, (c) one respondent listed tutoring, (d) one respondent listed horizontal enrichment, (e) one respondent listed math and reading, (f) two respondents listed the PRIMES math program, and (g) one principal stated that teachers work to provide enrichment in their classrooms. All of these options fit under the other forms of acceleration or programming options listed on the questionnaire.

Elementary school principals were asked to indicate if they had allowed any student to grade-skip during the 2008-2009 school year and these principals were also asked if they had permitted subject acceleration. For this question, 24 principals (17%) selected “yes.” In comparison, 81 (57.9%) indicated they had allowed subject acceleration in their schools. Participants who indicated that their school districts or elementary schools offered subject acceleration also reported the content area and where that acceleration typically occurred. A total of 108 (76.4%) elementary school principals listed subject acceleration as a form of academic acceleration offered in their schools. Two of the respondents provided additional information regarding other forms of subject acceleration offered at their schools. One indicated subject acceleration in social studies was offered and the other listed an accelerated math program offered to advanced fifth grade learners called PRIMES that compacted two years of math content into one year. Listing subject acceleration in language arts were 74 principals (52.9%), while 59

principals (42%) listed mathematics, and 13 (9.3%) principals indicated that they offered content acceleration in science. Table 12 provides a summary of these data.

Table 12
Subject Acceleration in the Content Area

Content Area	Number of Respondents	% of Total
Language Arts	74	52.9
Mathematics	59	42.1
Science	13	9.3
Other	2	1.4

Participants also selected programming options offered in addition to or in place of acceleration. Table 13 shows the programming options and curricular modifications provided in addition to other forms of acceleration.

Table 13
Programming Options and Curricular Modifications

Programming Options	Principals		District Administrators	
	n	% of Total	n	% of Total
Differentiation	116	82.9	21	67.7
Pull-out resource	79	56.4	19	61.3
Ability Grouping	70	50.0	17	54.8
Grade-level extra-curricular	62	44.3	10	32.3
Cluster Grouping	37	26.4	15	48.4
Self-contained (homogenous)	15	10.7	11	35.5
Self-contained (heterogeneous)	8	5.7	9	29.0
Grade-level online or distance learning	3	2.1	7	22.6

District administrators of gifted education programs also reported types of acceleration used in their districts. Grade skipping was selected the most frequently with

26 (83.9%) of the respondents choosing this option. Subject acceleration was selected by 24 (77.4%) of the respondents. District administrators of gifted education ranked the remainder of the acceleration option choices as follows: (a) subject acceleration (77.4%), (b) curriculum compacting (64.5%), (c) virtual school (48%), independent study (38.7%), continuous progress (29%), above-level extra-curricular programs (25.8%), private tutor or mentor (12.9%), and telescoping (9.7%) as shown in Table 11.

The next questionnaire items used to answer this research question focused on types of program options that schools or districts offered in addition to or in place of the other forms of academic acceleration. These included survey item 4 on the questionnaire for district administrators of gifted education and survey item 8 on the questionnaire for elementary school principals. Of the respondents, 83% of school principals and 68% of district administrators selected differentiation. The next most common choice selected was a pull-out model for gifted or enrichment classes (56.4% of principals and 61% of district administrators). The third most frequent option selected was ability grouping (50% of principals and 55% of district administrators.)

School principals then ranked the following forms of enrichment offered in their schools in addition to or in place of acceleration : (a) grade-level extra-curricular programs (44.3%), (b) cluster grouping (26.4%), (c) self-contained, full-time homogenous classes for the gifted (10.7%), (d) self-contained full time mixed ability group for gifted and high achieving students (5.7%), and (e) grade-level online or distance learning (2.1%.)

District administrators of gifted education programs ranked the remaining choices in the following way: (a) cluster grouping (48.4%), (b) self-contained, full-time homogenous classes for the gifted (35.5%), (c) grade-level extra-curricular programs (32.3%), (d) self-contained full time mixed ability group for gifted and high achieving students (29%), and (e) grade-level online or distance learning (22.6%). These data are shown in Table 13. According to the responses to the district questionnaire, one district administrator reported that accelerated students were reported and tracked in the district.

Principals were asked to provide information regarding where subject acceleration takes place. Of principals who selected subject acceleration as an option at their school, 38.3% (n = 41) stated that the acceleration is provided in the students regular grade-level classroom. Of the principals who indicated they offer content acceleration, 61.7% (n = 66) stated that the acceleration takes place in another location outside of the regular classroom, such as in a higher grade-level classroom. District administrators of gifted education also indicated where subject acceleration takes place in elementary schools in their county. Nineteen district administrators (51.4%) reported that the content acceleration typically takes place in the regular grade-level classroom while 18 administrators (48.6%) reported that subject acceleration takes place outside of the regular education classroom. Table 14 presents a summary of these data.

Table 14
Location of Subject Acceleration

Location	Principals		District Administrators	
	n	%	n	%
Regular Classroom	41	38.3	19	51.4
Not in Regular Classroom	66	61.7	18	48.6
Total Respondents	107	100.0	37	100.0

Research Question 3

What are the most common reasons for not accelerating a student according to district administrators and school principals in the state of Florida?

To respond to this research question, survey items 11 and 13 were analyzed for common themes among respondents. Survey item 13 was analyzed separately for principals' and district administrators' surveys. These survey items requested participants to rank eight common reasons for not accelerating students. Options were as follows: (a) attitude of the receiving teacher, (b) attitude of school administrator, (c) concerns about social/emotional development, (d) concerns that the work will be too difficult, (e) effects on siblings, (f) effects on other students in the classroom who are left behind, (g) gaps in knowledge, and (h) parent preference. These common reasons were selected from the review of literature. Each reason was assigned a value for its ranking. The lowest number represented the respondent's primary reason for not accelerating a student and the highest number represented the respondent's last choice among the possible reasons for not accelerating a student. A mean score was then provided for each reason by dividing each rankable total score by the number of respondents. Of the school principals, 104 (74 %) responded to this questionnaire item. Of the district administrators of gifted education,

only 12 (18%) responded to this questionnaire item. See Tables 15 and 16 for a summary of the data.

Table 15
Principals' Reasons for not Accelerating Students

Reasons	Ranking								Score	Mean Score
	1	2	3	4	5	6	7	8		
Attitude of Receiving Teacher	6	5	14	18	16	18	17	10	419	4.03
Attitude of school administrator	9	5	6	13	14	14	18	25	367	3.53
Concerns about social/emotional development	37	23	14	8	6	3	7	6	634	6.10
Concerns that the work will be too difficult	5	11	24	23	14	17	5	5	498	4.79
Effects on siblings	9	5	8	13	14	13	15	27	372	3.58
Effects on other students in the classroom who are left behind	4	13	6	7	14	15	26	19	366	3.52
Gaps in Knowledge	21	28	15	11	6	10	7	6	583	5.61
Parent preference	13	14	17	11	20	14	9	6	505	4.86

Note. (n=104) Response scale ranging from 1-8 with 8 indicating respondents' lowest ranked reason for not accelerating students and 1 indicating respondents' primary reason for not accelerating students. First choice options received the maximum amount of points and last choice options received the lowest points.

Table 16
District Administrators' Reasons for not Accelerating Students

Reasons For Not Accelerating	Ranking								Score	Mean Score
	1	2	3	4	5	6	7	8		
Attitude of Receiving Teacher	0	1	2	2	2	3	2	0	50	4.17
Attitude of school administrator	2	3	1	1	3	2	0	0	66	5.50
Concerns about social/emotional development	7	3	0	1	0	0	1	0	84	7.00
Concerns that the work will be too difficult	0	0	2	3	6	1	0	0	54	4.50
Effects on siblings	1	0	0	1	1	3	1	5	33	2.75
Effects on other students in the classroom who are left behind	2	0	1	0	0	0	4	5	35	2.92
Gaps in Knowledge	0	4	4	2	0	1	0	1	66	5.50
Parent preference	0	1	2	2	0	2	4	1	44	3.67

Note. (n=12) Response scale ranging from 1-8 with 8 indicating respondents' lowest ranked reason for not accelerating students and 1 indicating respondents' primary reason for not accelerating students. First choice options received the maximum amount of points and last choice options received the lowest points.

To add additional strength to the analysis, Friedman's Test, which is a nonparametric statistical test designed to analyze ranked data of this nature, was utilized. Friedman's Test was used to test the null hypothesis that all reasons for not accelerating a

student were equally likely. For both the principal and district administrator samples, the test proved to be highly significant (District: $X^2_7 = 29.25$, $p = 0.0001$; Principal: $X^2_7 = 120.63$, $p < 0.0001$) which meant that some reasons for not accelerating a student were more likely than others.

For school principals, concerns about social and emotional development obtained the highest rank score (6.10). The next highest reason for not accelerating student according to elementary school principals was a concern over gaps in knowledge (rank score = 5.61), followed by parent preferences (rank score = 4.86), concerns that the work will be too difficult (rank score = 4.79), attitude of the receiving teacher (4.03), effects on siblings (rank score = 3.58), attitude of school administrator (rank score = 3.53, and effects on other students in the classroom who are left behind (rank score = 3.52).

District administrators of gifted education also ranked the eight common reasons not to accelerate a student. Concerns over social and emotional development were selected as the primary reason not to accelerate a student (rank score = 7.00). Gaps in knowledge and attitude of the school administrator tied for second (rank score = 5.50), followed by concerns that the work will be too difficult (rank score = 4.50), then attitude of the receiving teacher (rank score = 4.17), parent preference (rank score = 3.67), effects on other students who are left behind (rank score = 2.92, and effects on siblings (rank score = 2.75).

Research Question 4

What relationship, if any, exists between school or principals' personal demographic variables and types of acceleration offered in their elementary schools?

The variable representing types of acceleration was accounted for by combining the total number of options selected from items 3 and 4. There were 10 possible selections for item 3: (a) grade skipping , (b) subject matter acceleration, (c) curriculum compacting , (d) telescoping, (e) continuous progress, (f) independent study, (g) virtual school or online program for advanced-level coursework , (h) private tutors or mentors, (i) above-level extra-curricular programs, and (j) other, not listed, and 8 possible selections for item 4: (a) differentiation of instruction within the regular classroom, (b) extracurricular programs and activities, (c) online/distance learning for grade-level courses, (d) ability grouping for instruction within the grade level, (e) cluster grouping, (f) full-time, self-contained gifted classes, (g) full-time, self-contained gifted and high achieving classes, and (h) resource room for a period of time each week or a portion of each day. These possible selections were used to create a count-based variable ranging from 0 to 18. Zero indicated that a participant did not select any of the various forms of acceleration and 18 indicated that a participant selected all of the forms of acceleration. One point was assigned for each acceleration option. In designing the analysis in such a manner, the relationship between the extent to which diverse acceleration forms were offered in elementary schools and demographic factors was tested. A multiple linear regression was performed with this newly created variable as the dependent variable. For this analysis, the dependent variable was the total number of forms of acceleration used

in schools as reported by school principals (n = 140). The minimum number of forms of acceleration selected was zero and the maximum number of forms of acceleration reported by principals was 12. The mean was 5.8 forms of acceleration (SD = 2.3). Independent variables included: (a) number of gifted students at a school, (b) number of total students at a school, (c) percentage of students receiving free or reduced lunch, (d) level of education of the principal, (e) number of years experience as a school principal, and (f) principal's certification or endorsement status in gifted education. Table 17 presents data related to these independent variables.

Table 17
Descriptive Statistics for School and Principal Demographics

Independent Variables	Number of Respondents	Minimum	Maximum	Mean	Std. Deviation
Approximate number of identified gifted in your school	126	0	155	26.5	27.6
Total number of students in your school	126	350	1,300	700.8	178
Percentage of students on free or reduced lunch	126	7	98	52.4	23.8
Years as Principal	130	0	30	7.8	5.8

A multiple linear regression was performed using two blocks. The purpose was to determine if school-based demographics and personal demographics, when added separately, had any significant change in overall significance (F) or explanation of variance in the dependent variable (R-square). The first block tested included school-based demographics. These demographics were (a) number of gifted students at the school, (b) number of total students at the school, and (c) percentage of students receiving

free or reduced lunch. The second block tested included personal demographics of the school principal as shown in Table 8. These variables included (a) the principal’s level of education, (b) number of years experience as a principal, and (c) whether or not the principal was endorsed or certified in gifted education. The categorical variable “level of education” was collapsed into two categories: (a) master’s degree, and (b) specialist or doctoral degree. The independent variable “gifted endorsement or certification” was not used because there was not enough discrimination in the variable to be a good predictor. There were 119 participants who selected “no,” 10 who selected “yes,” and 11 missing cases. Next, descriptives were run for the dependent and independent variables as shown in Table 18.

Table 18
Descriptive Statistics for Multiple Linear Regression Using Demographic Variables

Independent Variables	Mean	Standard Deviation
Total number of forms of acceleration used as reported by principals	6.0	2.1
Approximate number of gifted learners in the school	27.1	28.1
Total school enrollment	689.3	173.1
Percentage of students receiving free or reduced lunch	52.7	23.8
Total years as a principal	8.2	5.8

Note: Only respondents who answered each of the questionnaire items related to these specific independent variables were included in this regression analysis (n = 119).

Neither model was found to be statistically significant. In Model 1, $F(3, 115) = 0.649$, $p = .585$, $R\text{-square} = .017$. This means that only 1.7% of the variance in number of

acceleration forms was explained by the combination of independent variables. Model 2 contained the Model 1 factors plus personal demographic variables. It was also not found to be statistically significant, $F(5, 113) = .625$, $p = .681$, $R\text{-square} = .027$. For this Model, 2.7% of the variance in number of acceleration forms was explained by the combination of these independent variables. Table 19 shows both models.

Table 19
Model Summary of Multiple Linear Regression

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.129	.017	-.009	2.080	.017	.649	3	115	.585
2	.164	.027	-.016	2.087	.010	.596	2	115	.553

Also notable were the change statistics, displayed in Table 20, which also showed that the Model 2 factors did not contribute to a significant model, even when holding the Model 1 factors constant, $F(2, 113) = .596$, $p = .553$, $R\text{-square change} = .010$.

Table 20
Analysis of Variance (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	8.424	3	2.808	.649	.585
Residual	497.576	115	4.327		
Total	506.000	118			
2 Regression	13.614	5	2.723	.625	.681
Residual	492.386	113	4.357		
Total	506.000	118			

Research Question 5

What relationship, if any, exists between elementary school principals' knowledge of gifted learners and the types of acceleration implemented in their schools?

This question was analyzed using a linear regression. The same dependent variable used to answer research question 4, derived from questionnaire items 3 and 4 regarding types of acceleration used in the schools, was used to answer this research question. Items 15 through 20 on the questionnaire used a 5-point Likert-type scale and were combined to form a scale variable. These six items presented the following statements: (a) Gifted learners should remain in mixed-ability grouped classrooms because they will spend the rest of their lives with all types of people; (b) gifted learners are being held back in schools because there is too much attention paid on minimum proficiency skills that they have already mastered; (c) it is more important to focus time and instruction on the needs of the lowest achieving students than on students who are already at proficiency level or beyond; (d) gifted learners need special accommodations or modifications such as acceleration, modifications to the curriculum, or ability grouping in order to be successful in school; (e) gifted learners have unique needs that are different from general education students; and (f) gifted learners require modifications to instruction in order to learn and achieve their potential. Participants were asked to respond using a Likert scale selecting "strongly agree," "agree," "neither agree nor disagree," "disagree," or "strongly disagree."

A factor analysis was performed to determine the validity of conceptual groupings. The goal was to create a single variable from these six questions that

addressed the same concept of knowledge of gifted learners. This single variable had a minimum value of 6 and a maximum value of 30. A factor analysis on the questions revealed three separate factors as shown in Tables 21 and 22: (a) Gifted learners have unique needs, gifted learners require accommodations to instruction in order to learn and achieve their potential; (b) gifted learners do not need accommodations to be successful in school, gifted learners should remain in mixed-ability grouped classes; and (c) gifted learners are being held back; It is more important to focus on the needs of the lowest achieving students. Next, the factors were run through a reliability analysis using Cronbach's Alpha. The first factor had a value of .664 (moderate), while the other two factors had values of .289 and .218, respectively (weak). Because of the weak effect, only use the first factor was used as an independent variable for Research Question 5. This variable had a possible range from 2 to 10.

Table 21
Total Variance Explained: Principal Component Analysis

Component	Initial Eigenvalues		Rotation Sums of Squared Loadings	
	Total	% of Variance	Total	% of Variance
1	1.609	26.810	1.598	26.632
2	1.230	20.507	1.185	19.752
3	1.086	18.106	1.142	19.040
4	.816	13.606		
5	.791	13.183		
6	.467	7.788		

Table 22
Factor Analysis

Variables	Component		
	1	2	3
1. Gifted learners require accommodations in order to learn and achieve potential	.860		
2. Gifted learners have unique needs	.811	.156	
3. Gifted learners do not need accommodations or modifications to be successful in school		.785	-.184
4. Gifted should remain in mixed ability classes		.728	.251
5. Gifted learners are being held back	.290		-.748
6. The needs of lowest achieving students are more important	.339		.696

Note. Varimax rotation was used.

A simple linear regression was run with the total number of acceleration forms used as the dependent variable and gifted attitudes as the independent variable. The analysis showed that this relationship was not significant: $F(1, 129) = 0.154$, $p = .695$, R -square = .001. This can be interpreted to mean that less than 1% of the variability in acceleration methods practiced was able to be explained by the variable addressing gifted attitudes of the principals. Table 23 shows the regression analysis for this research question.

Table 23

Model Summary: Predictors (Constant) Attitude Toward Gifted

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.035	.001	-.007	2.099

ANOVA: Predictors: (Constant) Attitude Toward Gifted

Dependent Variable: Total Number of Acceleration Forms Used

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.678	1	.678	.154	.695
Residual	568.314	129	4.406		
Total	568.992	130			

Coefficients: Dependent Variable: Total Number of Acceleration Forms Used

Model	Unstandardized Coefficients		Standard Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.612	1.025		5.473	.000
Attitude Toward Gifted (Unique Needs + Require Accommodations)	.049	.124	.035	.392	.695

Research Question 6

What relationship, if any, exists between district-level acceleration policies and actual acceleration practices in elementary schools in the districts?

This research question was answered using data from the District Acceleration Policy Document Review Form using items on the District Administrator of Gifted Education Programs Questionnaire and the questionnaire administered to school

principals. For each acceleration practice, the matching survey item was identified. A total of 10 of 15 acceleration practices on the District Acceleration Policy Document Review Form were matched to a survey item on the questionnaire. For each of these pairings, the frequencies were reported. The acceleration practices were grouped into the following three categories: (a) referral and screening, (b) assessment and decision making, and (c) menu of services.

Referral and Screening

Section I of the District Policy Document Review Form included three items: (a) Students can be referred for academic acceleration to administration by any source (i.e. teacher, parent, student, counselor, etc.); (b) policies and/or procedures do not limit access to acceleration options based on gender, race, ethnicity, socio-economic status, English proficiency, disability or school building attended; and (c) the screening process is applied equitably and systematically to all referred students. These items did not match with any items on the district administrator acceleration questionnaire and were, therefore, reported separately.

Three of the districts (50%) with a policy on acceleration reported that they had a protocol with the steps that a teacher or principal should follow when considering academic acceleration. No other items related to referral and screening guidelines were evident in the written policy documents.

Assessment and Decision Making

Section II of the District Acceleration Policy Document Review Form addressed the assessment and decision making process for acceleration. Five items were included in this section: (a) Appropriate instruments are used for the type of acceleration being considered; (b) valid and reliable instruments are used to measure factors that are related to the success of acceleration such as general intellectual ability, intellectual and academic functioning levels, achievement motivation, lack of adjustment problems, and academic readiness; (c) the Iowa Acceleration Scales is used or another valid and reliable tool to help make decisions regarding acceleration; (d) acceleration decisions are made by a team of professionals at the school and or district (i.e., administrator, counselor, psychologist, parent, teacher, teacher of the gifted, etc.); and (e) a district protocol has been established to address the processes through which acceleration will occur. These items were numbered 8, 9, and 11 on the district administrator questionnaire.

All of the districts whose academic acceleration policy supported grade skipping required approval from the superintendent. One district policy listed various stakeholders who could initiate the referral process including parent, teacher, student and principal. One district policy provided evidence that the screening process was applied equitably and systematically to all referred students.

Of the districts with a policy on acceleration, 50% listed the requirement of valid and reliable instruments to measure factors that were related to the success of acceleration such as general intellectual ability, intellectual and academic functioning levels, achievement motivation, lack of adjustment problems, and academic readiness.

Two of the districts (33.3%) recommended the use of the Iowa Acceleration Scales in their acceleration policy.

Half of the districts that had an acceleration policy stated that the decision was made by a team of professionals at the school and or district level although the positions of those employees were not included. All districts included principals on the decision-making team. One district protocol included a statement about the decision-making team: “Invite all stakeholders. It is important that the principal or the principal’s designee be included in the meeting. If another school would receive the student, then a representative of that school should also be present.”

On the district administrators’ questionnaire, the participants were asked to indicate who participates in the decision to accelerate students in their school district. Because the district policy documents did not list the positions of members of the acceleration decision-making team, a comparison could not be made and instead, descriptive information was provided. Of the seven district administrators who responded to item 8 on the questionnaire, 100% of them stated that the parent and principal participate in acceleration decisions. Six of seven respondents indicated that the guidance counselor, classroom teacher, and teacher of the gifted participated in acceleration decisions. Three of the seven respondents reported that a district level administrator participated in the acceleration decision-making process. Five of seven also reported that the school psychologist was a part of the decision-making team in their schools.

School principals also reported on the participants in the decision-making process at the school level. There were 119 principals (85%) who responded to item 8 on the

questionnaire, indicating that parents participated in the decision-making process. Principals reported on team membership at the school level as follows: guidance counselors were cited by 83 (59.3%) of the principals, classroom teachers by 123 (87.9%) of the principals, and teachers of the gifted by 72 (51.4%) of the principals. Also cited as being on the team were principal or school administrator by 129 (92.1%) of the principals, district-level administrator by 16 (11.4%) of principals and school psychologist by 54 (38.6%). Ten respondents wrote in additional team members. These additional decision makers included the student (n = 1), Curriculum Resource Teacher (n = 1), Staffing Specialist (n = 3), leadership team (n = 1), literacy and math coaches (n = 1), academic coach (n = 1), “PST” (n = 1), and other (n = 1).

Item 9 on the district administrator questionnaire asked participants to indicate what instruments and what data schools in their districts were used to base decisions about acceleration. This matched with the District Policy Document Review Form section II. As mentioned previously, two districts cited the Iowa Acceleration Scales in their district policy and three of the districts had evidence of requiring valid, reliable tools to measure indicators related to successful acceleration. Four of seven respondents on the district questionnaire listed the Iowa Acceleration Scales. Other responses included academic achievement scores, psychological testing and evaluation, summative and formative assessments, progress monitoring data for reading and math, and The Florida Comprehensive Achievement Test (FCAT) scores.

School principals also reported examples of data that were used to make decisions regarding academic acceleration. This information was analyzed for common themes. All

140 principal participants reported tools and assessments they used to guide their decisions. These included FCAT scores, IQ scores, benchmark tests, progress monitoring reports, reading and math assessments, teacher-created assessments, achievement tests, checklists of behaviors including social emotional adjustment, state reading assessments, Running Record reading level indicators, Lexile scores, observations, parent input, computerized testing such as Successmaker, Scholastic Reading Inventory, mastery of grade level benchmarks, and formative and summative data. Of the 140 respondents, not one listed above-level assessments of achievement or aptitude. Only one cited the Iowa Acceleration Scales manual.

Menu of Services

Section Three of the District Policy Document Review Form included eight items related to offering a continuum or menu of acceleration options and series. These eight components were: (a) Subject acceleration options are available in all core subject areas; (b) curriculum compacting is included in the menu of options for students; (c) acceleration includes options such as whole grade acceleration; (d) acceleration includes options such as ability grouping; (e) acceleration includes options such as cluster grouping; (f) gifted learners are allowed to make continuous progress by testing out of previously mastered material; (g) acceleration plans include additional components such as enrichment, counseling, flexible grouping, and individualization; and (h) policy documents are periodically reviewed and revised to ensure compliance with the current literature in the field of gifted education. This section of the document review form

aligned with items 3, 4, 6, 7, and 11 of the district administrator questionnaire and items 2 through 7 and item 11 of the principal questionnaire. These items were used to elicit input on (a) types of acceleration offered, (b) program options offered instead of acceleration, (c) types of subject acceleration offered, (d) location of subject acceleration and (e) whether social and emotional factors were considered when making decisions regarding acceleration.

All (100%) of the districts that stated they had a policy on acceleration (n = 6) included grade skipping in their policy. No other form of acceleration was included in written policy. One of the six districts included additional components such as enrichment, counseling, flexible grouping, and individualization in their acceleration policy. Finally, one district included a statement that the acceleration policy would be periodically reviewed and modified as needed.

District administrators and school principals were asked to select all of the various forms of acceleration offered in their districts and schools. The form of acceleration cited most frequently by school principals was subject acceleration (n = 108, 77.1%). Principals followed subject acceleration with continuous progress as the next most popular option (n = 79, 56.4%) and then curriculum compacting (n = 63, 45%).

A total of 26 (83.9%) district administrators selected grade skipping as an option in their school districts followed by subject acceleration (n = 24, 77.4%), and curriculum compacting (n = 20, 64.5%). Table 24 provides a summary of the data for forms of acceleration most frequently used in the districts and schools.

Table 24
Forms of Acceleration Offered in Districts and Schools

Acceleration Forms	Principal		District Administrator	
	n	%	n	%
Subject acceleration	108	77.1	24	77.4
Continuous progress	79	56.4	9	29.0
Curriculum compacting	63	45.0	20	64.5
Above level extra-curricular	54	38.6	8	25.8
Grade Skipping	35	25.0	26	83.9
Independent study	28	20.0	12	38.7
Other form of acceleration	19	13.6	0	0.0
Private tutor or mentor	17	12.1	4	12.9
Virtual school	12	8.6	15	48.4
Telescoping	2	1.4	3	9.7

Both district administrators of gifted and elementary school principals ranked subject acceleration as high among options offered to gifted learners. Principals were asked to check which subject areas they allowed subject acceleration to take place in their schools. Choices were language arts, mathematics, science and other. Seventy four principals (52.9%) listed subject acceleration in Language Arts. Fifty-nine principals (42%) listed Mathematics as a content area that they provide subject acceleration to advanced learners. Thirteen (9.3%) principals indicated that they offer content acceleration in Science. Two indicated they provided subject acceleration in other areas: social studies and a compacted 5th and 6th grade math program for advanced fifth graders.

Research Question 7

What process is utilized in each district to help make decisions about acceleration for students?

Frequencies for items from the district administrator of gifted programs questionnaires for each of the nine districts were reported to answer this research question. Components listed on the District Acceleration Policy Document Review Form were also reported as descriptive frequencies. Of the nine district administrators of gifted education programs, seven indicated that their school districts had a written policy that guided acceleration practices. All indicated that a team approach was used to make decisions regarding acceleration although team members varied from district to district. All districts indicated that the final decision required the approval of the school superintendent. All districts that said they had written policies referred the researcher to their school district pupil progression plan for the information.

Acceleration was addressed along with sections on retention procedures. Six of the nine district administrators listed tools that their districts used in the process of acceleration, including the Iowa Acceleration Scales, academic achievement data, and teacher recommendations. All of the school district gifted program administrators stated that students' social and emotional needs were taken into consideration. Half of the districts reported that they had a protocol in place for principals or teachers to follow in order to initiate an accelerated placement request. Three of the six districts that had a written policy for acceleration also had language that required the use of valid and reliable instruments to measure students' academic achievement, aptitude and social-

emotional maturity. Only one district also included language that fostered an equitable referral process that could be initiated by any stakeholder, including the student.

Summary

Data collected from the self-reporting questionnaires and district policy document analysis forms have been presented in Chapter 4. The statistical analyses performed for each of the seven research questions were explained. Results from the statistical tests were reported and tables, figures and descriptions were provided. A summary of the results will be discussed in Chapter 5. Conclusions, implications for practice and future research will be presented.

CHAPTER 5 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

Contained in Chapter 5 are the statement of the problem and a description of the research and data collection methods used to conduct the study. The findings of the study are summarized and discussed. Conclusions drawn from the findings and recommendations for future research are also presented.

Problem Statement

The purpose of this study was to provide recent descriptive information about administrators' knowledge of acceleration and the needs of gifted learners, current acceleration policies, and accelerative practices in Florida elementary schools. District, school, and personal demographic variables were investigated to determine the extent to which they affected school-based acceleration options provided for gifted learners. Also, school district policies related to academic acceleration for elementary school students were examined to determine which types of research-based acceleration options were more frequently used and what procedures were in place to guide the decision-making process. This information was intended to be used to inform administrators and policy makers about acceleration and guide policy initiatives that are undertaken in support of advanced learners. The problem addressed in this quantitative study was the knowledge of gifted learners' needs possessed by elementary school principals and district-level

administrators of gifted education programs and the accelerative options that were provided for these students in their schools and supported by school district policy.

Methodology

Population and Data Collection

The population for this study was district administrators of gifted education programs and elementary school principals in the state of Florida. A sample of 291 elementary school principals from 10 school districts was selected for participation in the study. The entire population of district administrators of gifted education in all 67 districts was also selected. Of the 67, 10 district-level administrators from the same districts as the elementary school principals were selected for analysis of their school board acceleration policies. In nine of the 10 districts, permission was granted by their district assessment offices to contact elementary school principals and the district administrator of gifted education programs.

Data were gathered in the spring and summer of the 2008-2009 school year from 140 elementary school principals and 43 district-level administrators. Additional policy document information was provided by six of the nine district administrators of gifted education from the matching school districts.

Participants were first contacted in May of 2009 via the U.S. Postal Service with an introductory letter and waiver of consent form. The purpose of the letter was to introduce the study and inform them that they would be receiving an email with a link to

the online survey through SurveyMonkey.com. A few days later, participants were contacted through email with a link to the questionnaire. If the participant had not responded to the questionnaire after a week, a second contact message was sent via email with a link to the questionnaire. A third request and copy of the survey were sent to non-respondents by U.S. Postal service a week later. A self-addressed, stamped envelope was included for ease of return. Finally, a fourth and final request to complete the questionnaire was sent via email to those participants who had not responded after two more weeks. A thank you message was delivered to all participants who responded to the questionnaire. Copies of the contact messages sent to participants are included in Appendix F. A copy of the district's written acceleration policy (if there was one) was requested by email from the nine administrators of gifted education programs in the nine matching districts.

Instrumentation

Data were collected using two versions of a self-reporting online questionnaire. One was entitled *District Acceleration Policies and Practices Survey of Program Administrators* (See Appendix B) and the second was entitled *Elementary School Acceleration Policies and Practices Survey of Elementary School Principals* (See Appendix E). The questionnaire was created by the author using information from *A Nation Deceived* report on acceleration (Colangelo et al., 2004), the *NAGC Pre-K- Grade 12 Gifted Program Standards* and the *Questionnaire on Acceleration Attitudes and Practices* (Institute for Research and Policy on Acceleration, 2007) to create items that

addressed best practices for acceleration, types of acceleration, and attitudes toward the gifted. The questionnaires were pilot tested by 20 persons having expert knowledge and experience in gifted education. Feedback from these content experts was then used to edit the questionnaire.

The questionnaires contained 25 items and were divided into four sections with closed-ended and open-ended questions. Section I was designed to elicit information about types of acceleration implemented in schools. Section II was designed to request information about the decision-making process and tools used in schools. This section also addressed factors that support or impede the acceleration process in schools. Section III was designed to assess personal beliefs and attitudes toward the gifted and barriers to acceleration implementation. Section IV requested personal demographic information about the participant and participating school or district. Items contained multiple choice responses, fill in the blank statements, check boxes and value statements that required the participant to respond to statements and then select from “strongly agree,” “agree,” “neither agree nor disagree,” “disagree,” and “strongly disagree.”

Demographic data for school, school district, district administrators, and school principals were also collected. School demographic variables were: (a) total school enrollment, (b) total number of gifted learners, and (c) percent of students receiving free or reduced lunch. School district demographic variables addressed were: (a) total enrollment for students in grades K-5, (b) size of school district based on total enrollment grades K-12, and (c) total number of gifted learners in grades K-5. Demographic

variables of school principals were: (a) number of years as a principal, (b) certification or endorsement held in gifted education, and (c) level of education.

Analysis of Data

The researcher analyzed the data obtained from self-reported questionnaires and review of policy documents. Quantitative data from the questionnaire data were analyzed using Statistical Package for Social Sciences (SPSS) version 16.0. Qualitative data were collected from open-ended, write-in type response options on the questionnaire and from the policy documents. For these responses, the researcher sought to identify common themes from the data. Descriptive data were reviewed and a list of key responses was created. Tables were created to summarize the results of the analysis of the items that elicited write in responses. Policies were reviewed for specific components that related to the process of referral and screening, assessment and decision-making, and a continuum of options or services. These components were selected based on the review of literature on best practices for acceleration. Policy documents were reviewed and a checkmark was placed in the corresponding section on the District Policy Analysis Document Review form under the appropriate column to indicate which components were evident: (a) yes, (b) no, and (c) unable to determine. Frequencies were reported and displayed in tables.

Summary and Discussion of Findings

The following summary of findings has been organized around the seven research questions that guided the study. The findings are discussed as they relate to the research and literature reviewed for the study.

Research Question 1

Which of the types of acceleration listed in *A Nation Deceived* that are applicable to students in grades K-5 are addressed in school board policies?

Types of acceleration addressed in school board policies were examined.

Descriptive information from the District Acceleration Policy Document Review form were used and reported as counts. Although six of the nine districts surveyed (66.66%) reported that they had a policy on academic acceleration, the written policy was vague in all but one case, and all reference to acceleration was found in the districts' pupil progression plans and not as a separate official policy on acceleration. *A Nation Deceived* (2004) listed 18 different forms of acceleration, 11 of which were applicable to gifted learners in grades K-5. Only grade skipping was listed in district student progression plans as an option. The National Association for Gifted Children's Program Standards for Curriculum and Instruction has stated that gifted learners must have educational opportunities for both grade skipping and subject acceleration.

Research Question 2

What are the most common types of acceleration implemented in elementary schools in Florida?

Elementary school principals and district administrators of gifted education indicated which of the 11 forms of academic acceleration listed in *A Nation Deceived* were used in their schools or districts during the 2008-2009 school year. Participants also selected programming options offered in addition to or in place of acceleration.

Elementary school principals selected acceleration options from a list of 10 choices. All 140 respondents selected at least one form of acceleration from the choices provided. The most common form of acceleration selected was subject acceleration (n = 108). Subject acceleration is a means of matching a student's ability in a specific domain with appropriate instruction. Subject acceleration was taking place outside of the classroom rather than within the grade-level classroom in most cases with 61.7% (n = 66) principals selecting this other location compared to 38.3% (n = 41) of principals who reported that subject acceleration takes place in the regular classroom in their schools. In addition, principals selected the content areas that they offer subject acceleration to their students. More than half of the respondents (52.9%) indicated that they offer this form of acceleration in Language Arts, 42.1% (n = 59) listed mathematics, 9.3% (n = 13) listed science and two principals wrote in responses: (a) social studies, and (b) PRIMES math 6th grade curriculum for advanced 5th graders.

The second most frequently reported form of acceleration was continuous progress (56.4%). Continuous progress is a method of acceleration in which a student is

provided more challenging content as prior content is completed and mastered (Colangelo et al., 2004). The third most frequent form of acceleration offered in elementary schools was curriculum compacting (45%), followed by above-level extra-curricular programs (38.6%), then grade skipping (25%), independent study (20%), “other” (13.6%), private tutor or mentor (12%), virtual school (8.6%), and telescoping (1.4%). It was interesting to note that one fourth of the principals who indicated acceleration offerings in their schools selected grade skipping. Researchers have indicated that this has been one of the less frequently used options and has often been reserved for a few cases of children of exceptional ability and maturity (Colangelo et al., 2004). Participants were asked to indicate if they had actually promoted (grade-skipped) any students during the 2008-2009 school year, and 24 principals (17%) indicated this had occurred. In comparison, 57.9% (n = 81) indicated they had allowed subject acceleration in their schools. Grade skipping was reported to be used more frequently than independent study. This may have occurred because of the additional cost and planning associated with independent study.

Principals selected other forms of acceleration not listed on the questionnaire. These alternatives were as follows: (a) six respondents listed gifted or enrichment classes, (b) three respondents listed computer programs, (c) one respondent listed tutoring, (d) one respondent listed horizontal enrichment, (e) one respondent listed math and reading, (f) two respondents listed the PRIMES mathematics program, and (g) one principal stated that teachers work to provide enrichment in their classrooms. All of these options actually

fit under the other forms of acceleration or programming options listed on the questionnaire.

In an effort to triangulate the data, district administrators of gifted education programs were also queried about types of acceleration used in their districts. Like the school principals, subject acceleration was ranked high on their list of acceleration offerings, but grade skipping was ranked first (n = 26, 83.9%). Although the sample size was much smaller for district administrators, this result did not match the practices reported taking place in schools by the principals. This could perhaps be attributed to gifted program administrators being more current regarding research on acceleration. Their responses also might have indicated that grade skipping was used in their districts because they understood that there has been much dialog about acceleration since the *A Nation Deceived* report was released. This topic has been of high interest as evidenced by the number of break-out sessions at the National Association for Gifted Children annual conventions and articles in newspapers and magazines in the recent years leading up to the current study.

District administrators of gifted education ranked the remainder of the acceleration option choices as follows: (a) subject acceleration (77.4%), (b) curriculum compacting (64.5%), (c) virtual school (48%), independent study (38.7%), continuous progress (29%), above-level extra-curricular programs (25.8%), private tutor or mentor (12.9%), and telescoping (9.7%). Both groups ranked subject acceleration and curriculum compacting in their top three choices. District administrators listed virtual school higher than principals (4th ranking compared to 8th place.) It is possible that the school principals

who were not selected for this study or who did not respond to the questionnaire worked in schools that were using virtual school as an option for acceleration.

Principals and district administrators selected program options that their schools or districts offer in addition to or in place of the other forms of academic acceleration. Both groups selected differentiation as the first choice (83% of principals and 68% of district administrators). Both groups also selected the same choice for their second ranking which was a pull-out or resource model for gifted enrichment (56.4% of principals and 61% of district administrators). The third ranked choice of ability grouping was also the same for both groups (50% of principals and 55% of district administrators). School principals then ranked the following choices in order of popularity: (a) grade-level extra-curricular programs (44.3%), (b) cluster grouping (26.4%), (c) self-contained, full-time homogenous classes for the gifted (10.7%), (d) self-contained full time mixed ability group for gifted and high achieving students (5.7%), and (e) grade-level online or distance learning (2.1%).

District administrators of gifted education programs ranked the remaining choices in the following way: (a) cluster grouping (48.4%), (b) self-contained, full-time homogenous classes for the gifted (35.5%), (c) grade-level extra-curricular programs (32.3%), (d) self-contained full time mixed ability group for gifted and high achieving students (29%), and (e) grade-level online or distance learning (22.6%). The rankings of both groups were very similar on these items with district administrators placing cluster grouping higher than principals. The two groups choices were in agreement in reporting practices in the schools for program options offered in addition to or in place of other

forms of acceleration discussed above. It is possible that such options have typically been reported to the district administrators of gifted education, whereas most districts have not tracked grade skipping and subject acceleration as of 2009. According to the responses to the district questionnaire, only one district administrator reported that accelerated students were reported and tracked in their district.

Research Question 3

What are the most common reasons for not accelerating a student according to district administrators and school principals?

Elementary school principals were asked to rank eight common reasons for not accelerating a student. These reasons were based on the review of research in the literature on acceleration. For responding school principals (n = 104), concerns about social and emotional development obtained the highest rank score (6.10). The next highest reason for not accelerating student according to elementary school principals was a concern over gaps in knowledge (rank score = 5.61), followed by parent preferences (rank score = 4.86), then concerns that the work will be too difficult (rank score = 4.79), attitude of the receiving teacher (4.03), effects on siblings (rank score = 3.58), attitude of school administrator (rank score = 3.53, and effects on other students in the classroom who are left behind (rank score = 3.52).

District administrators of gifted education also ranked the eight common reasons not to accelerate a student provided in literature. Like school principals, responding district administrators of gifted education (n = 12) selected concerns over social and emotional development as the primary reason not to accelerate a student (rank score =

7.00). Gaps in knowledge and attitude of the school administrator tied for second (rank score = 5.50), followed by concerns that the work would be too difficult (rank score = 4.50), attitude of the receiving teacher (rank score = 4.17), parent preference (rank score = 3.67), effects on other students who are left behind (rank score = 2.92, and effects on siblings (rank score = 2.75).

Both school principals and district administrators selected social emotional concerns and gaps in knowledge as two of the top reasons for not accelerating a student. Principals ranked parent preference above district administrators on the scale. Principals, not district administrators, have often been the individuals who interact directly with parents when acceleration is proposed. It is possible that in an effort to satisfy a parent request or objection, a principal would value the parent or guardian's wishes more than a district administrator who did not interact with the parent, instead relying on knowledge of benefits or challenges of acceleration. A concern that the work would be too difficult was ranked third by district administrators and fourth by principals. Both groups placed effects on students who were left behind at the bottom of their list in seventh and eighth place.

Both principals' and district administrators' response that social emotional concerns was their top reason for not accelerating students was consistent with the findings of researchers on acceleration. Colangelo et al. (2004), Southern et al. (1989), Vialle et al. (2001) found that teachers, parents, and principals often worried about the social development of gifted children. The myth has continued to prevail that gifted learners can be harmed socially or emotionally by acceleration in spite of the documented

research on the maturity and asynchronous development of gifted learners. Because of this concern, valid and reliable tools have become important in the process of making careful decisions on acceleration for individual students. Researchers also noted the harmful social and emotional effects of not accelerating a student (Hansen & Toso, 2007; Renzulli & Park, 2000; Rimm, 2008). Broad dissemination of this information with stakeholders and decision-makers in the schools can improve the quality of decisions for individual students.

Research Question 4

What relationship, if any, exists between school or principals' personal demographic variables and types of acceleration offered in elementary schools?

A multiple linear regression analysis was conducted to answer this research question. Two models were run using factors related to the number of acceleration options used, independent variables, and personal demographics. Neither model was found to be statistically significant. In Model 1, only 1.7% of the variance in number of acceleration options offered could be explained by the combination of independent variables. In Model 2, 2.7% of the variance in number of acceleration options provided could be explained by the combination of independent variables. No relationship was, therefore, found between school or principals' personal demographic variables and types of acceleration offered in elementary schools. Two of the items that the researcher hypothesized would impact acceleration offerings included gifted endorsement or certification held by principals and percentage of students on free and reduced lunch. A total of 10 principals reported that they held certification or endorsement in gifted

education, yet the number was too low to run a valid analysis. For free and reduced lunch, this factor was not significant, $F(1, 123) = .983$, $p = .323$, $R^2 = .000$.

Research Question 5

What relationship, if any, exists between elementary school principals' knowledge of gifted learners and the types of acceleration implemented in their schools?

No relationship was found between school principals' knowledge of gifted learners and the types of acceleration implemented in their schools. A linear regression was run with acceleration type as the dependent variable and gifted attitudes as the independent variable. The analysis showed that this relationship was not significant: $F(1, 129) = 0.154$, $p = .695$, $R^2 = .001$. This means that less than 1% of the variability in acceleration methods practiced by elementary principals surveyed was explained by principals' knowledge of gifted learners.

Research Question 6

What relationship, if any, exists between district-level acceleration policies and actual acceleration practices in elementary schools in the districts?

The only policy that was evident in any of the district documents was that grade skipping was allowed in six of the nine districts that had a policy on acceleration. No mention of subject acceleration or any of the other ten forms of acceleration defined in *A Nation Deceived* as applicable to elementary school students was included. For this reason, only the use of grade skipping could be matched to the practices in the schools in each district using the frequencies reported. Some policies did include a protocol to guide

decision makers and some districts listed the use of valid, reliable instruments and a team to make decisions in the schools. These factors could be matched to responses from the principals' questionnaires.

Of the principals who responded as to who participates in the decision to accelerate (n = 132), all but three indicated that at least two or more persons comprised the decision-making team. Three principals stated that they were the sole decision-makers. These three principals were all from the same school district, which was one of the districts that did not specify the requirement of a team to determine eligibility for acceleration in the district policy. Researchers on acceleration and best practices for gifted education have often listed multiple criteria for screening and evaluation, e.g., the gathering of multiple sources of information and input from a variety of stakeholders, as important. Decisions regarding acceleration, using multiple criteria would likely involve a team of professionals including the parent and, if practical, the student. Without an explicit policy or district procedures for acceleration, schools may show a wide range of practices. Some of these practices might conflict with research findings and best practices.

Research Question 7

What process is utilized in each district to help make decisions about acceleration for students?

Processes were identified through data from the district administrators of gifted programs' questionnaire responses and from the data collected from the District Acceleration Policy Document Review form. All district administrators indicated that a

team approach was used to make decisions regarding acceleration. The requirement for use of a team approach, however, was not stated in all of the districts' written policies, and team members varied from district to district. Principals, in their survey responses, differed with district administrators in regard to team membership.

All districts indicated that any final decision on acceleration required the approval of the school superintendent. A total of six of the nine district administrators listed tools that their districts used in the process of acceleration. These included the Iowa Acceleration Scales, academic achievement data, and teacher recommendations. All of the school district gifted program administrators stated that students' social and emotional needs were taken into consideration. Half of the districts reported that they had a protocol in place for principals or teachers to follow in order to initiate an accelerated placement request. Three of the six districts that had a written policy for acceleration also had language that required the use of valid and reliable instruments to measure the student's academic achievement, aptitude and social-emotional maturity. Only one district also included language that fostered an equitable referral process that could be initiated by any stakeholder, including the student.

Processes relating to acceleration, therefore, were not consistent across districts or even within districts. Several district administrators mentioned "site-based decision-making" as a possible contributing or prohibiting factor when it came to acceleration in the schools. A lack of procedure, however, could leave principals to fend for themselves, sometimes having to "reinvent the wheel" and serve as gate keepers. Districts that develop their own protocol with step-by-step process using research-based best practices

can eliminate the subjectivity from the decision-making process and provide more consistent practices throughout their school district. This can also assist personnel in schools where there is more than one student who may need or request an accelerative option. It can provide equity in screening, evaluation and processing of possible acceleration candidates.

Conclusions

This quantitative study was conducted to gather data about policies and practices related to 11 forms of academic acceleration in elementary schools in the state of Florida. The purpose of this study was to provide recent descriptive information about administrators' knowledge of acceleration and the needs of gifted learners, current acceleration policies, and accelerative practices in Florida elementary schools. District, school, and personal demographic variables were investigated to determine the extent to which they affected school-based acceleration options provided for gifted learners. Also, school district policies related to academic acceleration for elementary school students were examined to determine which types of research-based acceleration options were more frequently used and what procedures were in place to guide the decision-making process. This information was intended to be used to inform administrators and policy makers about acceleration and guide policy initiatives that are undertaken in support of advanced learners. Based on the data collected for this study and the review of literature on gifted education and academic acceleration, the researcher reached the following conclusions:

1. Acceleration policies in the nine districts surveyed in the state of Florida refer only to grade skipping, just one of 11 possible forms of academic acceleration available to students in elementary school.
2. The most common types of acceleration provided to Florida's advanced learners during the elementary school years are subject acceleration in language arts and/or mathematics provided outside of the regular education classroom, continuous progress and curriculum compacting. Other common forms of enrichment and curricular modifications provided in elementary schools in Florida are differentiation, pull-out or resource classes for gifted and enrichment, and ability grouping in the classrooms.
3. Concerns over a student's social and emotional development and worries about gaps in knowledge were the main reasons selected for not accelerating a student.
4. No relationship was found to exist between school or principals' personal demographic variables and types of acceleration offered in elementary schools.
5. Based on the results of this study, no relationship was found between elementary school principals' knowledge of gifted learners and the types of acceleration implemented in their schools.
6. District acceleration policies supported grade skipping as a form of acceleration, and grade-skipping was found to be implemented in schools in all nine districts surveyed. Some district acceleration policies recommended

the use of a committee or team to help make decisions regarding acceleration, and evidence of this practice was found in all of the school districts surveyed. Guidelines for processes, instruments used to collect valid and reliable data on student achievement and ability, and equitable screening procedures were not evident in written policies.

7. Processes for implementing acceleration and making decisions on acceleration were not consistent across districts or within districts. In written district policies that addressed academic acceleration, guidelines were not established and recommendations were not made for tools such as the Iowa Acceleration Scales to help school leaders make sound decisions based on a variety of relevant data that address the whole child.

Implications and Recommendations for Practice

Based on the findings, implications and recommendations were as follows:

1. School board policies should be expanded to provide a continuum of services for advanced learners, including multiple forms of academic acceleration and curricular modifications. Policies should be written where none exist so that school principals will have guidance as they make decisions for students in their schools. Well written policies should guide practice.
2. Principals should be provided professional development regarding the benefits of various forms of acceleration. District-level administrators of gifted education should provide ongoing support and training on accelerative

options, acceleration processes and procedures, and the nature and needs of gifted learners. Various forms of acceleration should be discussed and promoted to the school principals, especially options that are low-cost and low-risk based on the substantial research base. Benefits of various forms of acceleration, including student achievement and social and emotional benefits should be discussed with school principals as the decision-makers in their schools.

3. Additional education and training on the nature and needs of gifted learners and the research base on the positive benefits of acceleration should be provided to school and district administrators. There is no evidence of acceleration causing harm to gifted learners who are carefully selected for acceleration and who are monitored during their transition.
4. Guidelines for acceleration processes and protocols are needed for school districts in Florida. District policy documents can suggest specific research-based instruments such as the Iowa Acceleration Scales to be used when making decisions regarding acceleration. In addition, components should include screening and referral procedures that provide equity and objectivity, due process, periodic review and revision of policy, and multiple selection criteria.
5. Since few principals surveyed held certification or endorsement on gifted education, additional training on the characteristics, nature and needs of gifted learners and research on acceleration should be included in educational

leadership courses since all principals will have gifted and advanced learners in their schools.

Recommendations for Future Research

The researcher determined several areas for future research based on the results of this study:

1. Revise the knowledge of gifted learners items on the questionnaire used in this study for future replications of this study to provide greater discrimination between variables.
2. Include teachers of the gifted and/or parents of gifted learners in a replication of this study for triangulation and deeper analysis of the fundamental questions.
3. Include a random sampling of school districts in the state of Florida to include smaller districts and rural districts and better generalizability of results.
4. Replicate this study in different states and across different regions of the country.
5. Include interviews with district level administrators of gifted education and school principals in order to probe in more detail some of the practices and beliefs of participants.
6. Include policies from all 67 school districts for analysis.
7. Conduct a similar study adding additional personal and professional demographic variables such as school grade, sex of the principal, background

teaching experience before becoming a principal, age of the principal, and ethnicity of the principal.

8. Conduct a similar study that includes more descriptive information about gifted learners in the school, such as their level of giftedness and number of students who qualified under the state's Plan B or district matrix criteria.
9. Conduct a similar study that probes school principals' opinions of obstacles or barriers to acceleration.

APPENDIX A
UNIVERSITY OF CENTRAL FLORIDA INSTITUTIONAL REVIEW BOARD
APPROVAL



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901, 407-882-2012 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Notice of Exempt Review Status

From: UCF Institutional Review Board
FWA00000351, Exp. 10/8/11, IRB00001138

To: Keri M Guilbault

Date: January 22, 2009

IRB Number: SBE-08-05898

Study Title: **Academic Acceleration of Elementary School Students: A Case Study of Policies and Practices in Five States**

Dear Researcher:

Your research protocol was reviewed by the IRB Chair on 1/13/2009. Per federal regulations, 45 CFR 46.101, your study has been determined to be **minimal risk for human subjects and exempt** from 45 CFR 46 federal regulations and further IRB review or renewal unless you later wish to add the use of identifiers or change the protocol procedures in a way that might increase risk to participants. Before making any changes to your study, call the IRB office to discuss the changes. **A change which incorporates the use of identifiers may mean the study is no longer exempt, thus requiring the submission of a new application to change the classification to expedited if the risk is still minimal.** Please submit the Termination/Final Report form when the study has been completed. All forms may be completed and submitted online at <https://iris.research.ucf.edu>

The category for which exempt status has been determined for this protocol is as follows:

2. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey or interview procedures, or the observation of public behavior, so long as confidentiality is maintained.
 - (i) Information obtained is recorded in such a manner that the subject cannot be identified, directly or through identifiers linked to the subject, **and/or**
 - (ii) Subject's responses, if known outside the research would not reasonably place the subject at risk of criminal or civil liability or be damaging to the subject's financial standing or employability or reputation.

A **waiver of documentation of consent** has been approved for all subjects. Participants do not have to sign a consent form, but the IRB requires that you give participants a copy of the IRB-approved consent form, letter, information sheet, or statement of voluntary consent at the top of the survey.

All data, which may include signed consent form documents, must be retained in a locked file cabinet for a minimum of three years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained on a password-protected computer if electronic information is used. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

On behalf of Tracy Dietz, Ph.D., UCF IRB Chair, this letter is signed by:

Signature applied by Janice Turchin on 01/22/2009 09:35:01 AM EST

IRB Coordinator

APPENDIX B
DISTRICT ACCELERATION POLICIES AND PRACTICES SURVEY OF
PROGRAM ADMINISTRATORS

A SURVEY OF DISTRICT ACCELERATION POLICIES AND PRACTICES
Form A

Directions: *Please complete the questionnaire below using data from your district for the 2008-2009 school year.*

Section I: Types of Acceleration

START HERE ▼

1. Does your district have a school board policy that addresses academic acceleration for students in grades K-5?

_____ Yes

_____ No

2. Does your school district track the number of elementary school students who receive academic acceleration such as grade skipping or subject acceleration?

_____ Yes

_____ No (*Please skip to item #5.*)

3. Approximately how many elementary school students in your district were allowed to skip one or more grade levels during the 2008-2009 school year? Please write the number of students on the blank.

_____ Students

4. Approximately how many grade K-5 students in your school district were permitted to take an above-level content area class ("subject acceleration") during the 2008-2009 school year? Please write the number of students on the blank.

_____ Students

Please continue on the next page ►

5. If a student or students in your school district received subject matter acceleration during the 2008-2009 school year, where was the material presented? Please check all that apply.

- In the student's regular, grade-level classroom
- In a location other than the student's regular grade-level classroom (e.g., in the next grade's classroom, after school, on weekends, or with a tutor.)
- I don't know
- Other (please list) _____

6. Acceleration can take many different forms. Indicate the forms of acceleration that are used in your district at the elementary school level. Please check all that apply.

- Grade skipping
- Subject-matter acceleration (Content is provided above a student's grade level.)
- Curriculum compacting (Students skip parts of the curriculum they have already mastered and move on to more challenging content and activities.)
- Telescoping curriculum (A student or group of students are allowed to complete several years of the school's curriculum in less time.)
- Continuous progress (The student is given material deemed appropriate for current achievement as the student becomes ready.)
- Independent Study (Self-paced instruction)
- Virtual School or online courses for above-level work (Correspondence course)
- Private tutors or mentors (The student learns with a mentor who provides skills in a specialized area at the appropriate pace.)
- Above-grade level extra-curricular programs
- Other (Please specify): _____

Please continue on the next page ►

7. Programming options for gifted students are sometimes offered in addition to or instead of other forms of academic acceleration. These options typically present students with grade-level material, even though that material may be different than what other grade-level classmates are working on. Indicate which of the following program options are used in your school district by placing a checkmark on the line next to the option.

- Differentiation of instruction within the regular classroom
- Extracurricular programs and activities
- Online/distance learning for grade-level courses
- Ability grouping for instruction within the grade level
- Cluster grouping (*Groups of identified gifted students are placed together with one teacher at their grade level*)
- Full-time, self-contained gifted classes (*homogeneous*)
- Full-time, self-contained gifted and high achieving classes
- Resource room for a period of time each week or a portion of each day (*Pull-out*)

Section II: Decision-Making Process

8. Who participates in the decision to accelerate students in your school district? Please check all that apply.

- Parent/primary caregiver
- Guidance counselor
- Classroom teacher
- Teacher of the Gifted
- Principal/School administrator
- District/County administrator
- School psychologist
- Other (please list)

Please continue on the next page ►

9. What instruments and what data do schools in your district use to base their acceleration decisions?

10. What are barriers to acceleration in your school district, in your opinion?

11. Are the student's social and emotional needs considered as well as academic achievement when making decisions regarding acceleration?

- Yes
- No
- I don't know

Please continue on the next page ►

Section III: Knowledge About Acceleration

12. The following reasons are frequently offered for why students are not accelerated. Please rank the following reasons in order of the most significant (1) to the least significant (8) reason for not accelerating a student.

- _____ Concerns about social/emotional development
- _____ Effects on siblings
- _____ Effects on other students in the classroom who are left behind
- _____ Parent preference
- _____ Attitude of receiving teacher
- _____ Attitude of school administrator
- _____ Gaps in knowledge
- _____ Concerns that the work will be too difficult

13. Does your school district provide training for school administrators on best practices for acceleration options for gifted learners?

- _____ Yes
- _____ No
- _____ Other (please specify) _____

14. Does your school district provide training for teachers on best practices for acceleration options for gifted learners?

- _____ Yes
- _____ No
- _____ Other (please specify) _____

Please continue on the next page ►

For items 15-20, please indicate how you feel about each statement.

15. Gifted learners should remain in mixed-ability grouped classrooms because they will spend the rest of their lives with all types of people.

- strongly agree
 agree
 neither agree nor disagree
 disagree
 strongly disagree

16. Gifted learners are being held back in schools because there is too much attention placed on minimum proficiency skills that they have already mastered.

- strongly agree
 agree
 neither agree nor disagree
 disagree
 strongly disagree

17. It is more important for teachers to focus time and instruction on the needs of the lowest achieving students than on students who are already at proficiency level or beyond.

- strongly agree
 agree
 neither agree nor disagree
 disagree
 strongly disagree

Please continue on the next page ►

18. Gifted learners need do not need special accommodations such as acceleration, modifications to the curriculum, or ability grouping in order to be successful in school.

- strongly agree
- agree
- neither agree nor disagree
- disagree
- strongly disagree

19. Gifted learners have unique needs that are different from general education students.

- strongly agree
- agree
- neither agree nor disagree
- disagree
- strongly disagree

20. Gifted learners require accommodations to instruction in order to learn and achieve their potential.

- strongly agree
- agree
- neither agree nor disagree
- disagree
- strongly disagree

Please continue on the next page ►

Section IV: Demographics

21. How many gifted students in grades K-5 were identified in your school district as of the 2008-2009 school year? Please write the number of students on the blank.

_____ Total number of K-5 gifted learners

22. What was the approximate total number of general education K-5 students in your school district during the 2008-2009 school year? Please write the number of students.

_____ Total number of K-5 general education students

23. Which of the following best describes your school district?

- _____ Large district
 _____ Medium district
 _____ Small district
 _____ Other (please specify) _____

24. Do you oversee other exceptional education programs or curriculum in addition to gifted?

- _____ Yes, I oversee (please list) _____
 _____ No, my duties only include gifted education programs.

25. What training have you had in gifted education that prepared you for your current position in your school district? (Please check all that apply.)

- _____ Master's degree in another ESF area (not Gifted)
 _____ Master's degree in Gifted Education
 _____ Gifted Education Endorsement/Certificate (not part of a Master's program)
 _____ Doctorate degree in Gifted Education or other Ed.D./Ph.D. with gifted education specialization area
 _____ Parent of a gifted child/children
 _____ Other (please specify) _____

Please continue on the next page ►

Thank you for completing this questionnaire. If you have any questions, please contact Ms. Guilbault at kguilbault@gmail.com or 321-438-9439. If you would like a summary of results from this dissertation when it is completed, please include an email address in the box below.

Please return this survey to Keri Guilbault in the stamped, addressed envelope provided to *910 Arabian Ave., Winter Springs, FL 32708*.

Comments:

Please continue on the next page ►

APPENDIX C
DISTRICT ACCELERATION POLICY DOCUMENT REVIEW FORM

DISTRICT ACCELERATION POLICY DOCUMENT REVIEW FORM

SCHOOL DISTRICT: _____

DATE POLICY WAS WRITTEN AND IMPLEMENTED: _____

NAME OF DOCUMENT: _____

School board acceleration policies will be reviewed to identify which of the following best practices as defined by the National Association for Gifted Children are included. A checkmark will be placed in the appropriate column next to each practice.

Acceleration Practices	Yes	No	Unable to Determine
I. Referral and Screening			
1. Students can be referred for academic acceleration to administration by any source (i.e. teacher, parent, student, counselor, etc.)			
2. Policies and/or procedures do not limit access to acceleration options based on gender, race, ethnicity, socio-economic status, English proficiency, disability or school building attended.			
3. The screening process is applied equitably and systematically to all referred students.			
II. Assessment and Decision Making			
1. Appropriate instruments are used for the type of acceleration being considered.			
2. Valid and reliable instruments are used to measure factors that are related to the success of acceleration such as general intellectual ability, intellectual and academic functioning levels, achievement motivation, lack of adjustment problems, and academic readiness.			
3. The Iowa Acceleration Scales is used or another valid and reliable tool to help make decisions regarding acceleration.			
4. Acceleration decisions are made by a <u>team</u> of professionals at the school and or district (i.e. administrator, counselor, psychologist, parent, teacher, teacher of the gifted, etc.)			
5. A district protocol has been established to address the processes through which acceleration will occur.			
III. Menu of Services			
1. Subject acceleration options are available in all core subject areas.			
2. Curriculum compacting is included in the menu of options for students.			
3. Acceleration includes options such as whole grade acceleration			
4. Acceleration includes options such as ability grouping			

5. Acceleration includes options such as cluster grouping			
6. Gifted learners are allowed to make continuous progress by testing out of previously mastered material.			
7. Acceleration plans include additional components such as enrichment, counseling, flexible grouping, and individualization.			
8. Policy documents are periodically reviewed and revised to ensure compliance with the current literature in the field of gifted education.			
TOTAL			

Comments:

APPENDIX D
NATIONAL ASSOCIATION FOR GIFTED CHILDREN PROGRAM STANDARDS

Gifted Education Programming Criterion: Program Design

Description: The development of appropriate gifted education programming requires comprehensive services based on sound philosophical, theoretical, and empirical support.	
Guiding Principles	Minimum Standards
1. Rather than any single gifted program, a continuum of programming services must exist for gifted learners.	1.0M Gifted programming services must be accessible to all gifted learners.
	1.0E Levels of services should be matched to the needs of gifted learners by providing a full continuum of options.
2. Gifted education must be adequately funded.	2.0M Gifted education funding should be equitable compared to the funding of other local programming.
	2.0E Gifted education programming must receive funding consistent with the program goals and sufficient to adequately meet them.
3. Gifted education programming must evolve from a comprehensive and sound base.	3.0M Gifted education programming must be submitted for outside review on a regular basis.
	3.0E Gifted education programming should be planned as a result of consultation with informed experts.
	3.1M Gifted programming must be guided by a clearly articulated philosophy statement and accompanying goals and objectives.
	3.1E The school or school district should have a mission/philosophy statement that addresses the need for gifted education programming.
	3.2M A continuum of services must be provided across grades pre-K-12.
	3.2E A comprehensive pre-K-12 program plan should include policies and procedures for identification, curriculum and instruction, service delivery, teacher preparation, formative and summative evaluation, support services, and parent involvement.
4. Gifted education programming services must be an integral part of the general education school day.	4.0M Gifted education programming should be articulated with the general education program.
	4.0E Gifted services must be designed to supplement and build on the basic academic skills and knowledge learned in regular classrooms at all grade levels to ensure continuity as students progress through the program.
5. Flexible groupings of students must be developed in order to facilitate differentiated instruction and curriculum.	4.1M Appropriate educational opportunities must be provided in the regular classroom, resource classroom, separate, or optional voluntary environments.
	4.1E Local school districts should offer multiple service delivery options as no single service should stand alone.
6. Policies specific to adapting and adding to the nature and operations of the general education program are necessary for gifted education.	5.0M The use of flexible grouping of gifted learners must be an integral part of gifted education programming.
	5.0E Gifted learners should be included in flexible grouping arrangements in all content areas and grade levels to ensure that gifted students learn with and from intellectual peers.
	6.0M Existing and future school policies must include provisions for the needs of gifted learners.
	6.0E Gifted education policies should exist for at least the following areas: early entrance, grade skipping, ability grouping, and dual enrollment.

Gifted Education Programming Criterion: Curriculum and Instruction

Description: Gifted education services must include curricular and instructional opportunities directed to the unique needs of the gifted learner.

Guiding Principles	Minimum Standards	Exemplary Standards
1. Differentiated curriculum for the gifted learner must span grades pre-K-12.	<p>1.0M Differentiated curriculum (curricular and instructional adaptations that address the unique learning needs of gifted learners) for gifted learners must be integrated and articulated throughout the district.</p> <p>2.0M Instruction, objectives, and strategies provided to gifted learners must be systematically differentiated from those in the regular classroom.</p> <p>2.1M Teachers must differentiate, replace, supplement, or modify curricula to facilitate higher level learning goals.</p> <p>2.2M Means for demonstrating proficiency in essential regular curriculum concepts and processes must be established to facilitate appropriate academic acceleration.</p> <p>2.3M Gifted learners must be assessed for proficiency in basic skills and knowledge and provided with alternative challenging educational opportunities when proficiency is demonstrated.</p>	<p>1.0E A well-defined and implemented curriculum scope and sequence should be articulated for all grade levels and all subject areas.</p> <p>2.0E District curriculum plans should include objectives, content, and resources that challenge gifted learners in the regular classroom.</p> <p>2.1E Teachers should be responsible for developing plans to differentiate the curriculum in every discipline for gifted learners.</p> <p>2.2E Documentation of instruction for assessing level(s) of learning and accelerated rates of learning should demonstrate plans for gifted learners based on specific needs of individual learners.</p> <p>2.3E Gifted learners should be assessed for proficiency in all standard courses of study and subsequently provided with more challenging educational opportunities.</p>
2. Regular classroom curricula and instruction must be adapted, modified, or replaced to meet the unique needs of gifted learners.	<p>3.0M A program of instruction must consist of advanced content and appropriately differentiated teaching strategies to reflect the accelerative learning pace and advanced intellectual processes of gifted learners.</p> <p>4.0M Decisions to proceed or limit the acceleration of content and grade acceleration must only be considered after a thorough assessment.</p> <p>5.0M Diverse and appropriate learning experiences must consist of a variety of curricular options, instructional strategies, and materials.</p> <p>5.1M Flexible instructional arrangements (e.g., special classes, seminars, resource rooms, mentorships, independent study, and research projects) must be available.</p>	<p>3.0E When warranted, continual opportunities for curricular acceleration should be provided in gifted learners' areas of strength and interest while allowing a sufficient ceiling for optimal learning.</p> <p>4.0E Possibilities for partial or full acceleration of content and grade levels should be available to any student presenting such needs.</p> <p>5.0E Appropriate service options for each student to work at assessed level(s) and advanced rates of learning should be available.</p> <p>5.1E Differentiated educational program curricula for students pre-K-12 should be modified to provide learning experiences matched to students' interests, readiness, and learning styles.</p>
3. Instructional pace must be flexible to allow for the accelerated learning of gifted learners as appropriate.		
4. Educational opportunities for subject and grade skipping must be provided to gifted learners.		
5. Learning opportunities for gifted learners must consist of a continuum of differentiated curricular options, instructional approaches, and resource materials.		

APPENDIX E
ELEMENTARY SCHOOL ACCELERATION POLICIES AND PRACTICES SURVEY
OF ELEMENTARY SCHOOL PRINCIPALS

**A SURVEY OF ELEMENTARY SCHOOL ACCELERATION
POLICIES AND PRACTICES
Form B**

Directions: Please complete the questionnaire below using data from your school for the 2008-2009 school year.

Section I: Acceleration Practices

START HERE ▼

1. Does your school improvement plan address academic acceleration of advanced students?

Yes

No

2. Acceleration can take many different forms. Indicate the forms of acceleration that are used in your elementary school. Please check all that apply.

- Grade skipping
- Subject-matter acceleration (*Content is provided above a student's grade level.*)
- Curriculum compacting (*Students skip parts of the curriculum they have already mastered and move on to more challenging content and activities.*)
- Telescoping curriculum (*A student or group of students are allowed to complete several years of the school's curriculum in less time.*)
- Continuous progress (*The student is given material deemed appropriate for current achievement as the student becomes ready.*)
- Independent Study (*Self-paced instruction*)
- Virtual School or online courses for above-level work (*Correspondence course*)
- Private tutors or mentors (*The student learns with a mentor who provides skills in a specialized area at the appropriate pace.*)
- Above-grade level extra-curricular programs
- Other (Please specify) _____

Please continue on the next page ►

3. Programming options for gifted learners are sometimes offered in addition to or instead of other forms of academic acceleration. These options typically present students with grade-level material, even though that material may be different than what other grade-level classmates are working on. Indicate which of the following program options are used in your school by placing a checkmark on the line next to the option.

- Differentiation of instruction within the regular classroom
- Extracurricular programs and activities
- Online/distance learning for grade-level courses
- Ability grouping for instruction within the grade level
- Cluster grouping (*Groups of identified gifted students are placed together with one teacher at their grade level*)
- Full-time, self-contained gifted classes (*homogenous*)
- Full-time, self-contained gifted and high achieving classes
- Resource room for a period of time each week or a portion of each day (*Pull-out*)

4. Were any students in your school allowed to skip one or more grade levels during the 2008-2009 school year?

- Yes
- No

5. Were any students in your school placed in an above-level content area class ("subject acceleration") during the 2008-2009 school year? (For example, a 1st grade student visited a 2nd grade classroom for reading instruction but returned to the regular 1st grade classroom for the rest of the day.)

- Yes
- No (*Please skip to item #8*)

Please continue on the next page ►

6. If a student or students in your school received subject matter acceleration during the 2008-2009 school year, what content area was it in?

- Language Arts/Reading
- Mathematics
- Science
- Other (please list) _____

7. If a student or students in your school received subject matter acceleration during the 2008-2009 school year, where was that material presented?

- In the student's regular, grade-level classroom
- In a location other than the student's regular classroom (e.g., in a higher grade classroom, after school, or with a tutor)
- I don't know

Section II: Decision-Making Process

8. Who participates in the decision to accelerate students in your school? Please check all that apply.

- Parent/primary caregiver
- Guidance counselor
- Classroom teacher
- Teacher of the Gifted
- Principal/School administrator
- District/County administrator
- School psychologist
- Other (please list) _____

Please continue on the next page ►

9. What instruments and what data does your school use to base acceleration decisions?

10. What are barriers to acceleration in your school, in your opinion?

11. Are the student's social and emotional needs considered as well as academic ability or achievement when making decisions regarding acceleration?

- Yes
- No
- I don't know

Please continue on the next page ►

Section III: Knowledge About Acceleration

12. The following reasons are frequently offered for why students are NOT accelerated. Please rank the following reasons in order of the most significant (1) to the least significant (8) reason for *not* accelerating a student.

- _____ Attitude of receiving teacher
- _____ Attitude of school administrator
- _____ Concerns about social/emotional development
- _____ Concerns that the work will be too difficult
- _____ Effects on other students in the classroom who are left behind
- _____ Effects on siblings
- _____ Gaps in knowledge
- _____ Parent preference

13. Does your school provide training for teachers on best practices for acceleration options for gifted learners?

- _____ Yes
- _____ No
- _____ Other (*please specify*) _____

Please continue on the next page ►

For items 14-19, please indicate how you feel about each statement.

14. Gifted learners should remain in mixed-ability grouped classrooms because they will spend the rest of their lives with all types of people.

- strongly agree
 agree
 neither agree nor disagree
 disagree
 strongly disagree

15. Gifted learners are being held back in schools because there is too much attention placed on minimum proficiency skills that they have already mastered.

- strongly agree
 agree
 neither agree nor disagree
 disagree
 strongly disagree

16. It is more important for teachers to focus time and instruction on the needs of the lowest achieving students than on students who are already at proficiency level or beyond.

- strongly agree
 agree
 neither agree nor disagree
 disagree
 strongly disagree

Please continue on the next page ►

17. Gifted learners need special accommodations such as acceleration, modifications to the curriculum, or ability grouping in order to be successful in school.

- strongly agree
- agree
- neither agree nor disagree
- disagree
- strongly disagree

18. Gifted learners have unique needs that are different from general education students.

- strongly agree
- agree
- neither agree nor disagree
- disagree
- strongly disagree

19. Gifted learners require modifications to instruction in order to learn and achieve their potential.

- strongly agree
- agree
- neither agree nor disagree
- disagree
- strongly disagree

Please continue on the next page ►

Section IV: Demographics

20. Approximately how many students in grades K-5 were identified as gifted in your school during the 2008-2009 school year? Please write the number of students on the corresponding blank below.

_____ Total number of K-5 gifted students

21. Approximately how many students were enrolled in your school during 2008-2009? Please write the number of students on the blank.

_____ Total number of students

22. Approximately what percentage of your students received free or reduced lunch during 2008-2009?

_____ % of students received free or reduced lunch

23. What is your highest level of education obtained?

_____ Master's degree

_____ Education Specialist degree

_____ Doctorate degree

_____ Other (please specify) _____

24. How many years have you been a principal?

_____ Years

25. Do you hold endorsement, certification, or a graduate degree in Gifted Education?

_____ Yes

_____ No

Please continue on the next page ►

Thank you for completing this questionnaire. If you have any questions, please contact Ms. Guilbault at kguilbault@gmail.com or 321-438-9439. If you would like a summary of results from this dissertation when it is completed, please include an email address in the box below.

Please return this survey to Keri Guilbault in the stamped, addressed envelope provided to 910 Arabian Ave., Winter Springs, FL 32708.

Comments:

APPENDIX F
CONTACT MESSAGES WITH PARTICIPANTS

Contact Letter 1

Within the next ten days you will receive a request by email to fill out a brief online questionnaire for an important study on academic acceleration policies and practices in Florida. Your school district was selected for participation in this study based on a partnership with the University of Central Florida and Progress Energy. You have been invited to participate because of your role as an elementary school principal in your district.

I am writing to you in advance because many people like to be informed prior to being contacted for participation in research studies. This study is an important one that will help Florida school districts as they develop their own written policies on academic acceleration.

Please find enclosed a copy of your school district's approval to conduct this research and a waiver of consent form. You do not need to return anything to me by mail and may keep the attached consent form for your records. If you choose to participate in this study, simply complete the online questionnaire and check that you are over 18 years of age.

Thank you for your time and consideration. Your response to the questionnaire is greatly appreciated. It is only with the help of generous people like you that this research can be successful.

Sincerely,

Keri M. Guilbault, Ed.S.
Doctoral Candidate, *Educational Leadership*
University of Central Florida
Phone: 321-438-9439
Email: kguilbault@gmail.com

Contact Letter 2

A few days ago you received a letter asking you to participate in a survey for my doctoral dissertation on acceleration policies and practices in Florida. I will be using an online questionnaire in an effort to determine the types of acceleration found in Florida's elementary schools.

You have been selected to be included in this sample because of your role as a principal in Florida. I highly value your participation. Your feedback is very important for educational policy makers, district gifted program administrators, and gifted learners in Florida. Results from this study can provide a current snapshot of acceleration practices in Florida and can help provide a better understanding of factors that determine local practices and policies related to academic acceleration.

I kindly ask that you take just a few minutes to share your thoughts and knowledge with me by filling out this online questionnaire. The questionnaire should only take about 10 minutes of your time. Your responses will be kept confidential. No personal or school district identifiers will be included in the reporting of results.

If you have questions or comments about this research project, you can reach me by email at kguilbault@gmail.com or by phone at 321-438-9439. My faculty supervisor is Dr. Walter Doherty who can be contacted at 407-823-1153. Questions of concern about research participants' rights may be directed to the UCF IRB Office, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at 407-823-2901.

Please click on the following link to complete the questionnaire: <surveylink>
By doing so, you give me permission to report your anonymous responses in my research paper.

If you do not wish to participate in this study, simply click on the following link to be removed from the study: <optout>

Thank you very much for your participation in this important study.

Sincerely,

Keri M. Guilbault
Doctoral Candidate, Educational Leadership
University of Central Florida

P.S. If you need another copy of the consent form or district approval to survey _____ County Public School principals, please contact Keri Guilbault at kguilbault@gmail.com or 321-438-9439.

Contact Letter 3

Last week you should have received an email with a link to an online questionnaire seeking information on your thoughts and school practices regarding academic acceleration interventions. Your district was one of 10 districts selected based on a partnership between UCF and Progress Energy. You were randomly selected from elementary school principals in your district.

If you have already completed the questionnaire, please accept my sincere thanks for your time. If you have not had time to take this survey yet, please do so today. I am especially grateful for your help because it is only by asking principals like you to share their schools information that I can understand the types of acceleration offered to advanced learners in Florida's elementary schools.

If you are not a principal and you feel like I have included you in this study by mistake, please let me know by sending me an email with a note indicating so. This would be very helpful.

Please visit the following link to access the questionnaire: <surveylink>

The survey should only take about 10 minutes of your time. I am especially grateful for your participation because your expertise and experience can help me gain an understanding of current practices in Florida.

If you prefer not to participate in this dissertation study, please select the following link to opt-out:
<optout>

Thank you very much for your time and assistance.

Sincerely,

Keri M. Guilbault, Ed.S.
Doctoral Candidate, Educational Leadership
University of Central Florida
kguilbault@gmail.com
321-438-9439

Contact Letter 4

A few weeks ago, I sent you an email with a link to an online questionnaire that asked you about academic acceleration interventions used in your district. To the best of my knowledge, your questionnaire has not yet been completed.

The comments and feedback from administrators who have already responded have yielded a wide variety of services and strategies. I think the results are going to be very useful as other school districts in Florida develop policies and procedures for academic acceleration.

I am writing to you again because of the importance that your questionnaire has for helping me gain accurate results. Although I sent this questionnaire to administrators of gifted education programs in several districts in Florida, it is only by hearing from everyone in the sample that I can be sure to get the results that are truly representative.

The survey should only take about 10 minutes of your time. I am especially grateful for your participation because your expertise and experience can help me gain an understanding of current practices in Florida.

To begin the questionnaire, please click on the following link: <surveylink>

If you prefer not to participate in this dissertation study, please reply to this email or click on the following link to opt out: <optout>.

If you have questions about this research, I can be reached at 321-438-9439 or by email at kguilbault@gmail.com. My faculty supervisor is Dr. Walter Doherty who can be contacted at 407-823-1153. Questions of concern about research participants' rights may be directed to the UCF IRB Office, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at 407-823-2901.

Thank you for participating in my research.

Sincerely,

Keri M. Guilbault, Ed.S.
Doctoral Candidate
University of Central Florida
kguilbault@gmail.com

APPENDIX G
DISTRICT ACCELERATION POLICIES

District 1

Acceleration for students demonstrating high achievement will be provided within their grade placement. Any consideration of accelerated placement must be in compliance with *FS 1008.25* requirements. The principal will evaluate the following documentation before any accelerated placement is considered: evidence of social/emotional readiness for higher level achievement and demonstration of high level mastery of current and next grade level curriculum before any accelerated placement is considered, however, the final decision for grade placement is the responsibility of the principal.

District 2

Accelerated Placement

Accelerated education experiences should be provided students within their assigned grade levels. Accelerated placement of students in succeeding grade levels may be considered for students who demonstrate exceptionally rapid mastery of grade level objectives and who have attained an adequate level of social maturity. A placement committee consisting of the principal, the classroom teacher, parent and any other personnel designated by the principal will make recommendations concerning accelerated placement. The parent(s) or guardian(s) of students considered for accelerated placement must be consulted. Parental consent must be provided in writing. The principal has the responsibility for final decisions regarding placement.

Where accelerated educational experiences seem indicated for an individual student, programs for the gifted shall be the first alternative for placement

District 3

Curriculum and Instruction

3. Skipping a Grade

When a principal recommends placement of a student into a higher grade, which results in the student skipping a grade or part of a grade, prior approval must be granted from the Superintendent's staff.

District 4

Accelerated promotion in grades k-5 may occur when a student demonstrates academic achievement of two or more years above grade level based on state performance standards and benchmarks, standardized tests scores, and classroom performance. Kindergarten students who do not meet the legal requirements for entering 1st grade must meet the requirements for accelerated promotion to be considered for entrance to 1st grade.

Procedure:

Accelerated promotion may be recommended by the School Placement Committee when data indicate all of the following:

- (1) Student's performance is above grade level performance in reading, writing, science and math
 - (2) student's performance is 2 or more years above average achievement
 - (3) student's standardized test scores indicate achievement and academic aptitude two or more years above grade level
 - (4) samples of student's daily work are consistently above average in reading, writing, science and math
 - (5) written reports from special services personnel support a decision for accelerated promotion
 - (6) student's social, emotional and physical development support accelerated promotion
- And
- (7) comments and recommendations of teacher support accelerated promotion

District 5

SPECIAL ASSIGNMENT/ACCELERATED PLACEMENT

A. Special Assignment

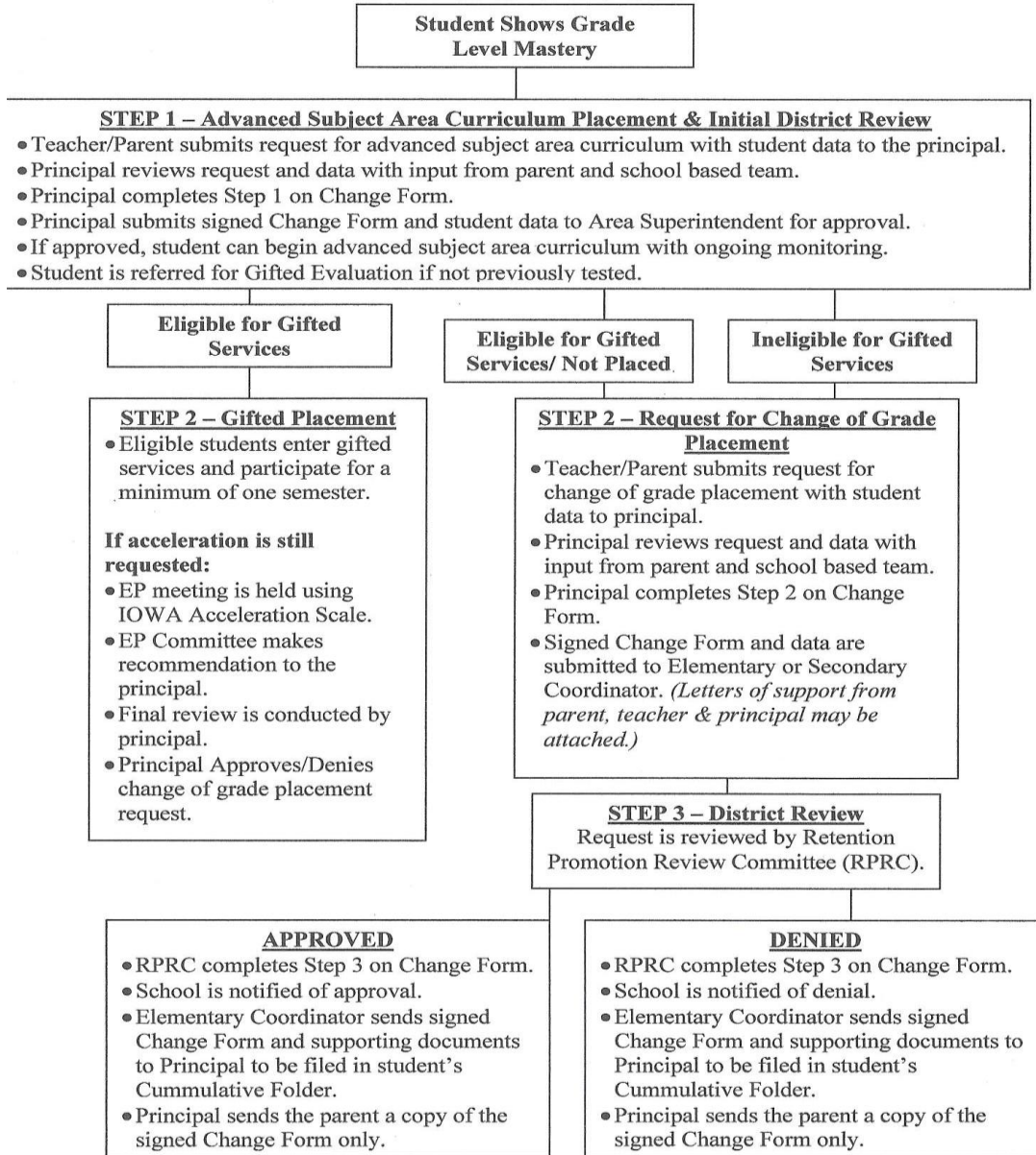
1. On the recommendation of the principal and with the approval of the superintendent, any student may be reassigned to a lower/higher grade so that the student will be able to benefit from instruction at that specified grade level. A Special Assignment/Accelerated Placement form will be used for the reassignment recommendation. This form is available through the office of Director of Elementary Education.
2. Parents must be notified formally in writing that their child is being assigned to the lower/higher grade. A copy of this notification must be placed in the student's cumulative guidance record along with the Special Assignment/Acceleration Placement form.

B. Accelerated Placement

1. The assignment of a student (who has never been retained) to a higher grade which results in the student skipping a grade or part of a grade should be made on the basis of exceptionally high achievement by the student and evidence that the student will benefit more from the instructional program at the advanced grade level. The probable long range academic, social, and emotional effect of the decision should be considered. The principal, with the approval of the superintendent, has the responsibility for making such assignments. However, a child will not be accelerated without parental consent. A Special Assignment/Acceleration Placement form will be used for the accelerated placement.
2. The student's cumulative folder and report card should be noted to indicate "accelerated placement" and the name of the principal who has made the placement.
3. Parents must be notified formally in writing that their child is receiving an accelerated grade placement to the next higher grade. A copy of this notification must be placed in the cumulative guidance record along with the Special Assignment/Acceleration Placement form.

District 9

**ADVANCED SUBJECT AREA CURRICULUM & CHANGE OF GRADE
PLACEMENT PROCEDURES**



LIST OF REFERENCES

- Benbow, C. P., Lubinski, D., Shea, D.L., & Eftkhari-Sanjari, H. (2000). Sex differences in mathematical reasoning ability at age 13: Their status 20 years later. *Psychological Science, 11*(6), 474-480.
- Borland, J. H. (1989). *Planning and implementing programs for the gifted*. New York: Teacher's College, Columbia University.
- Brody, L., Assouline, S., & Stanley, J. (1990), Five years of early entrants: Predicting successful achievement in college. *Gifted Child Quarterly, 34*, 138-142.
- Brody, L. E., & Benbow, C. P. (1987), Accelerative strategies: How effective are they for the gifted? *Gifted Child Quarterly, 3*(3), 105-110.
- Clark, B. (2007). *Growing up gifted: Developing the potential of children at home and at school* (7th Edition). New York: Prentice Hall.
- Colangelo, N., Assouline, S. G., & Gross, M. U. M. (2004). *A nation deceived: How schools hold back America's brightest students (Vol. 2): The Templeton National Report on Acceleration*.
- Colangelo, N., Assouline, S. G., & Lupkowski-Shoplik, A.E. (2004). Whole-grade acceleration. In N. Colangelo, S.G. Assouline & M. Gross (Eds.), *A nation deceived: How schools hold back America's brightest students* (Vol. 2, pp. 77-86): The Templeton National Report on Acceleration.
- Colangelo, N., & Davis, G.A. (2002). *Handbook of gifted education* (3rd ed.). Upper Saddle River, NJ: Allyn & Bacon.
- Cooper, B. S. (2008). *Handbook of education politics and policy*. NY: Routledge.
- Cornell, D. G., Callahan, C. M., Bassin, L. E., & Ramsay, S. G. (1991). Affective development in accelerated students. In W. T. Southern & E. D. Jones (Eds.), *The academic acceleration of gifted children* (pp. 74-101). New York: Teachers College Press.
- Daurio, S. P. (1979). Educational enrichment versus acceleration: A review of the literature. In W.C. George, S.J. Cohns, & J.C. Stanley (Eds.), *Educating the gifted: Acceleration and enrichment* (pp. 13-66). Baltimore, MD: The John Hopkins University Press.

- Davidson, J. & Davidson, B. (2006). *Does no child left behind require that no child can get ahead?* Retrieved October 11, 2007, from http://www.gtcybersource.org/Record.aspx?NavID=2_0&rid=14055
- Davidson, J., Davidson, B., & Vanderkam, L. (2004). *Genius denied: How to stop wasting our brightest young minds*. NY: Simon & Schuster.
- Delisle, J. & Galbraith, J. (2002). *When gifted kids don't have all the answers*. Minneapolis, MN: Free Spirit.
- Dillman, D. (2008). *Internet, mail, and mixed-mode surveys: The tailored design method*. Hoboken, NJ: Wiley.
- DiPasquale, G. W., Moule, A. D., & Flewelling, R. W. (1980). The birthdate effect. *Journal of Learning Disabilities, 13*, 234-238.
- Florida Department of Education. (2009). *No Child Left Behind and AYP*. Retrieved February 1, 2009, from <http://www.fldoe.org/nclb/District.asp>
- Florida Department of Education & Working on Gifted Issues (WOGI) (2008). *Rising to the challenge: Supporting gifted education in Florida*.
- Ford, D.Y. (1999). Renzulli's philosophy and program: Opening doors and nurturing potential. *Journal for the Education of the Gifted, 23*, 117-124
- Gagné, F., & Gagnier, N. (2004). The socio-affective and academic impact of early entrance to school. *Roeper Review, 26*, 128-139.
- Gallagher, J. (2004, Spring). No child left behind and gifted education. *Roeper Review, 26* (3), 121-123.
- Grossberg, I.W., & Cornell, D. G. (1988). Relationship between personality adjustment and high intelligence: Terman versus Hollingworth. *Exceptional Children, 55*, 266-272.
- Gross, M. U. M. (1993). *Exceptionally gifted children*. London and New York: Routledge.
- Hallahan, D.P., & Kauffman, J.M. (2003). *Exceptional learners: Introduction to special education* (9th ed.). Boston, MA: Allyn and Bacon.
- Hansen, J.B. & Toso, S. (2007). Gifted dropouts: Personality, family, social and school factors. *Gifted Child Today, 30* (4), 30-41.

- Hardy, L. (2002). A new federal role: Districts nationwide are gearing up for the most significant change in federal regulation of public schools in three decades. *American School Board Journal*, 189 (9), 20-24.
- Hollingworth, L. S. (1942). *Children above 180 IQ (Stanford-Binet): Origin and development*. Yonkers-on-Hudson, NY: World Book.
- Institute for Research and Policy on Acceleration (2007). *Questions and answers about acceleration*. Retrieved November 12, 2007, from <http://www.education.uiowa.edu/belinblank/acceleration/>
- Institute for Research and Policy on Acceleration (2007). *Questionnaire on acceleration attitudes and practices*. The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development, The University of Iowa.
- Jackson, N. E., Famiglietti, J., & Robinson, H. B. (1981). Kindergarten and first grade teachers' attitudes toward early entrants, intellectually advanced students, and average students. *Journal for the Education of the Gifted*, 4, 132-142.
- Janos, P.M. (1987). A fifty-year follow-up of Terman's youngest college students and IQ-matched agetmates. *Gifted Child Quarterly*, 31 (2), 55-58.
- Janos, P.M., & Robinson, N.M., (1985). Psycho-social development in intellectually gifted children. In F.D. Horowitz & M. O'Brien (Eds.). *The gifted and talented: Developmental perspectives* (pp. 149-195). Washington, DC: American Psychological Association.
- Kulik, J.A. (2004). Meta-analytic studies of acceleration. *A nation deceived: How schools hold back America's brightest students* (Vol. 2, pp. 13-22): The Templeton National Report on Acceleration.
- Kulik, J.A., & Kulik, C.C. (1984). Effects of accelerated instruction on students. *Review of Educational Research*, 54, 409-425.
- Kulik, J. A., & Kulik, C. C. (1992), Meta-analytic findings on grouping programs, *Gifted Child Quarterly*, 72-76.
- Landrum, M.S., Katsiyannis, A., & DeWard, J. (1998). A national survey of current legislative policy trends in gifted education: Life after the National Excellence report. *Journal for the Education of the Gifted*, 21, 352-371.
- Lipscomb, J. M. (2003). *A validity study of the Iowa Acceleration Scales*. (Doctoral dissertation, The University of Iowa, 2003). Dissertation Abstracts International, 3088261

- Loveless, T., Farkas, S., & Duffett, A. (2008). *High achieving students in the era of NCLB*. Retrieved June 18, 2008, from the Thomas Fordham Institute website http://www.edexcellence.net/detail/news.cfm?news_id=732&id=92
- Lubinski, D., & Benbow, C. P. (2006). Study of Mathematically Precocious Youth (SMPY) after 35 years: Uncovering antecedents for the development of math-science expertise. *Perspectives on Psychological Science, 1*, 316-343.
- Ma, X. (2003). Effects of Early Acceleration of Students in Mathematics on Attitudes Toward Mathematics and Mathematics Anxiety. *Teachers College Record, 105* (3), 438-64
- Marland, S. P. (1972). *Education of the gifted and talented, Volume 1: Report to the Congress of the United States by the U.S. Commissioner of Education*. Retrieved October 10, 2008, from the U.S. Department of Education Publications website <http://www.ed.gov/pubs/DevTalent/toc.html>
- Marron, M., & Gerling, R. (2007, November). *Academic acceleration policies: Why they are necessary and how to write them*. Session presented at the National Association for Gifted Children 54th Annual Convention, Minneapolis, MN.
- National Association for Gifted Children. (2000). *Pre-K-12 gifted program standards*. Retrieved October 27, 2007, from <http://www.nagc.org/index.aspx?id=546>
- National Association for Gifted Children. (2007). *State of the states: A report by the National Association for Gifted Children and the Council of State Directors of Programs for the Gifted 2006-2007*. Washington, DC: Author.
- National Association for Gifted Children. (2008). *Javits program description*. Retrieved October 11, 2008, from <http://www.nagc.org/index.aspx?id=572>
- Neihart, M., Reis, S., Robinson, N., & Moon, S. (Eds.) (2002). *The social and emotional development of gifted children: What do we know?* Waco, TX: Prufrock Press.
- No Child Left Behind (NCLB) Act of 2001, Pub. L. No. 107-110, § 115, Stat. 1425 (2002).
- Office of Program Policy Analysis and Program Accountability (OPPAGA), (2008). *Florida's gifted population grew faster than the overall school enrollment*. Retrieved, December 15, 2008, from <http://www.oppaga.state.fl.us/MonitorDocs/Reports/pdf/0801rpt.pdf>
- Obrzut, A., Nelson, R. B., & Obrzut, J. E. (1984). Early school entrance for intellectually superior children: An analysis. *Psychology in the Schools, 21*, 71-77.

- Pressey, S. L. (1949). *Educational acceleration: Appraisal and basic problems*. Bureau of Educational Research Monographs, no. 31. Columbus, Ohio: Ohio State University Press.
- Proctor, T. B., Black, K. N., & Feldhusen, J. F. (1986). Early admission of selected children to elementary school: A review of the research literature. *Journal of Educational Research*, 80, 70-76.
- Purcell, J. (1992). Programs for the gifted in a state without a mandate: An "endangered species?" *Roeper Review*, 14, 93-95.
- Reis, S.M., Burns, D.E., & Renzulli, J.S. (1992). *Curriculum compacting: the complete guide to modifying the regular curriculum for high ability students*. Mansfield Center, CT: Creative Learning Press.
- Reis, S. M., Gubbins, E. J., Briggs, C., Schreiber, F. J., Richards, S., Jacobs, J. K., Eckert, R. D., & Renzulli, J. S. (2004). Reading instruction for talented readers: Case studies documenting few opportunities for continuous progress. *Gifted Child Quarterly*, 48, 309-338.
- Reis, S. M., & Purcell, J. H. (1993). An analysis of content elimination and strategies used by elementary classroom teachers in the curriculum compacting process. *Journal for the Education of the Gifted*, 16(2), 147-170.
- Reis, S.M., Westberg, K.L., Kulilowich, J.M. & Purcell, J.H. (1998). Curriculum Compacting and Achievement Test Scores: What Does the Research Say? *Gifted Child Quarterly*, 42(2), 123-129.
- Renzulli, J.S., & Park, S. (2000). Gifted dropouts: The who and the why. *Gifted Child Quarterly*, 44(4), 261-271.
- Reynolds, R. A. (1993). The relationship between early school entrance and eighth-grade school success. *Dissertation Abstracts International*, 54(5-A). U.S.: University Microfilms International.
- Rimm, S. B. (1997). Underachievement syndrome: A national epidemic. In N. Colangelo & G.A. Davis (Eds.), *Handbook of gifted education* (2nd ed., pp. 416-434). Boston: Allyn and Bacon.
- Rimm, S. (2008). *Why bright kids get poor grades and what you can do about it: A six-step program for parents and teachers*. Scottsdale, AZ: Great Potential Press.

- Robinson, N.M. and Wiemer, L.J. (1991). Selection of candidates for early admission to kindergarten and first grade. In W.T. Southern and E. Jones (Eds). *The academic acceleration of gifted children* (29-50). New York: Teachers College Press.
- Rogers, K. B. (1991). *The relationship of grouping practices to the education of the gifted and talented learner* (RBDM 9102). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.
- Rogers, K.B. (2001). Effects of acceleration on gifted learners. In M. Neihart, S.M. Reis, N.M. Robinson, & S.M. Moon (Eds.), *The social and emotional development of gifted children: What do we know?* (pp.3-12). Waco, TX: Prufrock Press.
- Rogers, K. B. (2002). *Re-forming gifted education: How parents and teachers can match the program to the child*. Scottsdale, AZ: Great Potential Press.
- Rotigel, J.V., & Lupkowski-Shoplik, A. (1999). Using talent searches to identify and meet the educational needs of mathematically talented youngsters. *School Science and Mathematics*, 99(6), 330-337.
- Ruf, D. L. (2005). *Losing our minds: Gifted children left behind*. Scottsdale, AZ: Great Potential Press.
- Sankar-Deleeuw, N. (2002). Gifted preschoolers: Parent and teacher views on identification, early admission, and programming. *Roeper Review*, 24 (3), 172-177.
- Shaunessy, E. (2003). State policies regarding gifted education. *Gifted Child Today*, 26, 16-21.
- Shepard, L. A., & Smith, M. L. (1986). Synthesis of research on school readiness and kindergarten retention. *Educational Leadership*, 44, 78-86.
- Siegle, D. (2008). The time is now to stand up for gifted education: 2007 NAGC Presidential Address. *Gifted Child Quarterly*, 52, 111-113.
- Silverman, L. (2002). Asynchronous development. In N. Neihart, M., S.M. Reis, N.M. Robinson, & S.M. Moon, (Eds.). *The Social and Emotional Development of Gifted Children: What Do We Know?* (pp. 31-37) Waco, TX: Prufrock Press.
- Slavin, R.E. (1986). *Ability grouping and student achievement in elementary schools: A best-evidence synthesis*. Baltimore, MD: Center for Research on Elementary and Middle Schools.

- Southern, W. T., & Jones, E.D. (Eds.). (1991). *The academic acceleration of gifted children*. New York: Teachers College Press, Columbia University.
- Southern, W.T., Jones, E.D., & Fiscus, E.D. (1989). Practitioner objections to the academic acceleration of gifted children. *Gifted Child Quarterly*, 33, 29-35.
- Stanley, J. C. (1985). Young entrants to college: How did they fare? *College and University*, 58 (4), 361-371.
- Stanley, J. C. (1991). An academic model for educating the mathematically talented. *Gifted Child Quarterly*, 35 (1), 36-42.
- Stephens, K. R. (2000). Gifted education and the law. *Gifted Child Today*, 23(1), 30-37.
- Stephens, K. R. (2008). Applicable federal and state policy, law and legal considerations in gifted education. In S. I. Pfeiffer (Ed.), *Handbook of giftedness in children: Psycho-Educational theory, research, and best practices*. New York: Kluwer Academic/Plenum Publishers.
- Swiatek, M. A. (1993). A decade of longitudinal research on academic acceleration through the study of mathematically precocious youth. *Roeper Review*, 15, 120-124.
- Swiatek, M.A., & Benbow, C. P. (1991). Ten-year longitudinal follow-up of ability-matched accelerated and unaccelerated gifted students. *Journal of Educational Psychology*, 83, 528-538.
- Tannenbaum, A.J. (1958). History of interest in the gifted. In N. Henry (Ed.), *Education for the Gifted*. 57th Yearbook of the National Society for the Study of Education (Part II, pp. 21-38). Chicago: University of Chicago Press.
- Tannenbaum, A. J. (1983). *Gifted children: Psychological and educational perspectives*. New York: Macmillan.
- Terman, L.M. (1925). *Mental and physical traits of a thousand gifted children*. Stanford, CA: Stanford University Press.
- Tomlinson, C. A. (2003). *Fulfilling the promise of the differentiated classroom: Strategies and tools for responsive teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.
- U.S. Department of Education. (1997). *Third International Mathematics and Science Study*. Washington, DC: Author.

- U.S. Department of Education. (2006). *Jacob K. Javits gifted and talented students education program funding*. Retrieved October 10, 2006, from <http://www.ed.gov/programs/javits/fundng.html>
- U.S. Department of Education, Office of Educational Research and Improvement (1993). *National excellence: A case for developing America's talent*. Washington, D. C.: U. S. Government Printing Office.
- Van Tassel-Baska, J. (1986). Acceleration. In C. J. Maker (Ed.), *Critical issues in gifted education*, (pp. 179-196). Rockville, MD: Aspen Publishers.
- Van Tassel-Baska, J. (1992). Educational decision making on acceleration and grouping. *Gifted Child Quarterly*, 36(2), 68-72.
- VanTassel-Baska, J. (1997). Excellence as a standard for all education. *Roeper Review*, 20, 9-12.
- Van Tassel-Baska, J. (2006). State policies in gifted education. In J. Purcell & R. Eckert (Eds.), *Designing Services and Programs for High-Ability Learners* (pp. 249-261). Washington, DC: National Association for Gifted Children.
- VanTassel-Baska, J., & Brown, E. (2007). Towards best practice: An analysis of the efficacy of curriculum models in gifted education. *Gifted Child Quarterly*, 51(4), 342-358.
- Vialle, W., Ashton, T., Carlon, G., & Rankin, F. (2001). Acceleration: A coat of many colors. *Roeper Review*, 24, 14-19.
- Westberg, K. L., Archambault, F. X., Jr., Dobyms, S. M., & Slavin, T. J. (1993). *An observational study of instructional and curricular practices used with gifted and talented students in regular classrooms* (Research Monograph 93104). Storrs, CT: University of Connecticut, The National Research Center on the Gifted and Talented.