

CHAPTER 1

INTRODUCTION

Background of the Study

Americans have gone through tremendous struggles trying to create a schooling system capable of educating all its citizens. In an in-depth analysis of the history of the American educational system during the 20th century, Olson (2000) observes that the philosophical ideas serving as foundations for reform initiatives of the past century were established long before the 20th century began. Olson also notes that the idea that an educational system should embrace every part of the community was laid down during the 1800s, just after the American Revolution. As a result, most Americans were receiving some kind of formal education before the 1900s. Policy decisions, as well as social and economic forces since then, have brought millions of students into public schools for longer periods of time and for more varied purposes.

Olson (2000) believes that, in spite of this past century's success of providing a free public education to all, ensuring equal quality has been and continues to be a challenge all across the nation. Despite enormous progress, the opportunities students have for learning and how well they are expected to do so vary significantly based on where they live, their parents' income, and the color of their skin. In Olson's words: "It's as if, having invited everyone to the banquet, some are served an appetizer and others a five-course meal" (p. 4). He believes that the goal now is to make all public schools "commonly good". The "how" to reach this goal places education at center stage in the political arena.

Florida's Public School Accountability System: The A+ Plan

Providing a “top-quality” education to all the children in the state and transforming public schools into centers of excellence has been Florida Governor Jeb Bush’s most important mission for educational reform. In his Inaugural Address in 1999, Governor Bush stated: “We can see that children learn a year’s worth of knowledge in a year’s worth of time, and work with unbridled determination to ensure that no child in the educational system is left behind” (Florida Department of Education [FDOE], 1999, p.1). The present school reform plan of the Governor’s administration is known as the Bush/Brogan A+ Plan for Education (The A+ Plan), enacted by the Florida Legislature (FDOE, 1999). This plan is the latest response to public dissatisfaction with schools and perceptions of the inequities in educational achievement.

The A+ Plan (FDOE, 1999), the focal point of this dissertation, challenges the status quo and every one in the public school system to do better with its fundamental premise that “Every child can learn and no child should be left behind” (p.1). The three major components of this reform plan are (a) addressing accountability and improving student learning; (b) raising standards and improving training for educators; and (c) improving school safety and reducing truancy. Four principles serve as a platform to this reform plan: (a) higher standards and adequate funding; (b) holding the schools and educators accountable for the performance of their students; (c) rewards for success and consequences for failure; and (d) educational choices for families through more magnet and charter schools.

The A+ Plan's (FDOE, 1999) noble declaration that every child can learn and that no child should be left behind may be difficult to fulfill given the changing demographics of the United States. According to Miller (1999), educational policy analyst for the Florida Department of Education, in 1997, the country's child population roughly equaled the record set by baby boomers in 1966. Miller adds that this situation is aggravated with a large influx of poor and minority children who are historically the least well served by public schools.

School Reform and Organizational Change

Like the A+ Plan in Florida, any school reform initiative may lead to organizational change. In reference to school reforms, Sack (2000) refers to U.S. Secretary of Education Riley's last speech concerning all the organizational changes that school reform plans across the nation are creating. Riley advised the states to continue pressing ahead with their reforms, but at the same time, to pay great attention to legitimate public concerns. Sack explains that Riley further advised the states to establish challenging but realistic standards, setting high expectations, but not so high that they are unreachable except for a very few. Riley also warned the states not to rely on a single test to measure student knowledge.

Owens (1998), applying Deming's ideas into school organizational change, suggests that true school reforms could only happen through open, two-way, non-punitive communication. Owens believes that an organization that seeks quality control improvement (in this case, student-learning-improvement) should first go through deep cultural transformation. Organizations should focus on

changing basic assumptions, beliefs, and values that give purpose to the behavior of everyone in the organization. It is Owens' belief that intrinsic motivation is best. The author contends that having willing employees (teachers, in this case) doing things properly and providing them with the right tools is more efficient than testing and increasing supervision. Quality is achieved through cooperation, not competition.

Sarason (1971) predicts that school reform efforts would fail unless the strategies and tactics for change were modified. He believes that the reason so many school reform initiatives have been unsuccessful in improving schools is because they have been ineffective in significantly altering the culture, the one that shapes the assumptions and beliefs of the people in schools.

Combs (1988) agrees with this line of thought. He states that "no matter how promising a strategy for reform is, if not incorporated into teachers' personal belief systems, it will be unlikely to affect behavior in the desired direction" (p.39).

School Reform and the Teaching Profession

Hampering all state efforts to reform their public education systems is America's unprecedented teacher shortage crisis. Milken (1999) concludes that the K-12 educational system is not providing children with high-caliber teachers, which is a problem of quality as much as quantity. There is an unparalleled, urgent need not only to attract new teachers but also to retain and to motivate the most talented in the teaching profession. Milken supports the proposal that having high-quality teachers is second only to ensuring student safety as the most important issue that public schools are now facing.

Milken (1999) believes that teacher expertise in a subject area is what drives student achievement. However, the challenge to have high-quality teachers is exacerbated by the present teacher shortage crisis and an increase in out-of-field teachers, especially in the field of mathematics. The lack of high quality mathematics teachers has gained an unprecedented importance in the midst of the present national teacher shortage.

In spite of the teacher shortage, holding educators accountable for student achievement is the bedrock of many school reform initiatives across the nation. Goodlad (1984) holds that the states have been unsuccessful in their leadership role in education because of their powerlessness to motivate large numbers of people to participate in school change and reform. This inability to lead has deeply affected teachers, who, at this point in time, are the ones held most accountable for the desired reform results. Goodlad believes that the difficulty in attracting and retaining teachers is based on several factors: (a) loss in prestige and status faced by those entering the teaching profession; (b) a growing diversity in the student body; (c) the use of schools to try to solve critical social problems; (d) a constantly growing school governance through legislative mandates and court rulings; (e) low personal economic return and limited opportunities for career changes; and (f) continuous school and classroom conditions that drain physical and emotional energy and tend to promote routine rather than sustained creative teaching. Concerned about the consequence of holding teachers accountable under these circumstances, Goodlad states that “merely holding teachers accountable for improving student learning without

addressing these circumstances is not likely to improve the quality of their professional lives and the schools in which they teach” (p. 196).

The A+ Plan is based on holding educators accountable for the student achievement. Gallagher, Florida’s Secretary of Education (as cited in Sandham, 2000), points out that although schools are not thrilled about being held accountable for their students’ performance on the Florida Comprehensive Assessment Test (FCAT), they are all working intensely to raise their grades. Gallagher has raised the bar, and will do it again until legislators get schools where they want them to be. It is Sandham’s opinion that Florida is concentrating almost exclusively on the accountability of administrators, teachers, and students; and the message from legislators, those responsible for formulating state policies, has been punitive rather than inspirational.

School Reform at the High School Level

The question that has puzzled school reformers has been what kind of education would better suit the increasingly larger and more diverse student populations in American high schools? Examining the history of the 20th century American curriculum, Keller (2000) explains that high schools, in particular, have experienced extremes in curricular movements. A “rigorous curriculum” for all students served the purpose of Americanization at the end of the 1800s. In the 1930s, with the depression, the percentage of students achieving low academically boomed. The government response was to create a curricular tracking system which meant different curricula, standards, and content for

different students (college preparation, commercial, vocational, and general track).

The “tracking” curricular system, according to Keller (2000), has dominated American high schools for a long period of time; and “getting rid of it”, has been one of the greatest challenges that school reformers have had to face. The quality of college preparation that young Americans are receiving at the high school level has become a major concern in each and every school reform initiative nationwide.

According to Keller (2000), school reform efforts have adopted curricular academic standards for what students should know and be able to do and tried to ensure that all students, not just a few, have access to a top-quality education. Keller believes that academic standards, wisely developed and applied, can greatly benefit American education. Such measures could constitute major steps toward equalizing educational quality and ensuring that all American students, particularly poor and minority students, have access to the same challenging programs and courses that students in the nation’s best schools now receive. However, there is skepticism toward the reasonableness and appropriateness of the present standards movement.

In a Florida urban school district, where this study was conducted, just as in any other school district in the nation, the challenges that high school teachers and administrators have to overcome in order to meet the state criteria for good school performance are greater than those at the middle or elementary school levels. It is for this reason that teachers who teach at this level of the K-12

educational system were chosen as participants for this study. These teachers and school administrators are held accountable for their students' scores on the FCAT that at this level determines who graduates or not. In the 2000-2001 school year Florida's tenth grade students, for the first time, were required to pass the FCAT in order to graduate. High school teachers and school administrators are also accountable for the absenteeism, suspensions and dropouts rates, problems that are more characteristic of high school populations.

It is Hampel's (1986) belief that today's high school teachers and administrators have to deal not only with "risky" teenage behaviors such as pregnancy, violence, drug addiction, and alcoholism, but also with others that concerns him even more such as, part-time jobs, peer pressure to do no better than moderately well in schools, and the hours spent watching television.

Because the state of Florida is one of the major entryways for newly arrived non-English language background students, its public schools face challenges not experienced by many other states in the process of providing all its children with a top quality education. According to Fradd and Wilen (1998), the challenges that Florida faces in educating Limited English Proficient (LEP) students are (a) the need for effective personnel to fully implement educational policies, (b) commitment to equity in achieving academic excellence; and (c) leadership in creating a unified vision of educational outcomes.

School Reform and Today's Mathematics Education

Different school reform initiatives through the years, especially during the last two decades, have drastically changed the picture of American education.

Today's curriculum is quite different from the one adults remember when they attended school. This difference is very evident in the field of mathematics education. In mathematics classrooms students are now doing more than arithmetic. They are expected to achieve high standards of understanding, complexity, and accuracy that are set, not so much by their parents, as by state legislators.

In spite of all the advances in the teaching of mathematics, there is still a long-standing concern about a gap in mathematical achievement between students of poverty and their more advantaged peers. Price (1996) believes that in the face of the steady national progress in mathematics achievement since 1973, there are large racial/ethnic and urban/suburban differences in mathematics performance among American children.

It is Jones' (2000) belief that the reason for this present gap is the American educational system itself. Jones states that: "The U.S. continues systematically to undereducate minority and poor students in large part through a system of academic tracking that relegates these students to a low-level track characterized by watered-down, dead-end courses" (p. 1). Jones considers that the gap in mathematical achievement is institutionalized in schools and districts by setting high versus low expectations and standards in course offerings in different tracks as well as in different allocations of resources, including well-prepared teachers. Reaching high mathematical standards requires the right resources and most of all, qualified teachers.

The reason for selecting mathematics teachers for this study versus teachers in other academic fields is because, in the United States today, mastering mathematics has become more important than ever. Students with a strong grasp of mathematics have an advantage in academics and in the job market. Also, mathematics is one of only two academic subjects tested on the FCAT. Because mathematical knowledge and skills comprise 50% of the FCAT, mathematics teachers who teach at this grade level basically carry on their shoulders a major responsibility for their school performance grade. The challenges that the Florida urban district studied was facing in the 2000-2001 school year were amplified by the fact that the district's 1999-2000 mathematics FCAT mean score fell from above the state average to below the state average level. The state's concern for ensuring excellence in mathematics education was aggravated even more by an increase in out-of-field mathematics teachers and the many mathematics-teaching positions that were still waiting to be filled

Based on the importance of mathematics today and aware of the stubborn gap in mathematical achievement between minority/high poverty students and their counterparts the school district launched, starting school year 2001-02, the Algebra Initiative. This bold and aggressive initiative is intended to eliminate the mathematics tracking system by mandating all ninth grade students be enrolled in a mathematics course not lower than Algebra I. The objectives of this controversial district wide initiative are to better prepare all students to pass the FCAT; give all students plenty of time to enroll in higher levels of mathematics

and science; increase the opportunities of all students to attend and succeed in college; and better prepare students to enter the highly technological job market.

Purpose of Study

The purpose of this phenomenological qualitative study was to study what the A+ Plan, Florida's school accountability system, meant to tenth grade mathematics teachers and how this plan was perceived by tenth grade teachers who taught at schools that differed in school performance grade level; by teachers who differed in their teaching assignment mathematics course level; and by teachers who differed in race or ethnic composition. This study also tried to find out how administrators who worked at schools that differed in school performance grade level perceived this plan.

Research Questions

1. What does the A+ Plan, Florida's school accountability system, mean to tenth grade mathematics teachers?
2. How do tenth grade mathematics teachers who work at schools with different levels of school performance perceive the A+ Plan?
3. How do tenth grade mathematics teachers who teach different levels of mathematics courses perceive the A+ Plan?
4. How do tenth grade mathematics teachers who differ in race and ethnicity perceive the A+ Plan?
5. How do school administrators who work at schools with different levels of school performance perceive the A+ Plan?

Significance of the Study

Florida's present accountability system is based on noble principles. Its main purpose is to improve student learning and it challenges the status quo and every one in the public school system to do better, especially teachers. Based on the significance of teacher roles in any school reform plan, it is important to determine, from a teacher's perspective, if such a historic, bold reform plan, burdened with weighty consequences to all educational stakeholders, is likely to achieve its purpose. At this point, in the history of school reform initiatives across the nation, it is exceedingly relevant to see if the strategies used by the state legislature to create change are likely to work or if they seem more likely to add problems that will deviate the public school system further away from the desired destination.

Definitions

The terms used in the study and the meaning of those terms within the context of the study are:

1. Perceptions: the insight or knowledge gained by perceiving, by becoming aware and achieving understanding.
2. The A+ Plan: Florida's K-12 public schools accountability system, also known as the Bush/Brogan A+ Plan for Education, providing increased funding and increased accountability, passed by the 1999 Legislature and signed into law by Governor Bush on June 21, 1999.
3. Florida Comprehensive Assessment Test (FCAT): The test authorized by Florida's Legislature as part of a statewide student assessment program used as a means of measuring student achievement in reading and mathematics.

4. Limited English Proficient (LEP) Unschooled Students: High school Limited English Proficient students who come from countries where their education has been interrupted for long periods of time prior entering United States and are enrolled in America's high schools because of their age; therefore, lack literacy in their own language.

Researcher 's Biases

The researcher is an experienced high school mathematics teacher, and, consequently believes that her extensive high school mathematics teaching experience, as well as her content and pedagogical expertise, will serve as an asset in this investigation. She is acquainted with the social environment of high schools and understands the challenges faced by teachers who teach at this level and the burden that comes from teaching low performing tenth graders. The researcher's foreign accent, race, and ethnicity could limit the freedom of expression from teachers who acknowledge the overrepresentation of her race and ethnicity in low performing mathematics classes. On the other hand, the accent, race, and ethnicity of the researcher could elicit freedom of expression from minority teachers. The researcher also acknowledges that as a foreigner with English as a second language, it is sometimes hard to grasp gestures, ideas, comments, expressions, and jokes typical of the American culture.

Organization of Study

After a comprehensive discussion of the problem in chapter one, an extensive review of the literature focusing on six areas of education reform and accountability is presented in chapter 2. The methodology that was implemented

is outlined in chapter 3. The findings are presented in chapter 4 and the conclusions and recommendations in chapter 5.