2010

Curriculum Control And Teachers' Perceptions Of Professional Discretion And Satisfaction

Donald May

University of Central Florida

CURRICULUM CONTROL AND TEACHERS' PERCEPTIONS OF PROFESSIONAL DISCRETION AND SATISFACTION

by

DONALD S. MAY JR.
B.A. University of Florida, 1990
B.A. University of Florida, 1993
M.Ed. University of Florida, 1994

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

Summer Term
2010

Major Professor: George E. Pawlas

ABSTRACT

The goal of this research was to investigate teachers' perceptions of professional discretion and satisfaction related to internal and external factors of curriculum control. Results of the study were intended to provide data to policy makers and school district administrators that could be used in the development and implementation of the curriculum reform process. Middle and high school teachers in a large central Florida school district completed the survey. The survey's six constructs were

1. Influence of Teacher Beliefs
2. Perceptions of Success and Satisfaction
3. Influence of Tests and Curriculum Guides
4. Teacher Control of Pedagogy
5. Leadership
6. Maintaining High Standards

The research questions focused on determining the difference in perspectives due to years of teaching experience, level of teaching (middle or high school), and curriculum control category (high, medium, or low). The results revealed there was not significant disagreement among teacher perceptions based on years of teaching experience. However, results indicated significant differences in perceptions based on level of teaching and curriculum control category in regard to the six survey constructs. The construct of leadership revealed significant differences between both levels of teaching and curriculum control categories. Overall, the results indicated a significant relationship among curriculum control policies and effects on teachers' perceptions of professional discretion and satisfaction.

The literature on curriculum reform efforts since the 1980s, specifically in the areas of curriculum standards, textbook adoption policies, testing policies and leadership

practices, framed the study. The literature review focused on existing research issues within the six constructs and the research questions.

The information gained from this study may be used to inform policies, improve teachers' working conditions, and promote teacher and leadership effectiveness.

Recommendations for practice were addressed in terms of what policy makers, school district administrators, and individual classroom teachers can and should do to implement and support meaningful curriculum reform. The researcher emphasized that recognizing the professional expertise and knowing the perspective of teachers are key to the development and implementation of an effective curriculum reform process.

With respect and love,
my work is dedicated to my mother,
Joyce Perry,
who taught me that
only those who will risk going too far
can possibly find out how far one can go.

To my best friend and wife, Liz,
and to my children, Hannah and Liam,
you are my sun around which I enthusiastically and lovingly orbit.
Thank you for supporting me.

ACKNOWLEDGMENTS

I wish to express my appreciation to Dr. George Pawlas and Dr. Randy Hewitt for their continued support throughout my graduate coursework and the dissertation process. Their insights and encouragement were most substantial during my tenure as a graduate student. Dr. Hewitt's amazing sense of humor kept me grounded while his proclivity for critical inquiry inspired me to question and delve further into my research interests. Dr. Pawlas was nothing less than a blessing for me. Not only did he provide me initial guidance in the doctoral program, but also he set me on a meaningful course for a successful experience as a researcher. Dr. Pawlas, thank you for leading me on this journey.

I want to thank my other committee members, Dr. Edmund Short, Dr. Rosemarye Taylor, and Dr. Karen Beattie for their agreeing to partake of this adventure and supporting my journey. To Dr. Donald Boulware and Dr. Lea Witta, thank you for your extensive assistance provided during the analysis portion of this process.

A special thank you goes to Dr. Karen Beattie and Dr. Les Potter. If you had not inspired me and supported me along this trying path, I would not be where and who I am today. You both have been excellent role models as leaders in education and dear friends. I aspire to be like you one day.

To those wonderful individuals in Volusia County Schools who supported me in countless ways throughout the doctoral program, I express a sincere and heartfelt thank you. I have had the pleasure of working with some of the most passionate and compassionate people in the field of education and I am truly blessed. This dissertation

would not have been possible without the cooperation of Dr. Chris Colwell and the principals and teachers at the survey sites. I appreciate their willingness and enthusiasm to assist me in my study.

Finally, to my friends and family, thank you for believing in me. I am blessed with two children and a wife who are generous with patience, encouragement and unconditional love. They have taught me that happiness simply lies in the moments we share together. To all my friends and colleagues who listened to the toils of doctoral life, thank you so much for your support. And lastly, but most importantly, to my wife, Liz, once again you have graciously let me hike down a path to my dreams. My success is grounded in your belief in me. Thank you.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1 – INTRODUCTION

Background of the Study

Standard setting reforms have been a predominant issue affecting local and teacher control of curriculum and pedagogy. Education reform efforts, beginning in the 1980s, represented "an unprecedented assertion of state control over school and classroom curriculum decision-making" (Archbald & Porter, 1994, p. 21). The debate over curriculum control was further bolstered in 2009 by the possible reauthorization of the No Child Left Behind Act of 2001 (NCLB). Furthermore, states scrambling to get "Race to the Top" federal stimulus funding focused further attention on standardized testing and accountability measures attached to this funding, including teacher evaluations tied to testing results (Bauer, 2009). With the backing of state governors, education and political leaders pushed to the forefront new initiatives to create national curriculum standards, calling them "a new imperative to ensure that all students have the knowledge and skills base to compete in a rapidly changing world" (Allen, 2009, p.1). The impending reauthorization of NCLB under a new federal administration brought a renewed interest in national standards – or, at least, some common baseline by which to measure state educational performance – among the federal lawmakers dismayed at the variation of state standards and student proficiency levels that have come under the spotlight of NCLB's accountability and reporting requirements (Allen). Substantiating the cry for more accountability, the federal government allocated $350 million to create

uniform tests in reading and mathematics to measure national standards (Associated Press, The Washington Post, June 15, 2009).

States' efforts to comply with ever-changing NCLB requirements were a driving force which has focused increased attention on the goals of raising standards of content and performance for both students and teachers. The means of meeting these goals were high-stakes testing (HST), increased graduation requirements, prescriptive curriculum policy, textbook control, and strengthened accountability and accreditation programs (Apple, 2004; Archbald & Porter, 1994; Au, 2009; Madaus, Russell, & Higgins, 2009). These efforts, which served to create the standards-based accountability paradigm in education, brought to the forefront conflicting issues of accountability and autonomy, curriculum control and professional discretion in public education.

Statement of the Problem

The debate over who controls teachers' work and who is in charge of public schools had renewed energy in 2010. Two opposing perspectives dominated thought and policy regarding the conflicting issues of accountability and autonomy in education. The first perspective, held by many education reformers, policymakers, researchers, and members of the public, was that "schools are far too loose, too disorganized, and lack control, especially in regards to the work of teachers (Ingersoll, 2003, p.5). Ingersoll reports "members of this group argue the education system has been marked by low standards, a lack of coherence and control, poor management, and little effort to ensure accountability" (p. 5). These factors resulted in poor performance on the part of teachers, which explains the steady decrease in performance of students (Goodlad, 1984; Tyler,

1988). For the purposes of this study, this group was referred to as "the policy centralizers," due to the fact that those who subscribe to this viewpoint claim the problems inherent in the failing school systems could be solved by further centralizing control of schools and holding teachers accountable. Their objectives were "to tighten the ship" in one manner or another. Such tightening came in the form of "increased teacher training and retraining requirements; standardized curricula and instructional programs; and state and national educational goals, standards, and testing" (Ingersoll, p. 6).

The second and antithetical perspective of the educational system held by a different group of education reformers, policymakers, researchers, and members of the public, was that schools already have too much centralized control and too much bureaucracy. This group contended these constraints were excessive and led to the poor performance on the part of teachers, students, and schools. They argued the failures in the school system were a direct result of a surplus of top-down control and accountability, the epitome of an undemocratic bureaucracy (Ingersoll, 2003; White, 1992).

According to which groups were deemed to be the most disempowered, there were two main versions of this antibureaucracy, anticentralization viewpoint as identified by Ingersoll (2003). The first version focused on the control individual communities, families, and parents have in the decision-making process of local schools. The second version focused on individual teachers and their working conditions.

The members of the first faction of the antibureaucracy, anticentralization viewpoint were mainly concerned with the decline in local control. They argued that

local constituencies did not have adequate input into their children's and community's schools (Hannaway & Carnoy, 1993). These constituents claimed local control, as an important functional management principle, was threatened by the furthering of top-down policy implementation of education reforms (Archbald & Porter, 1994; Klein, 1991; Madaus et al., 2009; Meier & Wood, 2004). In opposition to their views, the policy centralizers contended that it was not true that national or common standards signified a loss of local control (Domenech, 2009; Schmidt, Huuang, & Shakrani, 2009). However, the anitcentralists alleged common standards already force students and teachers to focus too much on standardized testing, which in the long run discouraged innovation and stifled creativity (Robinson & Azzam, 2009; Sternberg, 2006; White, 1992). Bracey (2008) observed that the new national obsession with testing was one of the most useful tools for stamping out creativity in our schools. McNeil (2000) pointedly concluded "standardization reduces the quality and quantity of what is taught and learned in schools" all the while "de-skilling" teachers (p. 3).

The second version of the antibureaucracy, anticentralization viewpoint focused on the phenomena of de-skilling teachers and their restrictive working conditions. The central problem put forth by this faction was that "factory-like schools unduly deprofessionalize, disempower, and demotivate teachers" – a situation that was both dissatisfying to teachers and a source of school inefficiency and ineffectiveness (Ingersoll, 2003, p. 7). The proponents of this viewpoint contended central regulation undermined professional discretion by de-skilling teachers (Frymier, 1987; Giroux, 1988; Ingersoll, 2003; Kozol, 2007; Lucey & Hill-Clarke, 2008; McNeil, 2000; Mulcahy & Irwin, 2008; Rosenholtz, 1990) and damaged teacher morale (de Jesus, 2005; White,

1992; Zembylas & Papanastasiou, 2005). Giroux (1988) contended that many of the recommendations that came from policy centralizers had either ignored the role teachers played or they had "ignored the intelligence, judgment and experience that teachers might offer in the ongoing debate" (p. 120). Giroux found that "where teachers do enter the debate, they are the object of educational reforms that reduce them to the status of high-level technicians carrying out dictates and objectives decided by experts far removed from the everyday realities of classroom life" (p. 121). In short, the members of this viewpoint felt teachers had very little control over their own work in schools.

For the purposes of this study, this second version of the antibureaucracy, anticentralization viewpoint was referred to as the "teacher empowerment" perspective (Ingersoll, 2003; Rosenholtz, 1989). Of the main concerns of this viewpoint were the negative effects of central curriculum control on pedagogical effectiveness:

> By prescribing curriculum and instruments of assessment, such reforms . . . separate the craft of teaching from teaching style and remove teachers' discretion from their judgments about students and what they need to know. In this de-skilled model of teaching, one teacher lamented, the teacher becomes little more than an assembly-line worker, performing mechanical tasks. (McNeil, 1988, p. 335)

The proponents of teacher empowerment argued the obvious antidote to the problems inherent in public education could be fixed by decentralizing schools and increasing the power, autonomy, and professional discretion of teachers (Ingersoll, 2003). Of the many variants of the antibureaucracy, anticentralization thinking, it was with this latter viewpoint that this research study was primarily concerned.

Archbald and Porter (1994) explained, due to the reforms imposed by the policy centralizers, teachers had been forced to work within a "constrained curricular zone of discretion at the school and classroom level" (p. 21). These researchers argued this

curricular zone of discretion had consistently been shrinking since the onset of the 1980s reform movement. Still others (Dembele & Schwille, 2006; Schwille, 1986; Wills & Sandholtz, 2009) claimed this shrinking zone of curricular discretion was a problem because local curriculum leaders and teachers needed professional discretion to make effective curriculum decisions and feel professionally efficacious. Their main assumption was that, in the absence of central curriculum control policies, local actors would have made different and better content and pedagogical decisions leading to improved student achievement (Levine & Marcus, 2007). One of the most notable side effects of the education reform movements was the "shrinking autonomy," a continual decrease in teachers' professional decision-making power (Archbald & Porter, p. 21).

The teacher empowerment view and its assumptions about the actual effects of federal and state policies within the classrooms contrasts with a body of research on organizational structure and the implementation of change in education (Day & Smethem, 2009; Fullan, 2009; Slavin, 2008). This research depicted schools and teachers' practices as resistant to change, especially the sort of top-down change characteristic of the NCLB reforms. According to these researchers, schools are resiliently "loosely-coupled," "organized anarchies" with classrooms relatively impervious to external control. It was exactly this resistance to change and loose-coupling that policy-centralizers viewed as a problem. Reforms using new curriculum control policies were predicated on the assumption that there has been too much discretion at the local and classroom level. The 1980s crisis-in-education reports, most notably *A Nation at Risk* (1983), attributed declining performance to the predominance of lax standards associated with unclear goals and insufficient accountability in the schools

(Jorgensen & Hoffman, 2003). However, as McNeil (2000) illustrated, "the sound-bites that seduce policymakers always emphasize claims of benefits, not actual costs . . . and the costs are great . . . perhaps the worst effect is the silencing of two voices most important in understanding the real effects of standardization: the teachers and the children" (p. xviii).

This research study examined the claims made in this ongoing debate between policy centralizers and proponents of teacher empowerment and attempted to describe the conditions needed to support the development of teachers' professional discretion and increase job satisfaction.

Purpose of the Study

Both critics and supporters of central curriculum policies assumed reform policies had the clout and the reach to affect core processes of content selection and pedagogy in classrooms (Archbald & Porter, 1994). This study investigated two propositions related to this assumption: (a) Federal, state and district curriculum control policies reduce the professional discretion of teachers, and (b) teachers' perceptions of diminished control over curriculum decisions resulting from control policies hinder the development and enactment of professional discretion thereby adversely affecting job satisfaction.

This study was not designed to debate what should be taught or how to teach it, but instead, to gain knowledge of teachers' perspectives regarding variables that impact their professional discretion and job satisfaction. The study was modeled after research conducted by Douglas Archbald and Andrew Porter published in the journal of *Educational Evaluation and Policy Analysis, Spring 1994.* These researchers surveyed

high school teachers of social studies and mathematics. Although their sample was limited to less than 200 teachers, these researchers presented a well-rounded conceptual framework of centralized curriculum control. Archbald and Porter's model of centralized curriculum control policies and the effects was based primarily on testing policies, textbook adoption policies, and curriculum guidelines salient in the states of California, New York, and Florida. The researcher of this study expanded the sample, beyond the original selection of only social studies and mathematics teachers, to include teachers from middle and high schools, and across a variety of differentially regulated content areas to include teachers of English (reading, language arts, writing), science, and elective courses. The researcher also took into account an additional variable of external curriculum control not originally defined by Archbald and Porter, the leadership practices of school-site personnel, which were known to impact teachers' sense of professional discretion and job satisfaction (Bogler, 2001).

The purpose of the study was to determine teachers' perceptions of professional discretion and satisfaction impacted by four identified factors of curriculum control: curriculum guides, textbook adoption policies, testing policies, and leadership practices. The study examined the effects of these four external and independent variables on two dependent variables: teachers' professional discretion (identified by factors of teacher control over classroom content and pedagogy), and teachers' satisfaction (identified by factors of teacher empowerment and self-efficacy).

Conceptual Framework

In order to examine the external factors teachers must mediate in their work, the questions of what is "centralized curriculum control" and what are its effects on teachers' work must first be addressed. To answer these questions, it was necessary to begin with a conceptual model of centralized curriculum control. Archbald and Porter (1994, pp. 22-23) initially developed the "Curriculum Control Policy Model" used by most systems with central curriculum control policies (primarily in the states of California, New York, and Florida). Curriculum control policies in these states are viewed as contributing to a more coherent and efficient curriculum program. This model of curriculum control was "based primarily on textbook adoption policies, curriculum guidelines, and testing" (p. 22). Archbald and Porter found these curriculum control policies to be "the major contributing factors guiding teachers in their decision making about course content and the primary factors which hold teachers and schools accountable for prescribed content and achievement standards" (p. 22).

As stated above, not included in Archbald and Porter's (1994) Curriculum Control Policy Model was the external factor of leadership practices of school-site personnel. The researcher recognized the significance this variable may have in the control of curriculum and pedagogy and deemed it necessary to include in this study. Previous research has also illustrated the relationship between principals' leadership style, their decision-making processes, and the effects on teacher satisfaction and performance (Bogler, 2001) and teacher self-efficacy (Hipp, 1996; 1997). These researchers found leadership practices, namely the decisions made at the school-site and the support and guidance provided to teachers by school-based administrators, significantly impacted

teachers' job satisfaction and self-efficacy. Due to the possible significance that leadership practices may contribute to the results of this study, the researcher deemed it necessary to include this variable and adapt the original Curriculum Control Policy Model previously put forth by Archbald and Porter (1994).

Research Questions

1. What is the statistically significant variation among teachers' perceptions of professional discretion and satisfaction regarding the factors of curriculum control based on years of teaching experience?
2. What is the statistically significant variation among teachers' perceptions of professional discretion and satisfaction regarding the factors of curriculum control based on level of teaching (middle or high school)?
3. What is the statistically significant variation among teachers' perceptions of professional discretion and satisfaction based on the varying degrees of curriculum control of the subjects they teach?

Definition of Key Terms

Curriculum Control – any external factor that serves to guide teachers' decision-making regarding content and pedagogy, specifically state and district curriculum guidelines, textbook adoption policies, testing policies (Archbald & Porter, 1994), and leadership practices of school personnel (Kirby et. al., 1992; Koh et. al, 1995; Silins, 1992).

Policy Centralizers – the viewpoint held by many education reformers, policymakers, researchers, and members of the public, which claims that "schools are far too loose, too disorganized, and lack control, especially in regards to the work of teachers" (Ingersoll, 2003, p. 6). This group holds that the problems inherent in the failing school system could be solved by further centralizing control of schools and holding teachers more accountable (Ingersoll).

Teacher Empowerment – the viewpoint held by many education reformers, policymakers, researchers, and members of the public, which claims that "factory-like schools unduly deprofessionalize, disempower, and demotivate teachers" – a situation that is both dissatisfying to teachers and a source of school inefficiency and ineffectiveness (Ingersoll, 2003, p. 7).

Professional Discretion – "is the capacity and obligation to decide what actions are appropriate and the ability to take those actions. Thus, a teacher's professional discretion is centered on being able to decide what should be taught and being able to teach it; mediating competing demands while using learned expertise in order to meet the needs of students" (Boote, 2006, p. 462). Implicit in this context is the scope of personal and professional development, self-expression, and autonomy.

The Curricular Zone of Discretion – the zone in which teachers must work and make judgments about what to teach and how to teach while taking into account their students and their individual educational needs (McNeil, 1988). In the curricular zone of discretion teachers must mediate

the competing demands of external curriculum control factors and the internal factors of their own beliefs and learned expertise (Archbald & Porter, 1994).

Satisfaction – "teacher satisfaction refers to a teacher's affective relation to his or her teaching role and is a function of the perceived relationship between what one wants from teaching and what one perceives it is offering to a teacher" (Zembylas & Papanastasiou, 2005, p. 436). This relationship entails a number of aspects related to the individual teacher's concept of self-efficacy: professional identification and status, including their sense of personal prestige and self-fulfillment. Day (2005) added that job satisfaction is also a factor of sustainable commitment, which may be "better understood as a nested phenomena at the center of which is a set of core, relatively permanent values based upon beliefs, images of self, role and identity which are subject to challenge by change which is socio-politically constructed" (p. 563).

Methodology

This research study compared teachers' ratings of control and professional discretion under differing conditions of high, medium, and low curriculum control of subject matter groups in a central Florida school district. Variations in number of years of teaching experience and school level (middle or high) were examined. Also examined were variations in perceptions of teachers who teach subjects that are differentially regulated by external factors of curriculum control: curriculum guides, testing policies, textbook adoption, and leadership practices. This last comparison of the variations

among teachers' perceptions according to the subject they taught was particularly critical in the examination of the curriculum control model. The subjects of English (language arts, reading and writing), mathematics and science courses are differentially regulated in the chosen school district as compared to other subjects not directly affected by high-stakes, standardized testing policies: social studies, the arts, and various elective courses. Mathematics, English, and science content and achievement standards are subject to greater control because high-stakes standardized tests are directly associated with the subject areas and the students in these subjects are tested more often and readily progress monitored than other subjects.

Teacher responses on questionnaire items were used to assess claims supporting and critical of the curriculum control model. If teacher responses indicated curriculum control policies influence classroom content and do not show detrimental effects on perceptions of professional discretion and job-related attitudes, then perhaps some of the virtues of top-down curriculum control assumed by policy centralizers is in fact real. If, on the other hand, teachers reacted negatively to centralized curriculum control, then this approach to reform – or at least the elements teachers find objectionable – might be redesigned to be more compatible with teachers' concerns and professional values. The results of these findings are discussed further in Chapter 5.

Population

The population surveyed consisted of teachers at four middle schools and four high schools in one central Florida school district. The participation in the survey was voluntary and anonymous.

Instrumentation

The survey instrument used in this study was a six-point Likert design containing 25 perspective questions and four demographic questions. Archbald and Porter (1994) initially developed the survey instrument, which the researcher further adapted to better suit the needs of this study. The researcher then pilot tested the survey instrument to form constructs and determine reliability. The independent variables included years of teaching experience, level of teaching (middle or high school), and varying degree of curriculum control (high, medium, or low) of the subject taught. The dependent variables were the 25 questions.

Multiple factor analysis were calculated based on the responses of this survey group and the following constructs were named:

1. Curriculum Control
2. Teacher Belief Systems
3. Professional Discretion
4. Satisfaction

The reliability for each construct was calculated. All constructs produced a significant reliability (Cronbach's alpha > .5).

Procedures

Data Collection

The data collection process for the study was coordinated through the principals at each of the selected schools. A total of 831 teachers were asked to participate in the study, with 618 completing the surveys in full, producing a 74% return rate. The

researcher contacted each participant by email one-week prior with an introductory letter that identified the researcher, provided a brief explanation of the purpose of the study, and requested the participant complete a survey. The researcher distributed the surveys in a group-administered, face-to-face setting during a regularly scheduled faculty meeting. Teachers were assured of confidentiality and encouraged to be forthright in their responses. As teachers returned their surveys to a box, they were given the opportunity to select a candy bar as a token of appreciation. The survey instrument did not identify the teacher or their school site. However, unknown to the participants the researcher did color-code the survey instrument in order to identify the level of school (middle or high) in which it was administered.

Data Analysis

Following the scaling of the data by constructs, a multivariate ANOVA calculation was used to analyze the three research questions posed. Additionally, descriptive statistics were calculated for the purpose of describing the population. The calculations were performed using SPSS version 17.0, a statistical computer software program.

Significance of the Study for Practice

The tension over control and accountability in public education has become even more prominent in the last decade. Ingersoll (2003) contends the issues at the heart of this debate are "the crux of many of the most significant education reforms of our day – school choice, education vouchers, charter schools, school restructuring, the standards movement, teacher and student testing, and teacher professionalization, and so on" (p.8).

At the center of the reform movement are questions concerning the degree to which teachers are and should be controlled and held accountable. According to the views of policy centralizers, teachers and schools are not adequately controlled. The opposing teacher empowerment view holds that teachers are overly controlled, subjecting students to a narrow and ineffective curriculum (Crocco & Costigan, 2007; Eisner, 2006; Madaus et al., 2009).

Since the 1980s numerous reform policies focused on improving student achievement, but few acknowledged the need to understand, develop and support teachers' professional discretion and satisfaction. Instead, Boote (2006) suggests the reform efforts shifted curriculum policies and administration "toward giving teachers much less flexibility, control, or discretionary access to resources" (p. 472). Teachers increasingly faced challenges as they attempt to effectively deal with and adapt to curricular reforms. Boote further maintained that "curriculum policy and policy analysis . . . remains dominated by a discourse of managerial control and market-led ideology. These policies commodify education, ignore teachers' values, identities and skills" (p. 473). This research study examines whether the standards-based accountability paradigm is trapping teachers in a constant dilemma between the external forces of accountability and the internal forces of autonomy and satisfaction. The examination of this paradox takes place within the curricular zone of discretion, the place in which teachers must mediate the competing demands of the external and internal factors involved. Multiple studies examined the best efforts to ensure teacher change and compliance to reform policy, but few considered the significant link between the external factors driven by policy centralization reforms and the internal factors of self-determined behaviors that

mitigate needs for professional discretion and job satisfaction over the course of a teacher's career.

This study examined the link between teachers' perceptions of professional discretion and satisfaction and the impinging factors of curriculum control. Results of this study will serve to provide a basis for further research that would assist the education community in better understanding not only the external social aspects of curriculum decision-making, but also the individual or internal aspects involved in the decision-making process of the classroom teacher. Boote (2006) suggested that a better understanding of perceptions of teachers who work within the constraints of the debate and its resulting reforms will enable policy makers, professional curriculum developers, and educational leaders to help teachers develop professional discretion and further support quality teachers as they attempt to adapt to the dynamic, complex conditions of their career.

Assumptions

The specific assumptions of this study are:

1. It is assumed that teachers' personal and professional background may influence perceptions of professional discretion and satisfaction and affect responses self-reported on the survey instrument.
2. It is assumed the majority of teachers in the sample attempt to adhere to and implement course content and pedagogy as directed by state, district, and local school-site curriculum guides,

3. It is assumed that the majority of teachers sampled have a working understanding of the course content of the subject(s) they teach,
4. It is assumed that teachers, even beginning teachers, have some background knowledge relating to district and state testing policies and practices, and
5. It is assumed that the data reported by the teachers in the sample will be self-reported and reliability will be based on the veracity and accuracy of each participant's answers.

Delimitations to the Study

1. The objective of this study is to examine teachers' perceptions of professional discretion and satisfaction in relation to four external, independent variables of curriculum control: curriculum guides, textbook adoption policies, testing policies, and leadership practices of school-site personnel.
2. Research questions chosen seek to examine specific variations among the dependent variables of perceived professional discretion and satisfaction in relation to years of teaching experience, level of teaching (middle and high school), and varying degree of curriculum control present in identified subject area categories.
3. The survey research method was chosen for collecting data for a population too large to directly observe. Because this study examines teachers' perceptions, using a survey to measure attitudes and opinions was deemed appropriate (Dillman, 2009).

Limitations to the Study

1. This study is limited to teachers within the public educational system.
2. This study is limited to a geographic cluster, within a central Florida school district.
3. The sample used in this study is further limited by the selection of teaching staff of schools in which the principal was agreeable to having the researcher visit and distribute questionnaires in a group-administered, face-to-face setting.
4. This study is limited to self-reported survey data.

Organization of the Dissertation

This study addresses teachers' perspectives on specific issues relating to curriculum control and their perceptions of professional discretion and satisfaction in an era of accountability and curriculum reform. In Chapter 1, the background, purpose and significance of the study are described and the research questions are identified. In Chapter 2, the researcher presents a review of literature framed by the constructs of the study: external factors defining curriculum control; the practice of professional discretion involved in teacher control over classroom content and pedagogy; and the influences of teacher empowerment on teacher satisfaction. The methodology of the study is described in Chapter 3, including the development of the survey instrument. The results of the study are detailed in Chapter 4. The concluding chapter of the study, Chapter 5, focuses on a discussion of the results by the researcher and recommendations for future research.

CHAPTER 2 – REVIEW OF LITERATURE

Introduction

The effects of standardization have been fairly well researched since the onslaught of curricular reform efforts in the 1980s, but most stopped at the classroom door. This research study examined the effects of curriculum control on teachers' sense of professional discretion and job satisfaction. Few empirical studies were conducted to examine the impact of the policy initiatives with consideration to the development and practice of teachers' professional discretion and the relationship to job satisfaction. An investigation into the decision-making processes and actions taken by the classroom teacher in an era of curricular reform and accountability are related to the factors governing teachers' development and enactment of professional discretion in the following review of literature.

What were found in the literature review were numerous policy analysis and policy reports, and papers which detailed descriptive and normative theories of the individual and social conditions needed to support the development of teachers' professional discretion and increase job satisfaction. To examine whether the claims made in such reports were valid, several empirical studies conducted within the elementary and secondary public schools of the United States are highlighted along with meta-analysis findings. Studies done in other countries in which education reforms impacted the professional discretion and job satisfaction of teachers were also used in order to gain a broader perspective of the effects of these reforms.

This literature review observed the work of Boote and Beile (2005) as a heuristic or organizational frame. Additionally, in selecting works to include in this review of literature, the researcher attempts to address the centrality of relevance issue as put forth by Maxwell (2006), "relevant works are those that have important implications for the design, conduct, or interpretation of the study, not simply those that deal with the topic of research" (p. 28).

In the review of literature which follows, the researcher examined the relevant topics related to the two underlying propositions investigated in this study: (a) Federal, state and district curriculum control policies reduce teachers' professional discretion, and (b) teachers' perceptions of diminished control over curriculum decisions resulting from control policies hinder their practice of professional discretion thereby adversely affecting their sense of job satisfaction. To investigate these assumptions, first the interrelationship of several factors within the curricular zone of discretion must be acknowledged, the realm in which teachers must mediate the competing demands imposed by the external and internal factors involved. These factors ultimately influence the decision-making process and translate into daily work practices.

The main external factors of curriculum control, as identified by Archbald and Porter (1994), which directly impinge upon the curricular zone of discretion are curriculum guides, textbook adoption policies, and testing policies. Archbald and Porter determined these external factors had a significant effect on the decisions and practices of the individual teacher centered among these influences. The researcher also included the external, independent variable of leadership practices of school-site personnel: administrators, department chairs, mentor teachers, instructional and curriculum coaches,

and teaching colleagues. Due to the possibility that leadership practices of key school personnel may influence teachers' perceptions of professional discretion and satisfaction, the researcher deems it necessary to investigate the effects of this variable in relation to the other external variables recognized by Archbald and Porter.

The teacher exists in the center of these forces within a realm of internal factors that serve to shape self-determined behaviors. These behaviors not only influence the development and enactment of professional discretion, but also affect a teacher's sense of job satisfaction. According to Self-Determination Theory (Ryan & Deci, 2000), this sense of satisfaction is related to the fulfillment of three psychological needs: the need for competence, the need for autonomy, and the need for relatedness. These internal factors serve to strengthen or inhibit the teacher's development and practice of professional discretion. It is this relationship, the push and pull, of these factors that will be examined in the following review of literature.

Therefore the organization of the review of literature follows the outline of Figure 1 by beginning externally and working to the center to understand the classroom teacher's sense of professional discretion and satisfaction. The review of literature will first examine the external factors and provide a context for the interplay of factors considered, the curricular zone of discretion. Secondly, the practice of professional discretion, which teachers may employ to mitigate external factors and mediate competing demands, will be defined and discussed. Lastly the internal factors which influence a teacher's sense of job satisfaction will be examined in relation to the psychological needs associated with the theoretical framework of Self-Determination Theory (Ryan & Deci, 2000).

Curriculum Control

This study examined the impact external curriculum control policies had on the daily decision-making processes of teachers and whether these factors reduce the professional discretion and satisfaction of teachers. When teachers make decisions regarding what to teach and how to teach, they are mediating the external factors of curriculum control and the internal factors of self-determined behaviors within the curricular zone of discretion. Archbald and Porter (1994) found that some of the most significant variables within this curricular zone of discretion were curriculum guides, textbooks, testing, and leadership practices. Teachers must weigh against these external variables their own knowledge gathered from the students they strive to teach. Teachers practice professional discretion when they use their learned expertise to determine what should be taught and take steps to be able to teach it, perhaps finding it necessary to mitigate the demands of external factors in the process.

The external factors of curriculum guides, textbook adoption, testing policies, and leadership practices traditionally have been driven by the most recent reauthorization of the Elementary and Secondary Education Act of 1965 (ESEA, Public Law 89-10). ESEA was initially enacted to improve and strengthen educational opportunities and educational quality for all children in the Nation's elementary and secondary schools. However, Sizer (2004) contends that the most recent reauthorization of this historic act of the No Child Left Behind (NCLB) takes the powers of professional discretion away from teachers by "radically centralizing, by means of federal approval of state plans, one key element of school operation, the definition of 'standards' in several key areas and the

ways and means of assessing them" thus placing "substantial power and direction in the hands of the federal government" (Introduction, p. xx). Due to this top-down influence, many in the field of education expressed concern that this curricular zone of discretion in which teachers work is shrinking and negatively impacting the education of students by narrowing the curriculum with resulting losses of opportunity for creativity and relevant meaning making (Archbald & Porter, 1994; Robinson & Azzam, 2009). Policy centralizers, particularly those proponents of national curriculum standards, argue that local curriculum leaders and teachers had too much discretion at the local and classroom level.

Caught in the push and pull of this debate are the pragmatic applications of the variables within the curricular zone of discretion: curriculum guides, textbook adoption practices, testing, and leadership. It can be argued that each of these factors separately has a direct impact on teachers' professional discretion and satisfaction, but when combined they can be exponentially more forceful in constraining teachers' decision-making power. The external factors defining the factors of curriculum control used in this study are delineated below.

Curriculum Guides

Archbald and Porter (1994) asserted the main function of curriculum guides is to state learning goals and topics for a course. Curriculum guides can state these goals and topics to varying degrees of specificity. Some curriculum guides state only general goals and topics while others, toward the more prescriptive end of the continuum, contain hierarchies of goals and objectives, describe sequences of units composing a course, and

state or imply a pacing schedule. Units can be described in further detail by recommending concepts and learning strategies.

Craig and Ross (2008) found historically, that curriculum has been conceived as an instrument for school reform, which has forced teachers to become mediators between externally imposed curriculum and student outcomes. This means-ends outcome derivation was only strengthened by the accountability measures put in place by reform efforts such as NCLB. Craig and Ross argued that designing curricula for teachers to implement for instructional purposes was "rather like putting the cart before the horse" (p. 283). The interrelated nature of curriculum in this means and ends approach does not position the teacher as a viable curriculum maker. Thus, they argue teachers became the mediators between curriculum and student outcomes.

Pinar (1992) defined the state of affairs in curriculum design as one that is "dreamt into existence by others," with the "others" being policymakers outside the field of education who yield the most political influence (p. 228). Pinar argued that the factory model being utilized in the standardization reforms "tends to reduce teachers and students to automata: in designing and teaching the curriculum in units that presumably 'add up' to a logical, even disciplinary 'whole' (like products on an assembly line), the factory-model school achieves social control at the cost of intelligence, intelligence understood as including problem-solving, critical thinking, and creativity as well as memorization and calculation" (p. 231).

To combat these effects, Craig and Ross (2008) argued teachers must be further involved in both reflective practice and forming curriculum to best suit the needs of the students they serve. Schwab's (1970) seminal work indicated "the commonplaces of

teacher, learner, subject matter, and milieu needed to be viewed as foundational to the practical and the bodies of experience deemed as necessary for curriculum making" (pp. 287-288). These researchers suggested without a foundation of commonplace experience, development of curriculum should not proceed. This view provides great authority to teachers and local discretion in forming curriculum. However, in the means-ends accountability era of NCLB, one can argue that this practice of professional discretion is not being realized.

Eisner (2002) stated that teaching is a kind of artistry that "requires sensibility, imagination, technique, and the ability to make judgments about the feel and significance of the particular" (p. 4). Eisner argued for this artistry to truly be implemented, further curriculum research should be positioned at the intersection where teaching and curriculum meet, not as in the "cart-before-the-horse" policy model of curriculum control. Craig and Ross (2008) presented issues and challenges that must be surpassed before the teacher can genuinely take the place as curriculum maker:

> . . . the teacher defined as purveyor of codified content knowledge, the teacher whose knowledge base is determined by policymakers and bureaucrats and influenced by university professors, the teacher perceived as an implementer of others' reform strategies, the teacher enmeshed in the politics of inquiry, the teacher devoid of agency who struggles to gain authority, and the teacher for whom the extremes of technical rationalism encroach on classroom practice, narrowing the space within which lived curriculum can be instantiated. (p. 296)

This research study recognizes the teacher as an active agent who must deliberate the course of study by weighing the needs of students against dictated content of mandated curriculum. However, the researcher also recognizes the individual teacher must make these deliberations within an ever shrinking zone of discretion. Archbald and

Porter (1994) explained the actions of policy centralizers had delineated a shrinking zone of curricular discretion for the classroom teacher as curriculum maker, shrinking the authority teachers have to make decisions related to curriculum and pedagogy. The researcher recognized the importance of teacher as curriculum maker, and therefore the space within which the dynamic of teacher, curriculum guides, decision-making and self-determined behaviors occurs must be examined.

On one hand some curriculum guides may dictate content and pedagogy to the extreme of scripted lessons. But on the other they may be so vague and voluminous that they actually determine the need for professional discretion. As Craig and Ross (2008) indicated, teachers are concerned and often overwhelmed with the amount of content dictated by curriculum guides. In an analysis of the standards found in a typical K-12 school system, Marzano and Kendall (1998) found that "the knowledge and skills these documents describe represent about 3,500 benchmarks" (p. 5). Marzano and Kendall proposed that in order to cover such a vast range of content schooling would have to change from K-12 to K-22. Gallagher (2009) contended that the multitude of standards specified in most state curriculum guides raise a central point of concern, "when teachers try to cram twenty-two years of curriculum into a K-12 time frame, everyone loses" (p. 10). Gallagher found overall that teachers were forced to adopt a shallow approach and sprint through material. Marzano and Kendall stated "the sheer number of standards is the biggest impediment to implementing standards," suggesting content should be cut by at least two-thirds to make implementation with fidelity an actuality (p. 5).

The standards set by individual states directly correlate to the content and development of textbooks. Schmidt and Cogan (2009) conveyed that the state of affairs

in the market led textbook industry of the United States has aided in creating a curriculum that is "a mile wide and an inch deep" (p. 45). Schmidt and Cogan noted that the topics covered by textbooks in the U.S. "far exceeded those in countries that performed best on the Trends in International Mathematics and Science Study (TIMSS) 8th grade assessment" (p. 45). According to their analysis, textbooks used in the U.S. ranked first in the world in terms of their scope, size, and weight. These researchers argued, due to the encyclopedic nature of standards and textbooks, teachers were essentially forced to use their professional discretion, which in turn only yields differing emphases in each classroom, "Because the time available for teaching and learning in the school year is finite, teachers must do triage among the laundry list of topics included in standards and textbooks" (p. 45). Schmidt and Cogan argued that highly trained professional teachers faced with documents that embody such incoherent and unrealistic conditions inevitably teach substantially different content – often within the same state, district, or school.

Textbook Adoption

Textbook adoption is in place in twenty-one states within the United States, including the state in which this research study took place. According to the Thomas B. Fordham Foundation (2004) report, textbook adoption refers to the "process of committees of educators and community stakeholders reviewing textbooks according to state guidelines and then mandating specific books that schools must use or listing approved textbooks that schools must choose from" (p.3). Archbald and Porter (1994) declared textbook adoption controlled course content by restricting the range of textbooks and materials that can be used for a course. Some policies limited the approved

textbooks for a course to a small number (two or three) from which district curriculum specialists along with teachers had to make an individual selection, while others prescribed a particular book for each course.

One purpose of textbook adoption policies is to reduce the potential variability in content across different sections of a course (both within and between schools). Assuming teachers using the same book use it similarly – curriculum guides are intended to facilitate this – central adoption policies increased the likelihood that students in the same course get the same content. Adoption policies also had a quality control purpose. It is assumed a committee of selected teachers informed of district curriculum goals and representing teachers' preferences will choose better textbooks than individual teachers making choices at an individual or school level (Archbald & Porter, 1994).

Apple (1990) was one of the first to recognize the control inherent in the textbook adoption practices, especially those driven by the policies in the states of New York, Texas, and Florida. The proponents of local control had been resistant to such market led adoption policies. Apple agreed that trying to ensure more power reside at the local level is a meritorious effort, however he recognized this perceived level of control is often just fiction. Apple pointed out that textbook adoption policies were, in all actuality, creating a common curriculum. Apple stated, "that curriculum is determined not by academics and the government but by the market for textbooks . . . and this market is shaped by what is seen as important in states that have textbook adoption policies" (p. 3). Teachers had very limited influence within this market led process.

Finn and Ravitch, contributing authors of the Thomas B. Fordham Foundation (2000) report, concluded, "there is no evidence that textbook adoption contributes to

student learning" (p. 4). Instead, the authors of this report argued that textbook adoption policies "consistently produce second-rate textbooks that replicate the same flaws over and over again . . . and the market incentives caused by the adoption process are so skewed that lively writing and top-flight scholarship are discouraged" (p. 3).

Apple (2004) again argued that textbook adoption practices were creating "a curriculum of the dead" (p. 195). Apple emphasized that teachers and students should be empowered to make strides away from this restrictive process to a "negotiated curriculum where the materials are built in direct response to local community problems" (p. 195). Apple stated, "This seems to be a much more dynamic process than reliance on standardized materials that are often outdated and conservative" (p. 195).

Archbald and Porter's (1994) study revealed among all three categories affecting teacher authority (curriculum guides, textbook policies, and testing) teachers reported that textbooks and policies related to teaching materials influenced their decisions the most. Apple (2004) illustrated that in many studies in the United States, "even though there is no official rule that states this should be the case, the curriculum is the textbook in a large number of classes. Even though we don't have a national curriculum in the United States, and we don't have a national ministry of education that says that all teachers must use textbooks, it is quite clear that whether we like it or not, most teachers use textbooks" (p. 188). With so much money and business at stake, it is difficult to see how any faction could intervene to change this process and the prevalent conformity of practice.

However, in this era of technology and easier access to up-to-date information, more and more educators are seriously pondering the main question raised by Apple (2004), "would we be better off without textbooks altogether?" (p. 189). This question

has even been addressed in the state of Texas, one state whose textbook adoption policies had normally driven the content selected by textbook publishers. As Hurst (2004) reported, some school districts had begun buying into programs that offer laptop computers loaded with digital versions of state-approved textbooks. While there is much research to be done to examine the impact of digital technology on learning, Klymkowsky (2007) found that not using a textbook, especially in the teaching of science, was just as productive and even more engaging for students citing, "Most textbooks are not written with current evidence about best teaching and learning practices in mind, so they may be difficult to integrate into the design and presentation of a course that is based on this evidence" (p. 193). Traditional textbook adoption policies certainly need to be questioned further, especially since textbooks often contain content that is out of date before the next textbook adoption period and replacement costs accrue in the hundreds of thousands of dollars per subject area for school districts. New technology and handheld devices, such as e-books and iPods, allow for updates that can happen instantaneously and take place consistently.

Testing Policies

Madaus, Russell, and Higgins (2009) illustrated that high-stakes testing (HST) is so woven into the fabric of our nation's culture and psyche that "hardly a day passes without a newspaper or television news report concerning testing" (p. 5). The belief that schools and teachers had not provided the services for which they were contracted has given rise to accountability demands on schools and teachers as well as foster the HST movement (Craig & Ross, 2008). Ryan and Weinstein (2009) argued that HST has been one of the most powerful yet simplistic strategies to reform education, "a type of carrot

and stick approach" in which rewards and sanctions are contingently applied to outcomes of standardized tests, assuming this will motivate administrators, teachers, and students to improve (p. 224). Ryan and Weinstein noted that HST reform strategies are prevalent around the globe and exemplified in the *Education Reform* Act in Great Britain and the *No Child Left Behind* (NCLB) legislation in the United States. Such policies provide criteria for government entities to use the results of standardized tests to determine student advancement and reward high-performing schools or sanction those who falter.

Madaus, Russell, and Higgins (2009) contended that the contradictory outcomes produced when high-stakes tests are used make them, and the policies that define their use, "paradoxical" (p.3). Madaus et al. suggested that the policies regarding the use of high-stakes tests were at first "well intended" because they were focused on improving student learning and the quality of our schools. Yet these authors also recognized that the use of high-stakes tests produced several "negative" outcomes, like less time and attention devoted to subjects that are not tested, such as art, physical education, foreign languages, and social studies:

> The paradox results from using test scores for two purposes: First, to identify and help students, teachers, and schools that are not performing well, and second to make high-stakes decisions about those same students, teachers, and schools. These high-stakes decisions set in motion a series of actions by students, parents, teachers, and schools designed to improve test scores. But these decisions also produce unintended negative outcomes. For example, many schools increase attention on students who are at risk of performing poorly on high-stakes tests and increase time on test preparation and drill-and-practice. In response, parents of high-ability students – aka 'gifted' students – opt out of public schools for private schools. They believe that private schools, not constrained by accountability requirements and high-stakes sanctions, are able to offer a more challenging and richer curriculum . . . (p.3)

Another paradox produced by high-stakes testing policies lies in the fact that they apply contingent consequences to outcomes rather than behaviors. Ryan and Brown (2005) suggested that the dangers related to this outcome focus were a wide variety of potential behaviors, both desirable, as in changes in instruction, but also undesirable, as in "teaching to the test, narrowing of curriculum, and cheating" (p. 355). These behaviors can be equally reinforced insofar as they produce the desired outcomes.

One such example of undesirable behaviors was observed in one Florida community in which the entire agriculture program was threatened with closure due to pressure to provide more academic time to help students pass the FCAT, the Florida Comprehensive Achievement Test, which is used to measure state compliance with NCLB mandates (Meier & Wood, 2004). Meier and Wood emphasized that anything that does not directly contribute to higher test scores would be further scrutinized in this age of accountability. This is exactly the case for several subject areas such as art, music, shop, and other elective programs in many school districts across the United States.

McNeil and Valenzuela (2000) found that teachers acknowledged feeling the pressures of high-stakes testing which caused them to significantly realign their instruction to focus on the topics expected on the targeted exams. The result was that more time was spent on the instruction of test-taking strategies rather than substantive issues. Archbald and Porter (1994) also recognized that testing policies had a predominant role in shaping and controlling curriculum by both prescribing content and evaluating performance. First, test questions, like curriculum guides, imply content goals by adding authority to selected goals and topics. Like guides, they identify certain topics and skills as essential. Second, tests are part of an inducement system encouraging

teachers to teach and students to learn tested content. Archbald and Porter stated, "most students and teachers want to perform well, or at least avoid poor performance, although this desire varies depending on how results are used" (pp. 22-23).

Allen (2009) illustrated how high-stakes testing has a direct effect on the "shape-shifting" that content-area standards undergo as concepts or skills get continually reallocated in an attempt to prepare students for testing. As an example, Allen reported that science teacher Sheryl Loveland in Wichita, Kansas, saw standards reassigned from one grade level to another because of concerns about their developmental appropriateness, only to get moved back to jibe with topics on state science tests. For example, when a 6th grade unit on cell function and genetics was moved to 8th grade, teachers like Loveland welcomed it as a sound decision stating "even the older students had difficulties with some of that material" (p. 2). That placement in the 8th grade science curriculum also fit well with district alignment efforts that readied students for 9th grade biology, Loveland reported to Allen. But after two years, the material on cells and genetics was moved back to the 6th grade because related items appeared on the 7th grade state science test. Allen also reported a comment Loveland made which brings to the forefront her dissatisfaction as a result of testing influence: "I spend great amounts of energy and time preparing to teach my content. Then within a year or two the district switches it to another grade level, and I am starting all over again. This is crazy and does not allow for anyone to be comfortable with what they are teaching" (p. 2).

Apple (2009), in his introduction to Au's (2009) *Unequal By Design*, echoed this assertion that teachers face a great deal of pressure to cover the prescribed content so that students do well on the standardized tests. Apple stated, "In a time of NCLB . . . and

similar reforms, the space of autonomy, the space of critical pedagogic work, has been lessened considerably" (p. vii). Previously, Apple (2004) had argued that the importance given to ubiquitous tests, increasingly high-stakes since NCLB, had altered the conditions of policy making, for curriculum planning, and for testing. "What have been called 'audit cultures' now move to take center stage . . . demonstrating success in often reductive ways is the norm" (p. viii).

Schmidt and Cogan (2009) also addressed the impact of incongruities between curriculum and testing practices. These researchers concluded that the education system in the United States has "a much better track record in ensuring uniform, equitable assessment than in ensuring uniform, equitable access to learning" (p. 47). Schmidt and Cogan argued that our accountability system is entirely disconnected from the plethora of content standards. Equality of content coverage is assumed, but then assessments that are not curriculum sensitive are used to evaluate disparate curriculum. This practice, they argued, leads many "to believe that students who fail do so because of their own lack of effort, talent, and motivation" (p. 47). Art Costa (2009, November) questioned this disconnection as well by stating "What was once educationally significant, but hard to measure, has been replaced by what is insignificant and easy to measure. So now we test how well we have taught what we do not value" (Speech presented at NCTE Annual Convention).

Esiner (2006) recognized that testing under the accountability system of curriculum control has restrictive qualities as well, "The irony of wanting more as evidenced through test performance is that it often gives us less . . . to the extent to which we are interested in deepening meaning and in providing occasions for the excitement

and satisfaction that schools can engender, ironically we look at test scores when we should be looking at the degree of engagement students display in the classrooms and schools they inhabit" (pp. 4-5). This engagement, again, is under the purvey of the individual classroom teacher who may or may not have the authority to make decisions to adjust content and pedagogy. Eisner further asserted that "we might be better off understanding what teachers need in order to relate to students in ways that will make the pursuit of intrinsic intellectual satisfactions a primary aim of the educational enterprise" (p. 5). Such questions do bring into focus exactly what are the main goals, aims and purposes of education reforms.

Eisner (2006) illustrated the paradox that examining test scores and their increased importance in relation to accountability can actually "represent a decrease in the quality of education students receive" (p. 5). Eisner argued significant opportunity costs had been paid for higher test scores without thorough examination of whether the costs were worth the gain. Eisner stated, "If the time devoted to attention to, say, reading scores require inattention to other fields of learning, it may be that such inattention may be too high a price to pay, even for higher reading scores" (p. 5). But, as Apple (2009) stated, "Testing is so ingrained in our commonsense that even asking the question of what it is that tests actually do seems strange to all too many people" (p. viii). This is exactly the question that needs to be examined in the declining "zone of discretion," and in particular declining teacher authority over making decisions regarding content and pedagogy.

Au's (2009) study thoroughly examined the effects of high-stakes testing (HST) on curriculum forming and pedagogy. Upon analyzing the unevenness and resistance

that existed in local contexts, Au concluded that the effects of HST represented a form of "steerage at a distance, where policy makers and those with power attempt to steer what happens at the classroom level" (pp. 81-82). Au found "when punitive consequences were attached to test scores, teachers did indeed match their pedagogy and content to the test norms" (p. 82). In the states where higher-stakes are attached to testing, the more teachers focused their teaching on the tests. Au's study sought to examine how test-induced curricular control operated by exploring how the policy structures of the tests themselves interact to create a powerful system of control over pedagogy and the structure of knowledge in the classroom. In his analysis of "teaching under the yoke of testing," Au identified five areas of control, or effects of "teaching to the test," that teachers must interact with before making decisions regarding curriculum and pedagogy (pp. 82-103).

The first area of this interaction is "content control." Au (2009) reported the most prevalent and consistent finding in the empirical research is that high-stakes testing narrows the instructional curriculum because, to varying degrees, teachers shape the content norms of their curriculum to match that of the tests. Also, subjects considered to be nonessential to the high-stakes, standardized tests are being reduced or cut altogether (Au, p. 86). In addition to content control, the second area is further control over curricular form, or "formal control." Curricular form refers to the organization of meaning and action, including the order in which content is introduced and the very form that knowledge itself takes in the curriculum. As the content of the curriculum moves to match what the tests require (content control), the structure of curricular content knowledge shifts toward the fragmentation demanded by the tests. In this way, Au

reported, "knowledge learned for the tests is transformed into a collection of facts, operations, or data mainly needed for rote memorization in preparation for the tests" (pp. 87-88). Additionally, Crocco and Costigan (2007) found the imposed cases of scripted lessons, mandated curriculum, and narrowed options for pedagogy resulted in teachers finding their "personal and professional identity development thwarted, and creativity and autonomy undermined" (p. 513).

Au (2009) agreed that "pedagogic control" served to diminish teacher identity and presented this as the third area of teaching to the test. In teaching to the test, teachers end up adopting pedagogical strategies in their classrooms that correlate to the forms of knowledge and content contained on the high-stakes tests. This pedagogic control exerted by high-stakes testing creates the conditions where teachers are increasingly compelled to be "alienated executors of someone else's plans" (p. 89).

The fourth area of control exerted by the predominant test culture is that of bureaucratic control (Au, 2009). Au contended "high-stakes tests hold so much power because their results are tied to rewards or sanctions that can deeply affect the lives of students, teachers, principals, and communities – negatively for low performers, and positively for high performers" (p. 90). Ryan and Weinstein (2009) also reported that sanctions were a salient force for students and teachers alike. Indeed, Swope and Miner (2000) noted that punishments were enacted twice as often as rewards, especially in high-poverty schools, as educational reforms were implemented.

Au's (2009) last area of teaching to the test, discursive control, is perhaps the most disturbing. According to Au, "discursive control represents more than just language. It encompasses ways-of-being that express certain norms through a variety of

signals, including language, dress, rituals, movement, culture and identity" (p. 93). Within this framework, "high-stakes tests may be understood as hegemonic devices that are used by dominant elites to determine who is and who is not a part of their dominant discourse" (p. 93). In this way, Au pointed out, "The individual in contemporary society is not so much described by tests as constructed by them because the tests transform people by assigning them to various categories . . . and they are treated, act and come to think of themselves according to the expectations associated with those categories . . ." (p. 94).

Archbald and Porter (1994) reported that the power testing has over the authority of the teacher and their autonomy, as it relates to forming curriculum, was only second to those policies regulating textbooks. Yet, even the policies related to textbook adoption and the content and course guides as discussed earlier, were heavily influenced by the culture of high-stakes testing. As Au (2009) found, "high-stakes testing is having a tangible impact on the educational experiences of students" and their families (p. 101). For example, Latifi (2009) wrote a series of news articles illustrating an ongoing, heated debate between the Durham North Carolina school district officials and parents of elementary students who were at odds over the implementation of a new reading curriculum. Parents of students argued the newly required reading curriculum had forced teachers to focus too much on tests and in most accounts had stifled their children's love of reading. District officials' counter-argument was that they had to institute a new curriculum that would ensure students meet the No Child Left Behind standards by learning the same material at all twenty-nine elementary schools. The debate over the effects of high-stakes testing on curriculum forming and pedagogy will likely get even

more involved as the United States federal government spends millions of dollars on the development of national standards in language arts and mathematics and common assessments to measure student achievement of these standards.

Leadership

The last variable of external control, which was adapted to the model of curriculum control for the purposes of this study, is that of leadership practices of school-site personnel. The school-site personnel considered to have influence on the deliberations of the teacher include administrators, instructional coaches, and other teachers.

The person with the most significant influence at the school-site level is the school principal. Among all school-based personnel, the principal is viewed ultimately as the leader of all school staff and the one who has significant impact within the curricular zone of discretion. Bogler (2001) indicated "a number of researchers have investigated the relationship between principals' leadership style and decision-making processes and teacher performance and satisfaction (Kirby et. al., 1992; Koh et. al., 1995; Silins, 1992) and teacher self-efficacy" (Hipp, 1996; 1997). Bogler argued that these researchers did not incorporate a crucial factor in these investigations, "namely the perceptions of teachers regarding their occupation" (p. 662).

Ingersoll's (2003) research also revealed principals had "a great deal of control over key resources and decisions crucial to the work of teachers, and these provide a range of direct and indirect levers . . . to ensure accountability" (p. 222). Ingersoll explained one of the most fundamental challenges of any school principal is "the problem of control and consent" (p. 218). The actions a principal takes to harness the skill and

expertise of teachers while still ensuring the simultaneous need for accountability and commitment are crucial to the success of the individual school organization. Ingersoll indicated that principals, like managers in other kinds of organizations, must confront the basic challenges inherent in the coordination and control of large numbers of employees in the accomplishment of large-scale tasks. If the principal is to succeed as the school leader, he or she must coordinate, control, and hold their teachers accountable, but also depend on the cooperation, motivation, and expertise of those same individuals. Such a balancing act would be a difficult task for any organizational leader regardless of ever-changing mandates, like those imposed by NCLB reform, for which they must finagle and finesse their employees to comply.

Bogler (2001) illustrated that the rate of education reforms during the past two decades has been unprecedented, "schools have undertaken fundamental changes in areas such as curriculum development, students' and teachers' roles, and learning strategies" all in efforts to comply with NCLB reform policies (p. 663). Bogler stated "these changes have brought about a shift in the philosophy that dominated the realm of educational leadership" (p. 663). Bogler indicated that the traditional role of principal as instructional leader has been replaced by the more essential role of principal as transformational leader because principals are expected not only to bring visionary leadership to the organization, but are also expected to motivate and activate their staff to bring about changes in school culture. Bogler found "principals who demonstrate transformational behavior, such as paying attention to the needs and interests of the teachers, providing for intellectual stimulation and challenges, raising teachers' expectations and motivation to devote, and investing extra efforts, are assumed to

encourage teachers to view their occupation as more rewarding and central to their lives" thus affecting their overall sense of professional discretion and job satisfaction (p. 668).

Other external agents of school change considered in this study are the personnel roles of instructional or literacy coaches. Coaching became a widespread strategy in schools undergoing comprehensive restructuring as a way to create more professional collaborative cultures (Feldman & Tung, 2002). In the past decade, instructional coaching has been found to have a significant impact on teachers' practices as well (Cornett & Knight, 2009). The growth in the implementation of coaching followed a recognition that "the traditional one-shot approaches" to professional development were found to be ineffective, especially those in which teachers just hear about new practices but do not have the follow-up support to implement those practices" (Knight, 2009, p. 18). Instead, coaching individual teachers enables teachers to engage in a continued dialogue in a non-evaluative fashion. Coaches observe teachers while working in their classrooms and use powerful questions and communication skills to empower teachers to reflect deeply on their practices. Coaches may also provide precise explanations of new practices, model those practices, and provide teachers feedback as they attempt to implement changes in instruction. This practice is grounded in a partnership in which coaches are viewed as equal partners or collaborators with teachers. Thus, teachers had control over how to proceed. Among the noted influences that coaching personnel had on teachers were significant growth in teacher efficacy, increase in teacher satisfaction with career and position, and increase in professional climate of schools (Cornett & Knight).

Lastly, the influences of other teaching colleagues were also considered in this study as part of leadership influence. Pak and Tan (2009) stated that a "teacher picks up the most relevant know-how in a school from day-to-day by watching and talking with fellow teachers" (p. 37). Castle (2006) also pointed out that teaching is not an autonomous action. Instead when teachers perceived incongruities they most commonly sought knowledge from teaching colleagues. Castle noted that even the most autonomous teachers do not practice in a vacuum, but act as pedagogical researchers who glean knowledge from their peers and build research connections to others with whom they can collaborate. Margolis (2008) found that teachers rated the relationships and advice from other teachers as second among all the variables that influenced a teachers' practice, including the actions of a principal. This relative influence may be attributable to the fact that teachers displayed a relative lack of resistance to their colleagues' leading professional development discussions as opposed to administrative leaders.

In summary, the external factors of curriculum control had great significance in shaping the development and practice of a teacher's professional discretion and satisfaction. Pelletier, Séguin-Lévesque, and Legault (2002) confirmed that the external factors of control (curriculum guides, textbook adoption, testing policies, leadership practices), as discussed above, had considerable impact on teachers' motivation and teaching behaviors. Pelletier et. al. defined these determinants in relation to past research and developments in the measurement of motivation derived from self-determination theory (Ryan & Deci, 2000). Pelletier et. al. found the main perceptions of constraints and pressures experienced by teachers at work were: "teachers' perceptions of pressure associated with the importance of conforming to the school curriculum and performing

up to standards; teachers' perceptions of pressures coming from the school administration; and teachers' perceptions of pressure associated with conforming to colleagues' teaching" (pp. 187-188). Pelletier et. al. concluded that these pressures were mediated by teachers' self-determination toward work leading to autonomy support. In the next section of the literature review, the link between teachers' self-determination toward work will be examined in terms of the development and practice of professional discretion.

Professional Discretion

Teachers face ever-increasing responsibilities for a multitude of decisions affecting their students and the culture of their classrooms. They decide what is taught, how it will be taught, how to make accommodations for diverse learning needs, and how to maintain a productive learning environment (Boote, 2006). In all actuality, they are the "street-level bureaucrats" choosing to implement, or not implement, any and all educational reforms (Lipsky, 1980). The numbers of issues that teachers need to thoughtfully and deliberately consider had greatly multiplied since the onset of the educational reform beginning in the 1980s and considerably more since NCLB mandates. This new range of responsibility has brought with it a necessity for teachers to further employ aspects of professionalism, autonomy, and reflective practice as they mediate the needs of students and the external expectations placed upon them.

Tomlinson and Jarvis (2006) urged that teachers must take this professional responsibility seriously. These authors argued that teachers must be prepared to ignore conventional wisdom and tailor content and instruction to the needs and strengths of

students in their classrooms, rather than clinging to an already existing curriculum or mandated textbooks. Teachers must then develop and enact a practice of professional discretion that enables them to apply real-world connections and determine more appropriate methods to engage students in learning. Tomlinson and Jarvis stated, "It's not a matter of *either* teaching the curriculum *or* teaching students. Good teaching is inevitably the fine art of connecting content and kids – of doing what it takes to adapt *how* we teach so that *what* we teach takes hold in the lives and minds of students" (pp. 16-17). These deliberations and the actions taken to enact those choices most certainly are based on self-determined behavior and autonomy supports. While there are other factors which had been associated with the development of a teacher's professional discretion, for the purposes of this study, the self-determined behaviors of professional discretion were specifically examined in terms of teachers' perceptions of control over content (selecting topics and instructional materials), selecting teaching techniques (pedagogy), determining the amount of student work, and setting standards for grading and achievement (assessment and evaluation of student learning). Therefore, the discussion of professional discretion that follows incorporates these topics.

The new realm of responsibility that teachers are caught in forces them to employ professional discretion to mediate the demands of opposing factors within the curricular zone of discretion. Boote (2006) stated that professional discretion "is centered on being able to decide what should be taught and being able to teach it; mediating competing demands while using learned expertise in order to meet the needs of students" (p. 462).

Therefore the external influence of curriculum guidelines on teachers' deliberations of practice is considered inseparable, "The teacher must consider the formal

curricula that have been mandated by a nation, state, district and school . . . where in most cases the mandated curriculum carries the force of the law" (Boote, 2006, p. 463). Boote illustrated three features of mandated curriculum which require teachers to have discretion over the curriculum:

1. All curricula are inherently vague, requiring a teacher to interpret the intentions of the mandated curricula and infer at least some of what is to be taught. Even supposedly 'teacher-proof curricula' require some degree of interpretation.
2. These curricula are often ambiguous, leading reasonable teachers to teach different things.
3. These curricula often require a teacher to teach more than available time allows, forcing a teacher to either prioritize among competing intentions (and probably not teaching some of the mandated curriculum) or attempting to 'cover' the entire mandated curriculum (and probably not enabling all students to learn mandated curriculum). (p. 463)

Among the reasons given for teachers needing discretion over curriculum, Boote also conveyed the professional need for teachers to be able to adjust instruction to the relevant idiosyncrasies of their students stating it would "simply be foolish not to adjust curriculum to their needs and ability to learn" (p. 463).

Making decisions regarding curriculum cannot be separated from instruction. Boote (2006) asserted a teacher's ability to make appropriate curricular decisions must also be related to improving their ability to teach chosen content. While the factors in the curricular zone of discretion indicate that a teacher must ultimately determine what will be taught, Boote did not imply that "a teacher will recognize that they are choosing (making a deliberate choice), that they will choose well or badly, or that they will be able to execute those choices as intended" (p. 465). For these reasons, Boote (2006) stated, "there is a difference between simply making choices about curriculum and consciously

making good choices that one's professional community delegates and recognizes as appropriate" (p. 465).

A teacher's autonomous ability to determine the amount of homework assigned and the grading and reporting practices to evaluate student work had been questioned in the recent push to implement standards-based reforms. This study not only considers a teacher's ability to determine the amount of student work, but also their decisions regarding evaluating that work to be integral in the practice of professional discretion. Often, teachers had to individually set standards for grading and achievement for the students in their classroom. However, in the move to common standards and assessment, the individual classroom teacher may not solely determine student mastery of content. Many researchers weighed in on the link between teachers' professional discretion and the effects of imposed grading policies resulting from standards-based reforms (Guskey, 2009; Marzano, 2006; Reeves, 2004). Reeves regarded the practice of grading students as one of the last frontiers of teachers' professional discretion in this era of educational reforms. Guskey, however, argued, "it is important to identify grading practices that may increase the consistency between teacher appraisals and state assessment scores so that these indicators provide complimentary rather than conflicting information" (p. 75). Guskey attempted to illustrate the link between curriculum control and grading (or outcome measures) by suggesting that teachers should be required to report student performance levels on specific educational goals instead of broad content areas. Standards-based progress reports (SBPRs) would differ from traditional letter grade, percentage, narrative, or pass/fail approaches. Guskey contended if teachers are required to asses student progress on precise goals or objectives which are aligned with state

determined curriculum, then they would be more likely to focus their instruction on them as well.

The professional community has also recognized the impact of testing on the practice of professional discretion. Gallagher (2009) conveyed that teachers seeking to mediate competing demands definitely take into consideration what being 'held responsible' really means – teaching to the state and federally mandated exams administered each spring.

> Knowing that the tests are coming in the spring and that they will cover an impossible amount of standards thrusts teachers into an unwinnable situation: either they teach all standards shallowly to make sure the content on the test is covered before students sit down to take the exams, or they slow down and teach deeply, thus sacrificing their test scores by not covering all the content that will be on the exam. With sanctions and economic penalties dangling overhead, job evaluations hanging in the balance, and results of each school's performance printed in the newspaper for the community to see, is it any wonder which path most teachers take? (Gallagher, 2009, p.10)

In this paradox of autonomy and accountability, one assumption is that "teachers are in the best position to mediate between the needs of students and external expectations of their learning, and professional development and policy should free teachers to help students. On the other side, teachers saw the proliferation of curriculum policies seeking to delimit their choices" (Boote, 2006, p. 462). Ingersoll (2003) argued "Factory like schools . . . deny teachers the autonomy and authority and flexibility necessary for caring, engaged, efficacious, committed teaching" (p. 43).

Boote (2006) asserted it is still an all "too common fallacy that teachers can teach whatever they want . . . Teachers are delegated the authority to make curriculum decisions because of the nature of teaching and schooling dictates that they must make decisions" (p. 465). On the other hand, school administrators and leaders, especially

those who directly evaluate teacher performance, also influence teachers' decisions and practice. Considering this realistic domain of curriculum practice, it is evident that those affecting the working conditions of teachers do not only influence their abilities, but also their decisions.

> The domain of curriculum practice is the most important influence on teachers' work, arguably more important than their individual attributes. The mandated curricula, student idiosyncrasies, community concerns, values, materials and resources, standard curriculum practices, and other factors affect the decisions teachers make and how they act. Each aspect of the domain of curriculum practice is shaped, if not determined, by curriculum policy and administrative decisions. (Boote, 2006, p. 471)

The concept of professional discretion takes into account a pedagogical orientation in which there is a continuous and mindful focus on teaching for the good of the student. Giroux (1988) argued that teachers need to become "transformative intellectuals" in their practice of teaching through a process of critical thinking that leads them to reflect upon the principles that structure classroom life and practice. Giroux further conveyed a conception of professional discretion in which teachers "raise questions about the principles underlying classroom methods, research techniques and theories of education" and do not simply occupy themselves with learning the "how to" with "what works" or with mastering the best way to teach a given body of knowledge (pp. 123-124). Van Manen (1994) advocated for a pedagogical orientation that would more readily allow the teacher to overcome the increasingly authoritarian culture of education reform and make learning meaningful for their students. Professional discretion in this view encompasses the ability to see what is significant in situations that cannot be easily predicted. By way of reflective practice, teachers can come to a deeper

understanding of the meanings situations have for students. Castle (2006) contended this conception of professional discretion

> calls upon teachers to act in the best interest of students and then reflect on whether the course of actions chosen was appropriate in promoting student growth and learning . . . pedagogical intent does not always insure doing the right thing. But it does insure an ongoing dialogue about what is the right thing to do. Pedagogical responsibility (professional discretion) calls upon the teacher to take a stand on issues and therefore, to stand out and advocate for what is good for students regardless of what is politically correct. (p. 1095)

Understanding the teacher as advocate, as a decision-maker, and a deliberate actor even within the restrictive curricular zone of discretion force us to examine the individual attributes which may affect a teacher's capacity to decide what actions are appropriate and the characteristics that enable the teacher to take those actions. In the accountability paradigm of education, the external pressures of curriculum control influence teachers' decisions about what to teach and how to teach. Under such influences, how does a teacher recognize the obligation and take action to mitigate the controlling forces?

Hilferty (2008) suggested teachers practice this concept of professional discretion when they participate in a discourse embedded in a shared practical consciousness. Walkington (2005) added that professional discretion is developed over the course of a teacher's career through reflective practice, which helps to ground the teacher in certain professional beliefs, in turn creating a strong teacher identity. Walkington suggested that a teacher's identity is distinct from the functional roles of a teacher, "A teacher's role encapsulates the things the teacher does in performing the functions required of him/her as a teacher, whereas a teacher's identity is a more personal thing and indicates how one identifies with being a teacher and how one feels as a teacher" (p. 54). Such a notion of

a teacher's identity must also include their sense of job satisfaction. Walkington also indicates that a teacher's identity is based on the core beliefs the teacher gathers in the course of his or her career. Those beliefs are continuously formed and reformed through experience. Walkington explained while "it is possible to become an expert practitioner by actually doing the job, by performing the skills," true professional discretion involves another intellectual dimension of reflective practice (p. 54). Such a view suggests that a teacher who develops professional discretion can remain flexible, committed to continuous learning, able and willing to participate in change, and maintain a sense of competence while mediating competing external demands.

Boote (2006) agreed that professional discretion is developed over the course of a teacher's career and that this development is contingent upon links between both psychological and social factors. To understand the characteristics of teachers who develop and enact professional discretion, we must also define the behaviors needed for the practice of professional discretion. Boote asserted that professional discretion is not only being able to decide what should be taught, but also being able to teach it. To do this a teacher must use their learned expertise to mediate competing demands and meet the needs of students. Boote outlined several individual attributes teachers need to make appropriate curricular decisions and act upon them. These attributes included competence (in several areas related to content, pedagogy, and interpersonal skills); a need for sufficient self-control to overcome fear or anxiety; and procedural and substantive autonomy. According to Boote, "teachers have procedural professional discretion when they are able to devise a minimally coherent curriculum and teach it" (p. 467). The level beyond procedural professional discretion is defined as "substantive

professional discretion" (p. 467). Boote asserted the teacher's ability to take a self-reflective perspective on practice is what distinguishes procedural discretion from substantive discretion" (p. 467).

The individual attributes of competence, self-control, and procedural and substantive autonomy align with the psychological needs for motivation as put forth by Deci and Ryan (2000). In order for an individual to continue to engage in challenging tasks, the needs for competence, autonomy, and relatedness must be met. Boote (2006), like Deci and Ryan, recognized the social context of the practice of professional discretion and identified the need for the teacher and their actions to be accepted by their professional community.

> Decisions about a capacity for professional discretion lie at the heart of decisions about professional competence . . . This view of professional discretion implies that for each individual there is a period of life within a community when discretion is limited. Once teachers are capable of critical reflection within a school culture we recognize them as individuated within that school culture. They develop 'a voice' within their professional community. (pp. 467-468)

It is evident that teachers who develop and practice professional discretion do not do so in isolation. Instead their deliberations take place within a professional community and the "voice" they develop influences others in this community of practice as well. Boote (2006) maintained, "professional creativity, the hallmark of innovative professional discretion, requires teachers to continually interact and reinvest their energies in progressive problem solving . . . " (p. 469).

The need for reflective practice and relatedness within a professional community is an essential ingredient of increasing a teacher's sense of competence. Reflective practice became a popular concept in the educational community after the 1980s reform

movements (Valli, 1997). Zeichner and Liston (1987) suggested that reflection "helps teachers understand and have control over the content and process of their work, and it develops the teacher as a decision-maker, who can help to define the direction of school" and thereby positively affect their community of practice (p. 26). Despite the persistent pressures of working in schools that may be too restrictive and have leadership that is unsupportive of their efforts to develop a satisfying teaching practice, Crocco and Costigan (2007) found that many teachers were remarkably resilient in finding ways to deal with challenges of teaching in an age of accountability. This study examined the aspect of resiliency needed for job satisfaction in terms of self-determination theory (Ryan & Deci, 2000).

Satisfaction

What are the effects of many years of sustained education reforms upon teachers' work, lives, efficacy and satisfaction? To answer this question, we must first recognize the link between motivation, self-determined behaviors, and job satisfaction. A teacher working within the shrinking curricular zone of discretion must use his or her expertise to mediate, and at times mitigate, the multiple external factors when determining the appropriate content to be taught and the manner in which to teach it. This practice of professional discretion is fostered by the support of several psychological needs: competence, autonomy, and relatedness (Deci & Ryan, 2000). According to Deci and Ryan, a teacher's motivation to consistently engage in difficult tasks and the related sense of satisfaction is determined by the fulfillment of these needs.

The Link Between Motivation And Satisfaction

As Dinham and Scott (1998) reported, job satisfaction and motivation are two concepts that are often and understandably confused. For the purposes of this study, motivation refers to a stimulus for behavior and action in the realm of a particular context. In this study that particular context is the curricular zone of discretion. Satisfaction (and dissatisfaction) relate to the product of teachers' deliberations and actions taken within this identified context of teaching practice. Therefore, it is recognized that both motivation and satisfaction are inextricably linked to one another. A detailed examination of the literature on motivation, including the debate over the influences of extrinsic versus intrinsic motivation, is outside the scope of this study. However, where relevant, the work of researchers and motivation theorists are brought into the discussion.

Several researchers recognized the link between motivation and a teacher's actions and perceptions of satisfaction. Bogler (2001) recognized that the education mission is largely dependent upon the way teachers feel about their work and how satisfied they are with it. Other researchers (Heller, Clay, & Perkins, 1993) also suggested schools should give more attention to increasing teacher job satisfaction if educational reforms are to persevere. Bogler (2001) deemed that more responsibility lies with school-based administrators to become effective transformational leaders in the process of reform. Bogler stated, "overall, teachers report greater satisfaction in their work when they perceived their principal as someone who shares information with others, delegates authority, and keeps open channels of communication with the teachers" (p. 666). These findings are in line with the fulfillment of the needs of autonomy and

relatedness. Bogler (2001) reported a link between teacher's feelings of competence and satisfaction, stating "teachers use descriptions of job satisfaction that deal with how they feel about coming to school every day and their feelings of success, or lack of it, that they carry with regard to their performance with students" (p. 667).

Need-fulfillment also plays a significant role in satisfaction as noted in the well-known motivation works of Maslow (1970) and Alderfer (1972). According to their research, job satisfaction is an indicator of the degree of need fulfillment experienced by the individual. Efficacy beliefs have also been documented as significant determinants in shaping a teacher's sense of job satisfaction (Bandura, 2008). The agentic perspective of social cognitive theory is particularly important in this study because this type of perspective allows us to recognize the individual as an active agent who deliberates, determines actions, and then further adapts behaviors dependent upon the outcomes of actions taken (Bandura, 1986). Therefore, this study takes into consideration this research basis to examine the role of self-determined behaviors and how they may contribute to development of professional discretion. Bandura concurred that individuals are active agents within a social context who seek to intentionally influence their own functioning and the course of environmental events. In this view, teachers are contributors to their working circumstances and not just products of their external factors. Bandura (2008) stated, "Among the mechanisms of agency none is more central or pervasive than beliefs of personal efficacy. This core belief is the foundation of human motivation, well-being, and accomplishments" (p. 167). This agentic perspective of social cognitive theory is especially important when considering teachers' working within the curricular zone of discretion where they must mediate competing demands.

Regardless of deliberated course of action, satisfaction will not be attained unless teachers believe they can produce the desired outcomes. They have little incentive to pursue ambitious goals and to persevere in the face of challenges unless they are motivated. The implications of social cognitive theory suggest that whatever other factors serve as guides and motivators, consistent teaching practices are rooted in the core belief that teachers have the power to affect changes by their actions.

Other theories of motivation (Bruner, J. S., Goodnow, J. J., & Austin, G. A. 1962; McClelland et. al., 1953), assume that people initiate and persist at behaviors to the extent that they believe the behaviors will lead to certain reinforcements, desired outcomes or goals. Like these other theories, self-determination theory (SDT) (Ryan & Deci, 2000) differentiates this concept of goal-directed behavior, but it takes a very different approach to defining why such action is taken or sustained. SDT uses the concept of innate psychological needs for the goals or directions people take and the regulatory-processes that result. According to SDT, a critical issue in the effect of goal pursuit and attainment is the degree to which people are able to satisfy the basic psychological needs of competence, autonomy, and relatedness as they pursue and attain their valued outcomes (Deci & Ryan, 2000).

Intrinsic motivation, as defined by SDT is innate: "the inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn" (Ryan & Deci, 2000, p. 70). Ryan and Deci contended that the construct of intrinsic motivation depicts "a natural inclination toward spontaneous interest, exploration, assimilation, and mastery that is essential to cognitive and social development" (p. 70). Yet, despite these innate tendencies, there does exist evidence that

"maintenance and enhancement of this propensity requires supportive conditions, as it can be fairly readily disrupted by various nonsupportive conditions" (p. 70). Thus, based on this premise, this study does not consider the causes of intrinsic motivation as a concern. Instead, as illustrated by Ryan and Deci, "the conditions that elicit and sustain, versus subdue and diminish this innate propensity" are examined in relation to the practice of professional discretion and the perceptions of satisfaction (p. 70).

de Jesus and Lens (2005) found that not only does teacher motivation had a definitive effect on student motivation and therefore achievement, but that teacher motivation is a predominant factor for the advancement of educational reforms. These authors stated, "First, motivated teachers are more likely to work for educational reform and progressive legislation. Second – and perhaps more importantly – it is the motivated teacher who guarantees the implementation of the reforms originating at the policy-making level" (p. 120). In order for teachers to develop the capacity to decide what actions are appropriate and the ability to take those actions, they must first be motivated by a recognition of the obligation to act and then exhibit self-determined behaviors in order to take needed actions.

Some commentators, especially those espousing the views of policy centralizers, though had argued it is the teachers' lack of motivation that has hindered reform efforts. Is it a lack of motivation or diminished motivation due to constant challenges with little reward, reinforcement, or autonomy support? Day and Smethem (2009) found that reforms in education over the last 20 years had a negative impact on teachers' morale and sense of professionalism. In this time, most teachers experienced an intensification of work as a consequence to the consistent reform mandates, and "the persisting effect has

been to erode teachers' autonomy and challenge their individual and collective professional and personal identities" (p. 142).

Crossman and Harris (2006) indicated that teachers were less satisfied than any other professional group. Klassen and Anderson (2009) also found in a comparison study spanning more than thirty years that teachers' today are more concerned than their predecessors with negative satisfiers, or factors that were expected to contribute to job satisfaction but were, to some extent, absent. de Jesus and Lens (2005) noted that teachers suffer more than any other professional groups from an "occupational lack of motivation" (p. 119). But teachers, like other groups of professionals, most likely do not enter their chosen field with this occupational lack. If anything, people who choose the career of teaching are guided by an innate sense of civil service. Ryan and Deci (2000) concurred that teachers especially were inherently curious, vital, and self-motivated. These researchers argued that teachers were in general inspired and strive to learn, extending themselves to master new skills and apply their talents responsibly. Yet, it is also clear in the field of teaching this drive to learn and be challenged can be diminished by ever increasing challenges with little reward, reinforcement, or fulfillment of basic needs. As Ryan and Deci explained, individuals sometimes reject growth and responsibility and display a lack of determinism due to increased stresses and no perceived gain. This lack of determinism can in turn serve to inhibit the development of professional discretion and job satisfaction.

McClelland, Atkinson, Clark, and Lowell (1953), some of the most prominent researchers in achievement motivation, also offer insight into the connection between teacher motivation and satisfaction. These researchers sought to understand why some

people continue to strive for excellence while others do not. They found motivation is the key factor in this dilemma. According to McClelland et al, motivation concerns energy, direction, and persistence – all aspects of activation and intention. Anderman and Wolters (2006) suggested that people are motivated to act when the difference between an individual's goal and the individual's self-perceived performance on a task is large. The individual then becomes motivated to reduce this incongruity. Consider the teacher faced with curriculum reform mandates, a textbook that does not match those curriculum reforms and one that she had no voice in choosing, and a looming high-stakes test, of which student results will be used in her evaluation. Yet the teacher's expertise and knowledge of the students in her own classroom do not match these imposed demands. This is one scenario in which teachers may or may not recognize the obligation to decide what actions are most appropriate for their students and take steps to mitigate these external forces.

Taking action in such a scenario requires professional discretion and the motivation to deal with new and varied experiences and the consequences of those actions. Teachers can be moved to practice professional discretion because they see an inherent value in their own professional growth, they recognize the obligation imposed upon them by incongruent factors, or because there exist external forces coercing their decisions to act, such as the external factors of curriculum control: curriculum guidelines, textbook adoption policies, testing policies, and/or leadership practices. Self-determination theory (SDT) provides a theoretical framework in which to examine these factors affecting teachers' deliberations, actions, and related sense of satisfaction or dissatisfaction of outcomes.

Self-Determination Theory

Accordingly, this study focuses on the motivational implications of educational reforms on teachers' perceptions of professional discretion and satisfaction by examining the effects of external factors from the theoretical position of self-determination theory (Ryan & Deci, 2000). Ryan and Weinstein (2009) stated, "self-determination theory (SDT) has long argued that using controlling external contingencies to change behaviors or enhance outcomes is typically ineffective over the long term, and yields many hidden costs" (p. 225). Although many researchers recognized the damages associated with top-down, controlling policies, few had a theoretical or empirical basis for understanding these effects. SDT supplies both of these.

Self-determination theory (SDT) is an empirically based macro-theory of human motivation that has been primarily concerned with promoting interest in learning, growth in competencies, and overall well being (Ryan & Weinstein, 2009). The premise of SDT maintains that people possess inherent and deep propensities to assimilate knowledge and develop new skills. SDT also acknowledges that these natural propensities can be either supported or undermined by social contexts, therefore situating the active agent of self within a social context. In this manner, SDT takes interest in both the external and internal factors that either facilitate or forestall the assimilative and growth-oriented processes in people. Niemiec and Ryan (2009) argued that "SDT is of much import in the domain of education," a domain in which external controls are regularly imposed upon teachers (p. 134). All external factors of curriculum control, including school leadership, the use of evaluations, rewards and other external pressures, are thus of

particular interest within SDT as they impact teachers' potential to learn, develop, and enact professional discretion.

Ryan and Weinstein (2009) explained the importance of the dynamic between control and autonomy within self-determination theory (SDT):

> distinguishes between *intrinsic motivation*, doing an activity for its inherent satisfactions, and *extrinsic motivation*, doing and activity for its instrumental value. Within SDT, extrinsic motives are further differentiated into those that are heteronomously regulated or *controlled* versus those that are more self-regulated or *autonomous.* (p. 225)

For the purposes of this research study, SDT is viewed as an integral means to provide further understanding of teachers' more autonomous forms of motivation, which may in turn lead to more positive outcomes of greater competence and creativity, support the practice of professional discretion, and enhance satisfaction.

According to SDT, there are three basic psychological needs that when satisfied enhance intrinsic motivation and lead to autonomous internalization of behaviors that could be initially extrinsic in origin (Ryan & Deci, 2000). Ryan and Weinstein (2009) suggested that autonomous motives, and the energy and engagement associated with them, are supported by the social contexts that enhance experiences of competence, autonomy, and relatedness. Ryan and Deci maintained these three main psychological needs inherently illustrate the what (content) and why (process) of goal pursuits. Katz and Assor (2007) summarized these three psychological needs as follows:

> The need for autonomy refers to the need to feel a sense of full volition and 'choicefulness' regarding one's activities and goals, a feeling that emerges when one's actions and goals are experienced as emanating from one's authentic self. The need for relatedness refers to the need to feel closely related to other people. The need for competence is the need to be effective in one's interactions with the environment, and to feel that one is capable of mastering challenges. (p. 431)

Deci and Ryan (2000) explained "self-determination theory begins with the assumption that people are active organisms with innate tendencies toward psychological growth and development who strive to master ongoing challenges and to integrate their experiences into a coherent sense of self (p. 1). However, Deci and Ryan recognized that this natural human tendency does not operate automatically. Instead it requires ongoing support from the social environment in order to function effectively. In other words, the social context of the individual can either support or thwart the natural tendencies toward active engagement and growth. Secondly, not only does SDT consider innate tendencies for growth, which are shown by most who enter into teaching, but SDT also recognizes the greater factors in the realm of the social context of teaching. Teachers, as compared with other professionals, exist in a unique work setting that requires a great deal of daily social interaction that definitely affects the teacher's determination and practice of professional discretion.

Kurt Lewin (1999) was one of the first researchers to consider the forces of social context as a determinant of behavior. For Lewin, behavior was determined by the totality of an individual's situation. Lewin recognized a person existed within a social 'field' that is defined as the totality of coexisting aspects and the factors within this field are conceived of as mutually interdependent. Individuals will then behave differently according to the way in which tensions between perceptions of the self and of the environment are worked through. Lewin contended that, in order to understand one's behavior, the whole psychological field within which he acted had to be taken into account. Hence, the social context, or field, within which a teacher must make decisions and mediate factors daily, is of significance. Lewin, like Deci and Ryan (2000),

considered the individual's underlying forces, or needs, as having considerable effect on a person's decisions and determinations of enacted behavior. Lewin drew together insights from topology (e.g. lifespace), psychology (need, aspiration etc.), and sociology (e.g. force fields – motives clearly being dependent on group pressures). These three aspects of his thought were not separable. Clearly, the nature of motivation affecting the practice of professional discretion and overall satisfaction cannot be examined in exclusion of the social context, or 'field', within which teachers conduct their daily work.

The Need for Competence

One condition, which can elicit or sustain motivation, is the feeling of competence. The need for competence is "the need to be effective in one's interactions with the environment, and to feel that one is capable of mastering challenges" (Katz and Assor, p. 431). Deci and Ryan (2000) primarily argued that social-contextual events (e.g., feedback, communication, rewards) were significant and conducive toward feelings of *competence* and can enhance motivation. Deci and Ryan's research revealed that "not only tangible rewards but also threats, deadlines, directives, pressured evaluations, and imposed goals diminish intrinsic motivation because, like tangible rewards, they conduce toward an external perceived locus of causality" (p. 70).

Deci and Ryan (2000) found effectance-promoting feedback, optimal challenges, and freedom from demeaning evaluations facilitated intrinsic motivation, which then lead to more consistent engagement in challenging tasks. Marshall (2005) also reported that high-stakes evaluations tended to shut-down adult learning and diminish acceptance of reforms. Marshall concluded that the diminishing effects of negative performance

feedback were related to the fact that the evaluator, usually the principal, owns the feedback giving little autonomy for future actions or support for reflective practices.

Teacher efficacy has also been linked to competence enhancement. A teacher's self-efficacy influences his or her decisions regarding participation, active engagement, and integration of new pedagogy into existing practice. Bandura (1997) stated self-efficacy beliefs:

> Influence the course of action people choose to pursue, how much effort they put forth in given endeavors, how long they will persevere in the face of obstacles and failures, their resilience to adversity, whether their thought patterns are self-hindering or self-aiding, how much stress and depression they experience in coping with taxing environmental demands, and the level of accomplishments they realize. (p. 3)

Teacher self-efficacy must be a consideration in a discussion of factors related to competence. A teacher's sense of self-efficacy may promote or inhibit the practice of professional discretion in the decision-making process. Leroy, Bressoux, Sarrazin, and Trouilloud (2007) found that teachers' perceived pressures at school had a significant negative impact on teachers' sense of self-efficacy, and this in turn was associated with a decline in autonomous behaviors. Teachers make judgments about their ability to perform certain actions and evaluate the desired outcome before deciding actions to take or attempting to mediate or mitigate external factors. Based on these judgments, teachers decide what to teach and how to teach. These judgments had direct consequences on teachers' satisfaction and, therefore, cannot be excluded as a factor.

Not only is teacher self-efficacy a major factor in the practice of professional discretion, but teacher belief systems also play a role in teachers' perceptions of competence. Richardson (1994) concluded that ignoring teachers' beliefs in implementing reforms could lead to disappointing results due to the variation of teachers'

implicit theories related to their believed competencies. These implicit theories, based on their own teaching expertise, may be at odds with curriculum developers and supervisors. For instance, some teachers when implementing new curriculum domesticate it to match their own implicit theories of effective instruction thereby reinforcing their own set of competencies. In other words, every teacher practices some form of professional discretion and takes no curriculum change wholesale. Individuals have their own ideas as to how the curriculum fits the needs of the students. Regardless of the approach taken to integrate proposed changes with existing teacher belief systems, Richardson argues that it is helpful to understand how teachers think in action and understand how teachers' implicit theories might affect behavior.

Teacher belief systems and self-efficacy must be considered as influences upon teachers' perceptions of competence, which in turn may affect teachers' practices of professional discretion, particularly continued engagement in the challenging tasks put before them in an era of ever-changing curriculum reform. Gregoire (2003) agreed that teachers' pre-existing subject matter beliefs constrain them from adopting practices that conflict with those beliefs even when they positively value the reform they are trying to implement. Gregoire suggested that teachers' beliefs function to define tasks when the goals and purposes of such tasks are unclear. One such issue, which has increasingly become unclear to teachers in this era of reform, is the prevalent use of one-size-fits-all standardized assessments. Bogler (2001) found that one of the main defining factors contributing to a teacher's sense of competence was their ability to define student achievement, a finding that also draws implications on teachers' satisfaction and efficacy.

However, also existing within the balance of this equation between a teacher's sense of competence and student achievement is the variable of high-stakes testing (HST). Nichols and Berliner (2007) reported that HST traditionally served as "shame-based" motivators that focused on comparing schools in a public manner and on threatening school administrators and teachers. Ryan and Weinstein (2009) explained HST reforms represented "a motivational approach" to change behaviors since there is not only an emphasis placed on test scores, but the reforms also attempt to implement strategies to enhance changes in behavior through contingent rewards and sanctions (p. 225). When testing results are connected to rewards or sanctions they are a significant controlling factor (Ryan & Brown, 2005) therefore working against teachers' autonomy supports. Ryan and Weinstein reported that "although controlling events may prompt immediate compliance, people tend to exert the least effort required to gain rewards or punishments, and a side-effect is often diminished self-motivation, investment, and the performance enhancements that stem from these" (p. 226).

Reform strategies that sought to control have not only been empirically shown to undermine a teacher's perceptions of competence and more autonomous and engaged forms of motivation, but also have been linked to lower teacher morale and educational innovation (Ryan & Brown, 2005). Ryan and Weinstein (2009) concluded, when teachers were subjected to such controlling climates, they reported less interest, more anxiety, and less desire to engage in an endeavor beyond what was needed to protect self-esteem. These findings illustrated that controlling regulatory environments do in fact damage teachers' perceptions of competence and motivation.

Teacher belief systems also serve to define a teacher's identity within the realm of teaching practice and forming competence. In order to practice professional discretion, teachers must form an identity of purpose, one that supports their recognized obligation to act. Parkison (2008) postulated that teachers, especially in the public school systems, are facing a pending identity crisis. According to Parkison, "Issues of accountability, high-stakes testing, inclusion of children with exceptionalities and standards-driven national or state curricula have impacted the space within which teachers perform" and create their identity (p. 1). Within the "context of institutional role scripts and political influences," Parkison questioned whether teachers "choose to become determined by outsides forces rendering them incapable of change . . . Do they forfeit their rights and responsibilities?" (p. 1). Apple (2006) affirmed Parkison's argument that teachers found society placing more demands upon them and their work that were not previously confronted by teachers, "The cultural and professional scripts that have traditionally been available to teachers are being replaced by more 'efficient' and automated scripts," which challenge and diminish existing perceptions of competence (p. 52). It is within this social context of teaching practice that teachers must choose to either become determined by the external forces of curriculum control and thereby forfeit their compiled competence, or choose to express their self-conscious and their freedom by acknowledging and exercising their professional discretion. This research study examines the interplay of several factors within this complex and contradictory context by analyzing the links between teachers' self-determined behaviors and the external factors of curriculum control that influence a teacher's practice of professional discretion and satisfaction.

The Need for Autonomy

Teacher autonomy was discovered as a common link when examining teacher satisfaction, professionalism, motivation and empowerment. Autonomy emerged as a key factor as well when examining the literature on educational reform initiatives, with some recognizing that "granting autonomy and empowering teachers was an appropriate place to begin in solving the problems of today's schools" (Pearson & Moomaw, 2005, p. 37).

In contrast to the need for competence, opportunities for self-direction provided by choice and acknowledgement of feelings were found to enhance intrinsic motivation because they allowed people a greater feeling of autonomy (Deci & Ryan, 2000). The notion of autonomy was a central concern in self-determination theory and therefore central to the definition used in this study of professional discretion. Ryan and Deci (2000) specified "feelings of competence will not enhance intrinsic motivation unless accompanied by a sense of *autonomy* or, in attributional terms, by an internal perceived locus of causality" (p. 70). Thus, according to SDT, "people must not only experience competence or efficacy, but they must also experience their behavior as self-determined" (p. 70).

Parkison (2008) also noted the relationship of autonomy to teacher satisfaction stating "society and the government's constituted authorities, in particular, may be pushing teachers into a slow psychological death by restricting their space for performance and reflection. In this scenario, everything for the teacher becomes ominous, threatening, and beyond control" (p. 53). Parkison noted, "teachers may find a solution to this overwhelming situation is to withdraw, to psychically retreat into

institutional dysfunction or into alienation through capitulation" (p. 55). Parkison claimed this retreat is a form of "narrative determinism," noting however that it is important to recognize that this is also a self-determined path. He concluded, "either alternative leaves teachers without happiness, joy, or hope for future institutional and psychic re-integration" (p. 55). Adding to this lack of determinism, Parkison suggested is the fact that teachers are "evaluated by and held accountable to a set of standards that lack any connection (objectivity) to their experience" (p. 55).

Pelletier and Sharp (2009) found "a growing body of research was focusing on the teachers themselves, and how their social context affects them and their teaching behaviors" (p. 175). More specifically, these researchers examined school administrators as part of a teacher's social context, and found based on the level of controlling styles and attitudes, that teachers' autonomy can be significantly thwarted leading to less autonomous teaching behaviors like professional discretion, with corresponding negative results on other teacher behaviors. Bogler (2001) also addressed the need for autonomy supports from school-based leaders. Bogler noted the link between "the sources of teachers' job dissatisfaction" and "structural and administrative factors" adding "teacher job satisfaction is a determinant of teacher commitment and that it must be present before the individual develops organizational commitment" (p. 666). The concept of organizational commitment is also addressed by Deci and Ryan's (2000) need for relatedness. Pelletier and Sharp (2009) found similar results confirming pressures perceived by teachers from above affected their choice of motivational strategies and behaviors in class, conforming in many cases more strictly to curriculum guidelines. Pelletier and Sharp conveyed that the effects of the pressures on teachers' work

motivation were mediated through the connection between administrative pressures within the workplace and teachers' autonomy-supportive behaviors. Pelletier and Sharp stated, "the more teachers felt pressured by colleagues, the administration and constraints of the curriculum, the less self-determined was their work motivation" (p. 177-178). Pelletier and Sharp reported "that the more teachers perceived job pressure (defined as time constraints, pressure from school administrators, and evaluation based on student performance), the less they felt their basic needs for competence, autonomy, and relatedness were satisfied" (p. 178).

The Need for Relatedness

Although autonomy and competence supports are highly valued for producing increased intrinsic motivation, a third factor, relatedness, also bears on this dynamic within the social context of teaching. SDT hypothesizes that intrinsic motivation to engage in challenging tasks will more likely flourish in interpersonal settings characterized by a sense of security and relatedness (Ryan & Deci, 2000). This is especially so for the social and societal contexts in which teachers work. Ingersoll (2003) recognized that schools "are not simply organizational entities engineered to deliver academic instruction" but are rather social institutions akin to small societies (p. 11). Ingersoll argued "to fully understand control in schools, it is necessary to examine the control of the social aspects of the work of teachers in schools" (p. 12). Taylor and Tashakkori (1995) found the best predictors of teachers' sense of self-efficacy within the social context of schools were faculty communication and principal leadership.

Caprara, Barbaranelli, Borgogni, and Steca (2003) suggested that the attainment of satisfaction depended upon people's capacity to "operate in synergy and in concert

with others . . . In particular, when the functioning of a social system depends largely on the ability of people to work cooperatively in the pursuit of common goals . . . the belief in the collective efficacy of the group or the system as a whole may prove to be critical" (p. 821). The need for relatedness was also apparent in the findings of Dinham and Scott's (1998) research, in which they reported positive relationships and feeling part of a collegial, supportive environment were significant satisfiers. Zembylas (2003) concurred stating, "a teacher is an autonomous individual, constantly moving between the need to connect with other colleagues and the need to maintain a sense of individuality" (p. 107).

Pak and Tan (2009) also recognized the need for relatedness and shared goals as significant to the success of a community of practice:

> Everyone participates and contributes to a world, which is socially and culturally structured and constantly reconstituted by the activities of all those who are involved in it. In such a world, to know is to have the capability of participating in activities with a certain level of competence in the complex web of relationships among people. (p. 37)

These researchers argued that a sense of relatedness by way of a community of practice must be present for teachers to continue their learning, have the confidence to apply new learning, and thereby gain expertise. Pak and Tan explained that a community of practice is a group of teachers who have shared concerns, a set of problems, shared passion to overcome those problems, and who deepen their knowledge and expertise by continuing to interact. Hilferty (2008) concurred that teachers' sense of professionalism was empowered when they engaged in social processes attempting to control their worklives.

Parkison (2008) argued that the majority of responsibility to develop this sense of shared purpose lies with the teacher suggesting, "the recognition of a social mission legitimates the teacher's authentic identity" (p. 59). However, Parkison proposed that

those who identify with a purpose contrary to the external curriculum control factors might have to take the option of becoming dissidents in a sense.

> By asserting a counter-hegemonic paradigm . . . the space within which teachers develop their identity opens. This opening of the micro-political space requires a courageous act on the part of the teacher . . . By acknowledging the freedom that comes from accepting responsibility within a system, teachers can become empowered agents, co-equal partners, in the social system. This would entail a positive action on the part of teachers. Rather than capitulating to the constituted authorities, teachers within the educational institution must acquire a permanently critical attitude toward the function of the educational institution. Empowerment begins with the recognition of responsibility and grows within an ethical relationship to society. (p. 59)

To summarize, Ryan and Deci's (2000) self-determination theory framework "suggests that social environments can facilitate or forestall intrinsic motivation by supporting versus thwarting people's innate psychological needs" (p. 71). This framework has demonstrated strong links between motivation and satisfaction of the needs for competence, autonomy, and relatedness. These internal factors may have direct repercussions on a teacher's practice of professional discretion and sense of job satisfaction.

As Ryan and Weinstein (2009) proposed, perhaps it is time to take a different approach by incorporating self-determination theory (SDT) to work with stakeholders, including parents, administrators, teachers, and most importantly the students themselves. Instead of threatening or seducing schools to improve through external contingencies, educational communities could work together to identify barriers to change and define the goals to which they aspire. Such an approach would actively empower and support change from within. Not only would this result in greater engagement and knowledge,

but such practices would also emulate the democratic processes and responsibilities for which schools are charged to instill in students.

Summary

Few issues in education received more attention and are more controversial than who controls teachers' work, how much say they have over their work, and how much they should have (Ingersoll, 2003). Federal, state, and district initiatives to raise standards and improve curriculum through test, textbook, and course content policies raise complex issues about education reform and the effects on teacher authority and morale. These reform policies, intended to improve curriculum quality and standards, may have the unintended consequence of undercutting school-based curriculum control and the professional discretion of teachers; they may have little effect on curriculum at all, positive or negative. Yet, any reform initiative should first examine these effects and seek to gain the perspective, the practical foundation of experience, from the community of teaching professionals.

To the extent that curriculum control policies operate as intended, centralized districts (as the one selected for this study) can be expected to have greater uniformity in course content and more consistent achievement standards across schools. In the school district selected for this study, the alignment of curriculum control policies around textbooks and standard scope and sequence guidelines and the use of relatively conventional testing formats were consistent with traditional conceptions of curriculum.

What is the extent to which the propositions and assumptions of curriculum control policies actually affect the content and the teaching practices selected by teachers once they enter their classroom and shut the door? The intent of this study is to answer

this question by systematically examining the assumptions inherent in the debate over who controls teachers' work. Therefore, this research investigated the impact of centralized curriculum control policies, specifically those relating to curriculum guides, textbook adoption, testing, and school-based leadership practices, by comparing teachers' beliefs and attitudes about professional discretion and satisfaction.

CHAPTER 3 – METHODOLOGY

Research Design

This research compared teachers' ratings of professional discretion and satisfaction under differing conditions of curriculum control (high, medium, and low) in one central Florida school district. The research sought to answer three key questions in relation to teachers' perceptions of professional discretion: first do perceptions differ in relation to years of teaching experience, secondly do perceptions differ in relation to level of teaching (middle or high school), and lastly do perceptions differ in relation to the varying degree of curriculum control according to subject area.

The subject area comparison was considered likely to be illuminating because English (language arts, reading and writing), mathematics and science courses were differentially regulated in the chosen school district compared to other subjects (social studies, the arts, and various elective courses) not directly associated with high-stakes testing. Mathematics, English, and science content and achievement standards were subject to greater control because these subjects were tested and readily progress monitored more than other subjects.

Teacher responses on questionnaire items were used to assess claims supporting and critical of curriculum control factors. If teacher responses indicate curriculum control policies influenced classroom content but did not show detrimental effects on job-related attitudes, then perhaps some of the virtues of top-down curriculum control assumed by "policy-centralizers" may in fact be real. If, on the other hand, teachers react negatively to centralized curriculum control, then this approach to reform – or at least the

elements teachers find objectionable – might be redesigned to be more compatible with teachers' concerns and professional values.

Varying Degrees of Curriculum Control Among the Subjects

For analytical purposes, the researcher placed each subject area (mathematics, English, reading, language arts, science, social studies, electives, etc.) in three categories of control: high, medium, and low. Figure 1 provides a synopsis of curriculum control characteristics. In the section to follow, the researcher detailed the varying policy characteristics of control for each of the high, medium, and low categories examined in this study. Since the medium control subjects have some of the policy characteristics of both high and low control subject areas, the medium control subjects are described last.

	Varying Degrees of Control		
	High	Medium	Low
Policy Characteristics	• Detailed curriculum guides • Single textbook adoption • Use of course-based testing and high-stakes standardized tests to monitor student progress / achievement	• Specified curriculum guides • Do have textbook adoption policies, but have more freedom to choose supplementary materials • District-wide common assessments used for program evaluation; subject is not directly assessed by high-stakes, standardized	• Nonprescriptive curriculum guides • Greater freedom to choose instructional materials • No district-wide common course assessments and subject not directly assessed by high-stakes, standardized testing
Subject Area(s)	• English (Language Arts and Reading in the middle schools) • Math • Science	• Social Studies • Geography • Civics • American History • World History • American Government • Economics	Termed "elective" or "non-core" subjects (for example): • The arts – music, drama, drawing, dance, etc. • Physical education • Home economics • Health • Business / technology

Figure 1 Synopsis of curriculum control characteristics.

Policy Characteristics of the High Control Subjects

Three subject areas considered to be high control subjects in the sample were: mathematics, science, and English (including language arts, reading, and writing courses). In the chosen school district, the courses within the subject area of English were differentiated depending upon the level of school (middle, high school) and were dependent upon student need as indicated by the state standardized test, the Florida Comprehensive Achievement Test (FCAT). For instance, all students who scored below proficient on the FCAT (levels 1 or 2) were identified to take separate reading classes and/or received additional support. At the middle and high school levels, most students scoring below proficient (FCAT levels 1 or 2) were placed in a separate reading class in addition to having a language arts class.

All of the above three subject areas (mathematics, science, and English) had district-wide guidelines requiring schools to offer the same set of district-prescribed curriculum with detailed guidelines on particular course topics, sequences and pacing, and with a single textbook adoption and approved materials lists. Each subject area also used course-based testing on a district-wide level to monitor performance and specify district-wide standards.

Each of the high control subject areas had detailed curriculum guides, sometimes termed "curriculum maps." While the district curriculum guides differed in how content was organized and the level of detail at which it is prescribed, each guide of a high control subject area prescribed sequences of units, topics, pacing and lesson ideas. The curriculum guides in the school district sampled range from 9 pages to about 48 pages of material per course (not including terminology pages).

Figure 2 shows an excerpt of topics from a curriculum guide from a high control subject area. The mathematics excerpt shows the objective listed as an "essential question" and sub-objectives listed as "learning targets / skills" for linear equations, one out of thirteen "organizing principles" prescribed for the course. The guide also indicates where particular objectives and skills are specified in the state's curriculum frameworks, also known as benchmarks.

CURRICULUM MAP
Algebra 2

UNIT / ORGANIZING PRINCIPLE	Linear Equations	PACING: 1st Nine Weeks 45 days	
ESSENTIAL QUESTIONS:	Can the student identify the essential parts of a linear equation and determine how they are used to solve real world problems? Can the student analyze and solve a real life situation involving a constant rate of change?		
CONCEPTS / CONTENT	LEARNING TARGETS / SKILLS The student will:	BENCHMARKS Linked to statement	KEY TERMINOLOGY
• Linear Equations & Graphs • Literal Equations	• write the equation of a line given two points, a point and a slope, or a graph	MA.912.A.3.10	Prerequisite skill: Vocabulary: graph a line Slope y- intercept Ordered Pair Coordinate Plane Linear Function Slope-intercept form Standard form Direct variation Absolute value Domain Range Compound inequality
	• find the equation of a line parallel or perpendicular to a given line through a given point on the new line	MA.912.A.3.10	
	• solve literal equations for a specified variable	MA.912.A.3.3	
	• solve and graph linear equations	MA.912.A.2.6	
	• solve and graph linear inequalities in one and two variables	MA.912.A.3.6 MA.912.A.2.5	
	• solve and graph absolute value equations in one and two variables	MA.912.A.3.6 MA.912.A.2.5	
	• solve problems involving direct variation.	MA.912.A.2.12	
	• know equivalent forms of real numbers (absolute value) and rational and irrational numbers	MA.912.A.1.1	
	• Perform operations on real numbers (absolute value)	MA.912.A.1.4	
	• Symbolically represent and solve multi step equations	MA.912.A.3.5	

Figure 2 Excerpt showing selected high school mathematics topic from a high control curriculum guide.

Figure 3, is presented to provide another example of a curriculum guide from a high control subject in the middle school level, which displays many of the same detailed characteristics as Figure 2: sequences of units, topics, pacing and lesson ideas.

CURRICULUM MAP
6th Grade Comprehensive Science

UNIT/ORGANIZING PRINCIPLE: Body of Knowledge-The Nature of Science		**PACING: August – June** *These benchmarks should be integrated throughout the course.*	
ESSENTIAL QUESTIONS: Big Idea 1 1. What makes scientific inquiry a multi-faceted activity? 2. What is meant when we say that the processes of science frequently do not correspond to the traditional portrayal of "the scientific method?" 3. Why is scientific argumentation necessary in scientific inquiry and what role does in play in the generation and validation of scientific knowledge? 4. How does an observation differ from an inference?			
CONCEPTS/ CONTENT	**LEARNING TARGETS/SKILLS**	**BENCHMARKS**	**KEY TERMINOLOGY**
The Practice of Science ***Very Important:*** ***The Nature of Science goes far beyond the teaching of the Scientific Method.*** ***These benchmarks are very important for students to understand because they explain how the scientific world really operates.***	• define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	**SC.6.N.1.1**	Control Hypothesis Dependent Variable Independent Variable Data Data Analysis Conclusion Scientific Method
	• know there are proper safety techniques and rules that must be followed when conducting an experiment. • understand how to locate all safety equipment in the science lab.	**VCS**	
	• explain why scientific investigations should be replicable.	**SC.6.N.1.2**	
	• explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.	**SC.6.N.1.3**	
	• discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation.	**SC.6.N.1.4**	
	• recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.	**SC.6.N.1.5**	

Figure 3 Excerpt showing selected middle school science topic from a high control curriculum guide.

Each high control subject area delineated had a single textbook adoption per course. District textbook adoption committees composed mainly of teachers, community members or parents, and district curriculum specialists made textbook adoption decisions. In the school district sampled, these committees chose from a list of approved materials provided by state adoption committees.

All high control subject area courses were subject to district-wide course-based tests. Some of these tests, science and math in particular, were developed by teachers and district specialists and reflect district prescribed course content. Thus, each course in each subject area (e.g. biology 1, algebra 1, etc.) had an end-of-course test or "common assessment" required of all students. Additionally, other testing not designed by local teachers and curriculum specialist was also used in the high control content areas. This additional testing is as follows:

1. Reading – Florida Assessments for Instruction in Reading (FAIR)
2. Mathematics – school district and state developed assessments
3. Writing (English / Language Arts) – school district developed writing assessments and Florida Writes
4. Science – school district and state developed assessments

These tests were required according to the Differentiated Accountability (DA) / Schools In Need of Improvement (SINI) policies for baseline and mid-year results. These tests were designed to progress monitor students and predict success on the state standardized test, FCAT. Such testing also enabled teachers and administrators to assess student performance in each course on a uniform standard.

In addition to course-based testing, each high control subject area was also directly tested on the state standardized assessment measure, the Florida Comprehensive Achievement Test (FCAT). FCAT was the most high-stakes test due to its use as one of

the main basis for school grades and meeting NCLB's annual yearly progress (AYP) mandates. FCAT was also considered a high-stakes test for students since the results could prevent students from being promoted to the next grade level and/or determined future class placement in remedial classes, which also might have resulted in students surrendering the option of elective courses.

Policy Characteristics of the Low Control Subjects

The low control subject areas were distinguished from the high control subjects by the general absence of district-wide curriculum guides, textbook adoption, and most significantly testing policies, and therefore had a greater degree of curriculum autonomy. The subject areas contained in this category were the many elective courses (such as art, dance, drama, foreign language, music, physical education, etc.), which varied greatly depending upon course offerings at each school site.

Another characteristic of the low control subjects was the prevalence of nonprescriptive curriculum guides. All low control subjects had course curriculum guides, but in sharp contrast to the high control subjects, they lacked prescriptive detail, many items were presented with options or were voluntary, and were designed independently of textbook adoption decisions and without consideration of district tests (which may not exist). Some subjects relied on state curriculum frameworks. However these frameworks were not specific to the degree of other medium and high control subjects and were most often one page with approximately four benchmarks and thirteen skills identified. Another contrast with high control subjects was that the low control subjects had multiple textbook options and multiple instructional materials to choose from. Each low control subject area had a policy in place requiring textbook adoption per

course. However, individual teachers or departmental committees generally made textbook decisions. There is a list of state and district approved materials, but teachers had greater freedom to choose instructional materials and were not always relegated to choose from a list of approved materials.

Lastly, subjects in the low control category did not generally have common course assessments and were not directly assessed by the state's high-stakes, standardized FCAT. Common course testing was not a district-wide initiative; however some schools may have chosen to develop such measures. In these instances the testing results were used for program evaluation.

Policy Characteristics of the Medium Control Subjects

The medium control subjects had policies that have some of the characteristics of the high and low control subject categories. They lacked the extent of course-based testing in the high control subjects, but had significant, centrally prescribed course content guides. The courses considered medium control for the purposes of this study were in the social studies: geography, civics, American history, world history, American government, and economics. District-wide students must acquire a minimum amount of credits in social studies courses for promotion to the next grade level and eventually graduation. The selected school district did not have district-wide course-based tests for all selected courses; however, teachers and departments at several school sites were working on writing common assessments for the remaining courses. The results of common assessments were used for program evaluation. Social studies course content was not directly tested by FCAT and testing results were not directly correlated with the medium control subjects. The results of FCAT were used for identification of students

for special programs, class placement, and for research and program evaluation purposes in the medium control subjects. The district did convene textbook adoption proceedings; however, they had more leeway when making decisions about teaching materials. The use of curriculum guides remained a district requirement. Schools and social studies departments also were given more leeway to choose supplementary materials for instruction.

Population

Survey data was collected from the teaching faculty of eight schools (four middle and four high schools) in a central Florida public school district. A convenience sampling method was used due to the researcher's access to participants. The specific schools selected were chosen based on the principals agreeing to provide access to their teaching faculties in a timely manner. Additionally, schools that serve different areas of the central Florida school district and thus represent eight different communities were selected in order to get a representative sample. Acquiring a diverse sample was a priority, therefore student demographics, school grades (assigned by the State of Florida), and degree of county and state regulation (Correct I and II designations) were considered. Master schedules from each of the six schools selected in the sample were used to ensure that a balanced cross sample of teachers who teach the varied high, medium, and low control subjects was achieved. The researcher included all teachers at each school site, including teachers of standard core subjects and elective subjects. The school district selected is the ninth largest in Florida and represents urban, suburban and rural populations. The advantages of this sampling were convenience and timeliness. The disadvantages were

that the researcher's conscious or unconscious bias may be introduced into the sampling process. Due to this sampling process, generalization of results to the population of teachers in Florida will be limited.

The data collection process for the study was coordinated through the school district's curriculum office and through the principals at each of the selected school sites. Calculations to estimate a statistically reliable sample size were conducted. Using an online database provided by the central Florida school district, the total population of teaching faculty was approximated to be 4,000 teachers. The range of possible scores on each survey item is five (5). Using Tchebysheff's theorem to estimate the largest possible population variance, or worst-case scenario, yielded a variance of 1.5625. Given this estimated population variance and assuming a margin of error, or a Bound, of +/- .10, the minimum sample size needed was 540 people. This quantity of participants allows for more reliable interpretation of the data collected.

Instrumentation

The survey used in this study was a six-point Likert design containing 25 perspective questions and four demographic questions. The survey was initially developed by Archbald and Porter (1994) and then further adapted by the researcher to better suit the needs of this study. Recognizing factors not previously addressed by Archbald and Porter, the researcher altered the survey and developed items to address the external factor of "leadership" as discussed previously. Leadership encompasses the influences and practices of all school-site personnel including administrators, instructional coaches, and teaching colleagues. The researcher adapted these new items

from the previous sub-scale, labeled "department" by Archbald and Porter, due to the considerable influence that the factors of leadership of other personnel may provide in interpreting results. "Leadership" was added to the external control scale to be examined along with the influences of curriculum guides, testing policies, and textbook adoption policies.

Dillman's (2009) principles for using self-administered surveys were applied in the development of this survey (See Appendix A for the complete survey). The Dillman (2009) Tailored Design Method (TDM) as explained in the book's first chapter was utilized to gain a more complete sample and guard against measurement error (chapter 1). As Dillman defined it, "Tailored Design is a set of procedures for conducting successful self-administered surveys that produce high quality information and high response rates" (p. 29). The primary tool for acquiring data about teachers' perceptions of professional discretion and satisfaction was a group-administered, paper-and-pencil survey conducted in a face-to-face setting during a regularly scheduled faculty meeting. Protocol for group-administration of a self-administered questionnaire was followed in each school setting (p. 255). Dillman pointed out some key advantages of using group administration of self-administered surveys, "In this case it is possible not only to draw a sample ahead of time, but also to motivate or even require individuals to assemble in one place to complete the questionnaire. The cost savings for this type of administration are often enormous, and in many cases nonresponse is negligible and not associated in any way with the content of the questionnaire" (p. 253).

The survey used in this study was analyzed for content validity by a panel of graduate students, and the group's feedback was applied to the development and

adaptation of the survey. The panel confirmed the overall ease of survey to read and follow. The panel assisted in the clarification of key questions and raised concerns about anonymity. The independent variables include years of teaching experience, level of teaching (middle or high), and varying levels of curriculum control among subject areas (high, medium, low control). The dependent variables are the 25 questions presented. The researcher formed the survey blueprint (see Figure 4) based on Archbald and Porters' (1994) research and then adapted items and scales based on the procedures previously described.

***Curriculum Control Scales**:* Curriculum Guides (items 1, 2); Leadership (3, 4, 5); Testing (items 6, 7, 8); Textbook (item 9); Teacher Beliefs / Self (items 10-13).

"Rate how big an influence each factor below has in determining the content (information, concepts, skills) of the course you teach." *(Note: Respondents will rate each influence (1-13) on a 0 to 5 [No Influence to Major Influence] scale next to the item; scale not shown.)*

1) State curriculum guidelines
2) District curriculum guidelines
3) School administrators' decisions and guidance
4) Departmental decisions and guidance
5) Other teachers' decisions and guidance
6) State test
7) District tests
8) School / department common assessments
9) The main course textbook
10) My own beliefs about what topics are important
11) My own knowledge of particular topics
12) What my students are capable of understanding
13) What my students need for future study and work

***Professional Discretion Scales** (Teachers' perceptions of control over classroom content / pedagogy):* Content (items 14, 15); Pedagogy (items 16-18).

"How much control do you feel you have in your classroom over each of the following areas in your planning and teaching?" *(Note: Respondents will rate their control over each area (14-18) on a 0 to 5 scale ["None" to "Complete Control"] next to the item; scale not shown.)*

14) Selecting textbooks / instructional materials.
15) Selecting content, topics, and skills.
16) Selecting teaching techniques.
17) Determining amount of homework to be assigned.
18) Setting standards for grading and achievement in my classes.

Satisfaction Scales: Self-Efficacy (items 19-21); Teacher Empowerment and Job Satisfaction (22, 23); Standards (24, 25).

"Please use the scale provided to rate the extent to which agree or disagree with the statements below." *(Note: Respondents will rate their agreement with the statements on a 1 to 6 scale ["Strongly Disagree" to "Strongly Agree"] next to each item; scale not shown. For items (b-c), the scale will be reversed in the database so that high efficacy is associated with larger numbers.)*

19) My success or failure in teaching students is due primarily to factors beyond my control rather than my own effort and ability.
20) I sometimes feel it is a waste of time to try to do my best as a teacher.
21) Teachers are not a very powerful influence on student achievement when all factors are considered.
22) I feel that I am making a positive difference for the majority of my students.
23) I usually look forward to each working day at this school.
24) Staff members maintain high standards of performance for themselves.
25) The teachers in this school push the students pretty hard in their academic subjects.

Figure 4 Blueprint for Survey

Data Analysis

Factor Analysis

As a method for analyzing data, factor analysis is considered an efficient method of discovering predominant patterns among large numbers of variables (Babbie, 2001; Field, 2009). According to Field (2009), factor analysis provides an empirical base for reducing the many variables to a few factors by combining variables that are moderately or highly correlated with each other. A factor is a mathematical expression of the common element that cuts across the combined variables in a set. The mathematical basis for factor analysis is complex. The use of computerized software (SPSS Statistics version 17.0) was used to make this process less complicated for the researcher. The mathematical process involves a search for clusters of variables that are all intercorrelated with each other. The individual variables are given coefficients, which are also referred to as the loading of each variable on the factor. An examination of the survey questions in conjunction with the clusters and individual coefficients results in the determination of the constructs of the survey.

After three subsequent factor analysis calculations involving the removing of the items with weak or no correlation, six constructs were identified representing 23 of the 25 questions. The six constructs were named

1. Influence of Teacher Beliefs (Questions 10, 11, 12, 13, 15),
2. Perceptions of Success and Satisfaction (Questions 19, 20, 21, 22, 23),
3. Influence of Tests and Curriculum Guides (Questions 1, 2, 6, 7),
4. Teacher Control of Pedagogy (Questions 16, 17, 18),
5. Leadership (Questions 3, 4, 5, 8), and
6. Maintaining High Standards (Questions 24, 25).

For each of the six constructs Cronbach's alpha was used to determine the internal consistency, or reliability, which is the proportion of the variance in each scale score

attributed to the true score (Cronbach, 1988). This measure provided a coefficient between zero and one with increasing values indicating significantly superior internal consistency. All constructs produced a significant reliability ($\alpha > .75$) (Field, 2009).

Scaling Procedure

A scale was developed for each of the six constructs resulting in the creation of six customized variables for use in the analysis. According to Babbie (2001), scaling is a method of assigning scores to patterns of responses. As a measurement technique, scaling determines the magnitude of a latent variable at the time it was measured in responses (Field, 2009). In the six constructs of this survey, the latent variable was the respondents' attitudes toward each of the six constructs.

A person's response on each of the six constructs was formed by the summation of that individual's ranked responses to each question within the construct. Therefore, each respondent had a score for each of the six constructs. Using the Regression method, the extracted factor scores for each construct were used for further comparative analysis. The regression method accepts that correlations between factor scores are acceptable (Field, 2009).

Multivariate Analysis of Variance (MANOVA)

Following the scaling of the survey data by constructs, a between-subjects multivariate analysis of variance (MANOVA) was performed using the six scales constructed as dependent variables. The independent variables are years of teaching experience, level of teaching (middle or high school), and category of varying degree of curriculum control (high, medium, low control). Teachers' perceptions of curriculum

control policies were examined by comparing mean ratings from teachers among different conditions of centralization. Also, mean ratings across the entire sample on scales were examined to reveal whether differential influences of policies affect individual discretion and satisfaction. Multivariate analysis of variance (MANOVA) tests with follow-up test were conducted using SPSS Statistics version 17.0. Data from this survey was not used to generalize for the entire population of teachers in the State of Florida. Data from the use of the survey was intended for use by future studies to build on the subject of teachers' perceptions of professional discretion and satisfaction in an era of educational reforms.

CHAPTER 4 – ANALYSIS OF DATA

This study was designed to answer the following research questions:

1. What is the statistically significant variation among teachers' perceptions of professional discretion and satisfaction regarding the factors of curriculum control based on years of teaching experience?
2. What is the statistically significant variation among teachers' perceptions of professional discretion and satisfaction regarding the factors of curriculum control based on level of teaching (middle or high school)?
3. What is the statistically significant variation among teachers' perceptions of professional discretion and satisfaction based on the varying degrees of curriculum control of the subjects they teach?

Respondent Demographics

Table 1 presents the demographic breakdown of survey respondents by teaching experience, school level, age, and gender. The percentage of high school teachers (61%) who participated in the survey was greater than the percentage of middle school teachers (39%). The majority (62.8%) of these participants teach subjects in the High Curriculum Control category, mainly English (which includes reading and language arts courses), math, and science. The largest single group of teachers based on years of teaching experience was those with less than ten years of teaching experience (38.8%). Representative of the general population of teachers, more females (67.6%) than males

(32.4%) participated in the survey. The largest single group of teachers based on age was those 50 years or older (41.4%).

Table 1: Respondent Demographics

Demographics	Participants (n = 618)	Population %
School Level		
Middle	241	39.0
High	377	61.0
Curriculum Control Category		
High Control	388	62.8
Medium Control	125	20.2
Low Control	105	17.0
Teaching Experience (in years)		
Less than 10 years	240	38.8
10 to 20 years	179	29.0
21 or more years	199	32.2
Age (in years)		
20-29	62	10.0
30-39	151	24.4
40-49	149	24.1
50 or more	256	41.4
Gender		
Female	418	67.6
Male	200	32.4

Descriptive Statistics

Table 2 reports the means and standard deviations for items 1 to 18 on the survey. Items 1 to 18 were coded no influence = 0, minimal influence = 1, little influence = 2, some influence = 3, considerable influence = 4, major influence = 5. The items listed with higher means indicate a higher level of perceived influence among responding teachers on that item.

Table 2: Descriptive Statistics for Scales Measuring Influences on Content and Pedagogy, Items 1 to 18

Item	Mean	Std. Deviation
Selecting amount of homework to be assigned (Q# 17)	4.16	1.143
Selecting teaching techniques (Q# 16)	4.11	1.069
District Curriculum Guides (Q# 2)	4.01	1.222
What my students need for future study and work (Q# 13)	3.91	1.189
Selecting standards for grading and achievement (Q# 18)	3.84	1.192
State Curriculum Guides (Q# 1)	3.79	1.379
What my student are capable of understanding (Q# 12)	3.68	1.158
My own knowledge of particular topics (Q# 11)	3.54	1.294
Departmental decisions and guidance (Q# 4)	3.53	1.229
My own beliefs about what topics are important (Q# 10)	3.40	1.282
State tests (Q# 6)	3.19	1.635
School Administrators' decisions and guidance (Q# 3)	3.15	1.420
School / Department Common Assessments (Q# 8)	2.95	1.506
Other teachers' decisions and guidance (Q# 5)	2.83	1.238
Selecting content, topics, and skills (Q# 15)	2.80	1.488
Main Course Textbook (Q# 9)	2.77	1.570
District tests (Q# 7)	2.73	1.691
Selecting textbooks and instructional materials (Q# 14)	2.23	1.520

Among the factors that influence teachers' content and pedagogical decisions, teachers indicated they felt the most control and influence over selecting the amount of homework to be assigned (m = 4.16) and selecting teaching techniques (m = 4.11). The above two factors were followed closely by the indication that the largest influence in determining content (information, concepts, skills) of the course(s) they taught were district curriculum guides (m = 4.01). Teachers felt the least control over selecting textbooks and instructional materials (m = 2.23).

Table 3 indicates the means and standard deviations for the scales measuring teachers' perceptions of external curriculum control factors.

Table 3: Descriptive Statistics for External Curriculum Control Factors, Items 1 to 9

Item	Mean	Std. Deviation
District Curriculum Guides (Q# 2)	4.01	1.222
State Curriculum Guides (Q# 1)	3.79	1.379
Departmental decisions and guidance (Q# 4)	3.53	1.229
State tests (Q# 6)	3.19	1.635
School Administrators' decisions and guidance (Q# 3)	3.15	1.420
School / Dept Common Assessments (Q# 8)	2.95	1.506
Other teachers' decisions and guidance (Q# 5)	2.83	1.238
Main Course Textbook (Q# 9)	2.77	1.570
District tests (Q# 7)	2.73	1.691

Examining external curriculum control factors, district curriculum guides (m = 4.01) were reported to have more of an influence than state curriculum guides (m = 3.79) and the influence of state tests (m = 3.19). Teachers reported that the main course textbook (m = 2.77) and district tests (m = 2.73) had the least influence in determining content (information, concepts, and skills) taught.

Table 4 presents the means and standard deviations related to the scale of internal factors of curriculum control and professional discretion exhibited by the influence of teacher beliefs. The greatest belief, which influenced teachers' determinations of content taught, was their perception of what students need for future study and work (m = 3.91). Teachers reported that their own beliefs about what topics are important were the least influence in determining content (m = 3.40).

Table 4: Descriptive Statistics for Internal Factors of Curriculum Control (Teacher Beliefs), Items 10 to 13

Item	Mean	Std. Deviation
What my students need for future study and work (Q# 13)	3.91	1.189
What my student are capable of understanding (Q# 12)	3.68	1.158
My own knowledge of particular topics (Q# 11)	3.54	1.294
My own beliefs about what topics are important (Q# 10)	3.40	1.282

Table 5 reports the descriptive statistics relating to the items representing teachers' perceptions of professional discretion as represented by control of content and pedagogy. Teachers indicated they felt the most control over selecting the amount of homework to be assigned (m = 4.16) followed closely by the perception of control over selecting teaching techniques (m = 4.11). Teachers reported the least amount of control was perceived in the selection of textbooks and instructional materials (m = 2.23).

Table 5: Descriptive Statistics for Professional Discretion Scales, Items 14 to 18

Item	Mean	Std. Deviation
Selecting amount of homework to be assigned (Q# 17)	4.16	1.143
Selecting teaching techniques (Q# 16)	4.11	1.069
Selecting standards for grading and achievement (Q# 18)	3.84	1.192
Selecting content, topics, and skills (Q# 15)	2.80	1.488
Selecting textbooks and instructional materials (Q# 14)	2.23	1.520

Table 6 reports the means and standard deviations for teachers' satisfaction scales, items 19 to 25 on the survey. Items 19 to 25 represent degrees of teacher satisfaction and were coded strongly disagree = 1, disagree = 2, slightly disagree = 3, slightly agree = 4, agree = 5, strongly agree = 6. Items 19 to 21 were negatively worded statements on the survey regarding teacher satisfaction. Therefore, the responses for these three items were reverse coded to match the degree of satisfaction indicated by the participant.

Descriptive statistics for teachers' satisfaction scales are presented in a separate table to accurately represent how items were grouped and coded differently for comparative analysis. Due to the difference in coding of items 19 to 25, their means and standard deviations should not be used for direct comparison with the means and standard

deviations of items 1 to 18, even though each of the twenty-five items on the survey have the same range (5).

Table 6: Descriptive Statistics for Teacher Satisfaction Scales, Items 19 to 25

Item	Mean	Std. Deviation
I feel that I am making a positive difference for the majority of my students (Q# 23)	4.87	.998
I sometimes feels it is a waste of time to try to do my best as teacher (Q# 20)*	4.58	1.497
Teachers are not a very powerful influence on student achievement when all factors are considered (Q# 21)*	4.58	1.411
I usually look forward to working each day at this school (Q# 22)	4.56	1.320
Staff members maintain high standards of performance for themselves (Q# 24)	4.44	1.124
Teachers in this school push the students pretty hard in their academic subjects (Q# 25)	4.41	1.123
My success or failure in teaching is due primarily to factors beyond my control rather than to my own effort and ability (Q# 19)*	3.58	1.540

*Items 19 to 21 were reverse coded to represent negatively worded statement.

Teachers expressed the greatest agreement regarding making a positive difference for the majority of their students ($m = 4.87$). The least amount of agreement was related to locus of control as indicated by item 19: My success or failure in teaching is due primarily to factors beyond my control rather than my own effort and ability ($m = 3.58$). However, this was the only item which teachers indicated any degree of disagreement ($m < 4.0$).

Factor Analysis

The purpose of this investigation was to explore the factor structure underlying the item responses. According to Field (2009), the objective of factor analysis is "to measure things that cannot directly be measured," and thereby discover latent variables

(p. 628). Factor analysis is a technique used to reduce a larger set of variables to a smaller set of factors, which may be capable of accounting for a large portion of the total variability in the items. Field stated, "The existence of clusters of large correlation coefficients between subsets of variables suggests that those variables could be measuring aspects of the same underlying dimension" (p. 628). A thorough review of which clusters correlate the highest with a certain factor helps determine the underlying dimensions, or latent variables. The meaning of the factor can then be defined by analyzing what conceptually ties the items together. A successful result is one in which a few factors can be given a meaningful name by associating a number of items that correlate the highest with it (Field, 2009).

In the context of this study, when success is attained, we may say that we have validity evidence supporting the conclusion that the scores from this instrument are a valid assessment of teachers' perceptions related to factors of curriculum influence, professional discretion, and satisfaction. We can feel confident when adding similar items up for total scores to represent the different dimensions of one's overall perceptions (each factor represents a dimension). When items line up in a predictable manner according to what thematically ties them together conceptually, this is an indication of validity, also referred to as internal structure evidence. The descriptive statistics of the items are presented in tables 2 and 6 above. It may be observed that the standard deviations are smaller than the respective means and that no one standard deviation stands out upon gross observation as remarkably larger than other variables.

Factor analysis was therefore used to allow the researcher to further understand the underlying structure of a set of variables by identifying groups or clusters of related

variables. Multiple factor analyses were conducted on items 1 to 25, excluding demographic items 26 to 29. The maximum likelihood (ML) procedure was conducted on the 25 items with orthogonal rotation (varimax) using the blank point of .40 or below. Field (2009) suggests the use of the maximum likelihood technique for factor extraction because results can be generalized from the sample participants to a larger population. The orthogonal rotation method, varimax technique, was selected in an attempt to maximize dispersion of loadings within factors. The Varimax technique does not assume factors are correlated and as such "tries to load a smaller number of variables onto each factor resulting in more interpretable clusters of factors" (Field, p. 644).

The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO = .82 ("great" according to Field, 2009), and all KMO values for individual items were > .72, which is well above the acceptable limit of .5 (Field, 2009). Bartlett's test of sphericity χ^2 (300) = 6140.812, $p < .01$, indicated that correlations between items were sufficiently large for maximum likelihood. Multiple factor analyses were run to obtain eigenvalues for each factor in the data. Kaiser's rule was used to determine which factors were most eligible for interpretation because this rule requires that a given factor is capable of explaining at least the equivalent of one variable's variance. This is not unreasonable given that factor analysis has as its objective reducing several variables into fewer factors. Using Kaiser's rule, six factors were extracted (see table 7). Together they are capable of explaining roughly 61.65% of all the variable variances.

Table 7: Total Variance Explained of Extracted Factors

	Initial Eigenvalues		
Factor	Total	% of Variance	Cumulative %
1	5.708	22.830	22.830
2	3.672	14.686	37.516
3	2.106	8.425	45.941
4	1.484	5.934	51.875
5	1.268	5.071	56.947
6	1.176	4.703	61.649

A review of the initial factor loadings suggests that the proper solution was attainable through maximum likelihood, as it was capable of converging in 7 iterations. The results also do not indicate any warning of nonpositive definite, so one important condition for proceeding with the interpretation has been met.

Given the large sample size, and the convergence of the scree plot and Kaiser's criterion on six factors, this is the number of factors that were retained in the final analysis. Table 8 displays the factor loadings after rotation using the blank point of .40 or below (for the complete table, which displays all factors loadings, please see Appendix B).

Table 8: Rotated Factor Matrix Revealing Six Consructs

	Factor					
	1	2	3	4	5	6
My own beliefs about what topics are important (Q# 10)	.827					
My own knowledge of particular topics (Q# 11)	.817					
What my student are capable of understanding (Q# 12)	.596					
What my students need for future study and work (Q# 13)	.558					
Selecting content, topics, and skills (Q# 15)	.503					
Personal degree of whether to try to do my best as teacher (Q# 20)		.761				
Teachers are a very powerful influence on student achievement (Q# 21)		.661				
I feel that I am making a positive difference for the majority of my students (Q# 23)		.536				
I usually look forward to working each day at this school (Q# 22)		.530				
Perception of control over success or failure in teaching (Q# 19)		.494				
District tests (Q# 7)			.802			
State tests (Q# 6)			.775			
District Curriculum Guides (Q# 2)			.574			
State Curriculum Guides (Q# 1)			.565			
Selecting amount of homework to be assigned (Q# 17)				.782		
Selecting standards grading and achievement (Q# 18)				.668		
Selecting teaching techniques (Q# 16)				.634		
Departmental decisions and guidance (Q# 4)					.866	
School Administrators' decisions and guidance (Q# 3)					.542	
Other teachers' decisions and guidance (Q# 5)					.539	
School / Dept Common Assessments (Q# 8)					.427	
Staff members maintain high standards of performance for themselves (Q# 24)						.829
Teachers in this school push the students pretty hard in their academic subjects (Q# 25)						.693

Note: Blank point of < .40 was designated for display of factor loadings.

The results were also examined to ensure that the conditions of communalities and mulitcollinearity were met before proceeding with an interpretation. The results indicated a proper solution of communalities with both an initial set and an extracted set

differentiated. Analysis of the correlation matrix (*R* matrix) revealed no correlations greater than 0.8, revealing that multicollinearity did not exist among the variables providing further evidence that the results are appropriate for interpretation.

Analysis of the Pearson correlation coefficient between all pairs revealed two variables had weak or no correlation (determinant $r < 3.23$) to the other variables. Therefore, variables representing items 9 and 14, "(Q#9) The main course textbook," and "(Q#14) Selecting textbooks / instructional materials" were eliminated from further factor analysis.

After three subsequent factor analyses calculations involving the removing of the above two items, six constructs were identified representing 23 of the 25 questions in a rotated factor matrix (Eigenvalue > 1). The sampling adequacy remained sufficient for a factor analysis (KMO = .81). The percentage of the sample represented was 64.9. The six constructs were named

1. Influence of Teacher Beliefs (Questions 10, 11, 12, 13, 15),
2. Perceptions of Success and Satisfaction (Questions 19, 20, 21, 22, 23),
3. Influence of Tests and Curriculum guides (Questions 1, 2, 6, 7),
4. Teacher Control of Pedagogy (Questions 16, 17, 18),
5. Leadership (Questions 3, 4, 5, 8), and
6. Maintaining High Standards (Questions 24, 25).

Using both the Anderson-Rubin and Regression methods, extracted factors scores for each construct were saved and used for further comparative analysis. All factor loading scores were used in the analysis including those below the blank point of .40. The Anderson-Rubin method ensures that factors are uncorrelated, however the regression method accepts that correlations between factor scores are acceptable (Field, 2009). For the purposes of this study, regression factors were primarily used due to the strong

conceptual correlations present. Anderson-Rubin extracted factors were used for comparison and verification of results.

Scaled Score Reliability

The reliability for each construct was calculated using Cronbach's alpha (Cronbach, 1988). All constructs produced a significant reliability ($\alpha > .75$) (Field, 2009). Table 9 presents the internal consistency reliabilities for the six constructs. Influence of teacher beliefs was the most reliable ($\alpha = .823$).

Table 9: Reliability Analysis of Constructs - Scale (Alpha)

Construct	Alpha α
Influence of teacher beliefs	.823
Perceptions of success and satisfaction	.766
Influence of tests and curriculum guides	.795
Teacher control of pedagogy	.818
Leadership	.746
Maintaining high standards	.805

Scaled Scores of Survey Constructs

Summary statistics for the six scales are presented in Table 10. The sample size, scaled mean, standard deviation, and range are reported. The scaled mean reports the mean of each construct using the scaled scores. The mean reports the scaled mean of each construct divided by the number of questions within that construct. Thus allowing the comparison of the construct means. Due to the large sample size (N = 618) in this

study, significance tests of skew and kurtosis could not be used for meaningful interpretation "because they are likely to be significant even when skew and kurtosis are not too different than normal" (Field, 2009, p. 139).

Table 10: Mean, Standard Deviation, Range, and Percent of Total Variance for Each Construct

Scale	N	Scaled Mean	Standard Deviation	Mean	Range	% of Variance
Perceptions of success and satisfaction	618	22.15	4.92	4.43[a]	1.28	8.4
Maintaining high standards	618	8.86	2.06	4.43[a]	.03	4.7
Teacher control of pedagogy	618	12.11	2.92	4.04	.321	5.9
Influence of teacher beliefs	618	17.35	4.91	3.47	1.12	22.8
Influence of tests and curriculum guides	618	13.73	4.71	3.42	1.28	14.7
Leadership	618	12.47	4.08	3.12	.70	5.0

Note: [a] indicates different scale used (1 to 6) for these constructs.

Examining the constructs related to internal factors involved, teachers indicated only a slight degree of success and satisfaction (m = 4.43), which explained approximately 8.4% of the total variance. Teachers reported a minimal belief overall that all teachers maintain high standards of performance for both themselves and their students (m = 4.43), explaining roughly 4.7% of the total variance. Both of the above scaled means representing internal factors were only slightly above the scale midpoint. Teachers indicated a considerable sense of control over pedagogy (m = 4.04). Among the external factors influencing content (information, concepts, and skills) taught, results indicate that teachers' beliefs were a predominant influence (m = 3.47), which explained roughly 22.8% of the variance in scores. Teacher beliefs were rated above the influences of tests and curriculum guides (m = 3.42) making up the next largest proportion of

variance explained, 14.7%. The least influence reported was within the construct of Leadership (m = 3.12), explaining 4.7% of the total variance. Together these constructs are capable of explaining roughly 61.5% of all the variable variances.

Research Questions and Survey Constructs

A multivariate analysis of variance (MANOVA) was conducted to examine the interactions between the independent variables of classroom teaching experience, level of teaching, and curriculum control category as defined by the six constructs using the derived regression scale scores. Multivariate tests allow the researcher to look at all dependent variables at once and examine contrasts defining how groups may differ from each other (Field, 2009).

Table 11 reports the results of the MANOVA tests of the Six Constructs with Teaching Experience, Level of Teaching, and Curriculum Control Category as Independent Variables. Using the Wilk's criterion, the combined dependent variables were significantly affected by Curriculum Control category, $F(12.0, 1190.0) = 13.67$, $p < .01$, Level of Teaching, $F(6, 595.0) = 2.564$, $p < .05$, and their Interaction, $F(24.0, 2076.92) = .750$, $p < .05$, but not by Teaching Experience, $F(12.0, 1190.0) = 1.643$, $p > .05$. Curriculum control category explained the greatest variance in scores, 12.1%, followed by the interaction of constructs, 7%.

Table 11: Results of MANOVA of the Six Constructs with Teaching experience, Level of Teaching, and Curriculum Control as Independent Variables

Independent Variable	Wilks'Λ	F	Hypothesis Df	Error df	Sig.	Partial Eta Squared
Teaching Experience	.968	1.643a	12	1190.0	.074	.016
Curriculum Control	.772	13.67a	12	1190.0	.000	.121
Level of Teaching	.975	2.564a	6	595.0	.018	.025
Interaction	.970	.750	24	2076.92	.007	.069

a. Exact statistic

Teaching Experience

Even though the construct of teaching experience as a whole did not have a significant effect on the independent variables, the researcher further examined the comparison of means in order to understand the significant correlations within the construct. The comparisons of means within the construct reveal significant differences related to the Influence of Tests and Curriculum Guides. Table 12 reports the means on scales by categories of years of Teaching Experience.

Table 12: Means on Scales by Categories of Years of Teaching

Construct and Scale	Years of Teaching Experience			
	Less than 10 years	11 to 20 years	21 or more years	Total
Influence of Teacher Beliefs				
My own beliefs about what topics are important	3.38	3.42	3.41	3.40
My own knowledge of particular topics	3.48	3.48	3.67	3.54
What my students are capable of understanding	3.73	3.58	3.71	3.68
What my students need for future work and study	3.97	3.78	3.94	3.91
Selecting content, topics, and skills	2.76	2.80	2.83	2.80
Perceptions of Success and Satisfaction				
Personal degree of whether to try to do my best as a teacher	4.80	4.50	4.40	4.58
Teachers a very powerful influence of student achievement	4.76	4.59	4.36	4.58
I feel that I am making a positive difference for the majority of my students	4.93	4.75	4.90	4.87
I usually look forward to working each day at this school	4.67	4.46	4.50	4.56
Perception of control over success or failure as a teacher	3.62	3.68	3.45	3.58
Influence of Tests and Curriculum Guides*				
District tests	2.75	2.72	2.71	2.73
State tests	3.17	3.25	3.18	3.19
District curriculum guides	4.03[a]	4.07[a]	3.92[b]	4.01
State curriculum guides	3.80[a]	3.90[a]	3.68[b]	3.79
Teacher Control of Pedagogy				
Selecting amount of homework to be assigned	4.19	4.17	4.11	4.16
Selecting standards for grading and achievement	3.83	3.74	3.92	3.84
Selecting teaching techniques	4.18	4.02	4.11	4.11
Leadership				
Departmental decisions and guidance	3.55	3.50	3.53	3.53
School administrators' decisions and guidance	3.21	3.20	3.03	3.15
Other teachers' decisions and guidance	2.99	2.79	2.66	2.83
School / department common assessments	2.95	2.90	3.00	2.95
Maintaining High Standards				
Staff members maintain high standards of performance for themselves	4.36	4.48	4.51	4.44
Teachers in this school push the students pretty hard in their academic subjects	4.29	4.46	4.52	4.41

Note: The [a] and [b] indicate means differing by statistically significant margins from each other. * indicates *F* ratios exceeding the $p = .05$ level of statistical significance for differences among category means on the scale. For the ANOVAs conducted for Table 12, a Scheffe test (a conservative multiple comparisons test) was used to determine which category means differed from each other by statistically significant margins.

A one-way multivariate analysis of variance (MANOVA) was conducted as a follow-up tests to determine the effect of teaching experience (represented by three categories: 0-10 years, 11-20 years, 21 or more years) on the six dependent construct variables. Table 13 presents the results of the univariate tests on the dependent variables of the six constructs for the three categories of teaching experience. Using the Bonferroni method, each ANOVA was tested at the .05 level.

Table 13: Univariate Tests Results on the Dependent Variables for Each Category of Teaching Experience

Dependent Variable	Sum of Squares	Df (N = 600)	Mean Square	F	Sig.
Influence of teacher beliefs	1.264	2	.632	.781	.458
Influence of tests and curriculum guides	5.642	2	2.821	3.745	.024
Perceptions of success and satisfaction	1.081	2	.540	.803	.449
Teacher control of pedagogy	.358	2	.179	.237	.789
Leadership	2.536	2	1.268	1.663	.190
Maintaining high standards	3.350	2	1.675	2.130	.120

The ANOVA examining the effect of category of Teaching Experience on the influence of tests and curriculum guides, $F(2, 600) = 3.745$, $p < .05$, was significant. However, results of the ANOVA tests on the remaining five out of six factors within the construct were nonsignificant ($p > .05$), thus explaining the overall lack of significance Teaching Experience category had on the six constructs found in the initial MANOVA tests.

Post hoc analyses to the univariate ANOVA for Teaching Experience consisted of conducting pairwise comparisons to find which category of Teaching Experience affected the factor most strongly. Each pairwise comparison was tested at the .05 level. The most

significant difference (p = .027) was found in the comparison of teachers with 21 or more years and teachers with less experience, both groups 0-10 and 11-20 years experience. Teachers with 21 or more years experience indicated that tests and curriculum guides had a significantly less influence in their determinations of content taught (scaled mean difference = .275).

Level of Teaching

Analyses of the initial MANOVA tests of the six constructs revealed a significant affect on the independent variables by Level of Teaching. Using the Wilk's criterion, the combined dependent variables were significantly affected by Level of Teaching category, $F(6, 595.0) = 2.564$, $p < .05$. Table 14 reports the means on scales by Level of Teaching.

Table 14: Means on Scales by Level of Teaching

Construct and Scale	Level of Teaching Category		
	Middle School	High School	Total
Influence of Teacher Beliefs			
My own beliefs about what topics are important	3.38	3.42	3.40
My own knowledge of particular topics	3.50	3.57	3.54
What my students are capable of understanding	3.76	3.63	3.68
What my students need for future work and study	3.91	3.90	3.91
Selecting content, topics, and skills	2.67	2.87	2.80
Perceptions of Success and Satisfaction			
Personal degree of whether to try to do my best as a teacher	4.58	4.59	4.58
Teachers a very powerful influence of student achievement	4.54	4.60	4.58
I feel that I am making a positive difference for the majority of my students	4.89	4.85	4.87
I usually look forward to working each day at this school	4.46	4.62	4.56
Perception of control over success or failure as a teacher	3.51	3.63	3.58
Influence of Tests and Curriculum Guides			
District tests	2.91	2.61	2.73
State tests	3.39	3.07	3.19
District curriculum guides	4.13	3.93	4.01
State curriculum guides	3.83	3.76	3.79
Teacher Control of Pedagogy			
Selecting amount of homework to be assigned	4.08	4.21	4.16
Selecting standards for grading and achievement	3.68	3.93	3.84
Selecting teaching techniques	4.08	4.13	4.11
Leadership*			
Departmental decisions and guidance	3.47[a]	3.57[b]	3.53
School administrators' decisions and guidance	3.13	3.16	3.15
Other teachers' decisions and guidance	2.83	2.82	2.83
School / department common assessments	2.92[a]	2.97[b]	2.95
Maintaining High Standards			
Staff members maintain high standards of performance for themselves	4.47	4.43	4.44
Teachers in this school push the students pretty hard in their academic subjects	4.48	4.37	4.41

Note: The [a] and [b] indicate means differing by statistically significant margins from each other. * indicates *F* ratios exceeding the $p = .05$ level of statistical significance for differences among category means on the scale. For the ANOVAs conducted for Table 14, a Scheffe test (a conservative multiple comparisons test) was used to determine which category means differed from each other by statistically significant margins.

Table 15 reports the results the univariate tests on the dependent variables for

Level of Teaching categories (designated "middle school, grades 6-8" or "high school, grades 9-12"). A univariate analysis of variance ANOVA was conducted as a follow-up tests to determine the effect Level of Teaching had on the six dependent construct variables.

Table 15: Univariate Tests on the Dependent Variables for Level of Teaching Category

Dependent Variable	Sum of Squares	Df (N = 600)	Mean Square	F	Sig.
Influence of teacher beliefs	.903	1	.903	1.116	.291
Influence of tests and curriculum guides	.629	1	.629	.836	.361
Perceptions of success and satisfaction	.127	1	.127	.189	.664
Teacher control of pedagogy	.185	1	.185	.245	.621
Leadership	8.619	1	8.619	11.301	.001
Maintaining high standards	.412	1	.412	.524	.469

Results indicate Level of Teaching categories significantly effected the Leadership variables, $F(1, 600) = 11.301$, $p < .01$. Post hoc analyses of the univariate ANOVA test for Grade Level consisted of conducting pairwise comparisons to find which Level of Teaching (Middle or High) affected the factor most strongly. Each pairwise comparison was tested at the .05 level. Results revealed that Leadership had the most significance ($p < .01$) within the construct. High school teachers reported that Leadership had a higher degree of influence (mean difference = .306).

Curriculum Control

Analyses of the initial MANOVA tests of the Six Constructs revealed a significant affect on the independent variables related to Curriculum Control. Using the

Wilk's criterion, the combined dependent variables were significantly affected by curriculum control category, $F(12.0, 1190.0) = 13.67$, $p < .01$. Table 16 reports the means on scales by categories of Curriculum Control.

Table 16: Means on Scales by Categories of Curriculum Control

Construct and Scale	Curriculum Control Category			
	High	Medium	Low	Total
Influence of Teacher Beliefs*				
My own beliefs about what topics are important	3.30[a]	3.30[a]	3.90[b]	3.40
My own knowledge of particular topics	3.39[a]	3.56[a]	4.08[b]	3.54
What my students are capable of understanding	3.64[a]	3.55[a]	3.96[b]	3.68
What my students need for future work and study	3.93[a]	3.63[a]	4.15[b]	3.91
Selecting content, topics, and skills	2.60[a]	2.78[a]	3.55[b]	2.80
Perceptions of Success and Satisfaction*				
Personal degree of whether to try to do my best as a teacher	4.57[a]	4.43[a]	4.80[b]	4.58
Teachers a very powerful influence of student achievement	4.60	4.46[a]	4.66[b]	4.58
I feel that I am making a positive difference for the majority of my students	4.90	4.74[a]	4.90[b]	4.87
I usually look forward to working each day at this school	4.61	4.42	4.50	4.56
Perception of control over success or failure as a teacher	3.54[a]	3.50[a]	3.82[b]	3.58
Influence of Tests and Curriculum Guides				
District tests	3.15	2.19	1.80	2.73
State tests	3.78	2.57	1.78	3.19
District curriculum guides	4.16	3.99	3.48	4.01
State curriculum guides	3.96	3.70	3.29	3.79
Teacher Control of Pedagogy*				
Selecting amount of homework to be assigned	4.12[a]	4.01[a]	4.47[b]	4.16
Selecting standards for grading and achievement	3.80[a]	3.60[a]	4.26[b]	3.84
Selecting teaching techniques	4.08[a]	3.92[a]	4.44[b]	4.11
Leadership*				
Departmental decisions and guidance	3.70[a]	3.28	3.17[b]	3.53
School administrators' decisions and guidance	3.32[a]	2.85	2.85[b]	3.15
Other teachers' decisions and guidance	2.96[a]	2.59	2.63[b]	2.83
School / department common assessments	3.22[a]	2.48	2.50[b]	2.95
Maintaining High Standards				
Staff members maintain high standards of performance for themselves	4.46	4.34	4.50	4.44
Teachers in this school push the students pretty hard in their academic subjects	4.39	4.33	4.61	4.41

Note: The [a] and [b] indicate means differing by statistically significant margins from each other. * indicates *F* ratios exceeding the $p = .05$ level of statistical significance for differences among category means on the scale. For the ANOVAs conducted for Table 16, a Scheffe test (a conservative multiple comparisons test) was used to determine which category means differed from each other by statistically significant margins.

A one-way multivariate analysis of variance (MANOVA) was conducted as a follow-up tests to determine the effect of Curriculum Control categories (designated "high," "medium,"or "low") on the six dependent construct variables. Table 17 presents the results of the univariate tests on the dependent variables of the six constructs for the two categories of Curriculum Control.

Table 17: Univariate Tests Results on the Dependent Variables for Each Category of Curriculum Control

Dependent Variable	Sum of Squares	Df (N = 600)	Mean Square	F	Sig.
Influence of teacher beliefs	18.406	2	9.203	11.371	.000
Influence of tests and curriculum guides	1.505	2	.753	.999	.369
Perceptions of success and satisfaction	77.432	2	38.716	57.498	.000
Teacher control of pedagogy	6.065	2	3.032	4.013	.019
Leadership	17.179	2	8.589	11.263	.000
Maintaining high standards	.192	2	.096	.122	.885

The ANOVA examining the effect of category of Curriculum Control on the Influence of Teacher Beliefs, $F(2, 600) = 11.371$, $p < .01$, Perceptions of Success and Satisfaction, $F(2, 600) = 57.498$, $p < .01$, and Leadership, $F(2, 600) = 11.263$, $p < .01$, were all highly significant. Control of Pedagogy, $F(2, 600) = 4.013$, $p < .05$, was also significant. However, results of the ANOVA tests on the remaining two constructs, Influence of Tests and Curriculum Guides and Maintaining High Standards, were nonsignificant ($p > .05$).

Post hoc analyses of the univariate ANOVA test for the levels Curriculum Control consisted of conducting pairwise comparisons to find which level of Curriculum Control

affected the factor most strongly. Each pairwise comparison was tested at the .05 level. Examining the differences related to the Influence of Teacher Beliefs, there was no significant difference found between the High Control and Medium Control groups alone ($p > .05$). However, there was considerable significant difference ($p < .01$) found when comparing the Low Control to both High and Medium Control groups. The differences found among all groups, High, Medium, and Low, were also considerably significant ($p < .01$) when comparing teachers' Perceptions of Success and Satisfaction. The difference between the High and Medium Control groups was significant ($p < .01$), however the greatest mean difference occurred between the Low and High Control groups with the Low Control group indicating a higher rating on average (*m* difference = 1.002). Examining Control of Pedagogy among groups revealed a significant ($p < .05$) difference between the Low Control and High Control groups only, with the Low Control group indicating a higher rating on average (*m* difference = 0.3). Lastly, the comparisons related to Leadership revealed a considerably significant ($p < .01$) difference among the Low and High Control groups, with High Control group indicating a higher rating of influence on average (*m* difference = .498). The difference among all other group comparisons was nonsignificant ($p > .05$).

CHAPTER 5 – DISCUSSION AND RECOMMENDATIONS

The purpose of this study was to determine teachers' perspectives regarding specific variables relating to curriculum control, professional discretion and satisfaction and whether their perceptions influenced these variables, specifically whether there were significant differences in these perspectives based on years of teaching experience, level of teaching, or curriculum control category. This researcher suggests with the ever-increasing emphasis on high-stakes testing and accountability, knowing teachers' perspectives is critical to the effectiveness of any educational reform process.

At the time this study was conducted in 2010, Florida was vying for millions in the federal grant money known as "Race to the Top" funding. To receive this funding, states competed for school improvement money from the U.S. Department of Education. In proposals, states had to "document their efforts to make changes in educational policy, like integrating 'career-ready standards' and new tests into their school systems, building better teacher evaluation systems (many tied to high-stakes tests results), creating school data systems that can track student achievement, intervening in failing schools and eliminating caps on charter schools" (Dillon, 2010, p. 15). The Florida Department of Education embarked on a new project to align the Next Generation Florida Standards with the National Common Core Standards to respond to the Race to the Top federal funding program demands. Dillon revealed Florida was initially identified as a finalist in

the Race to the Top funding due to having "one of the most advanced student-data tracking systems in the country and having a system that rates schools like report cards, A through F" (p. 15).

The debate over who controls teachers' work and who is in charge of public schools has renewed energy in this arena of education reform. Among educators the conversation has shifted from the legitimacy of state standards to the implementation of national standards possibly further narrowing the curriculum, from the credibility of statewide assessments to accountability policies that align teacher evaluations and assign school grades based on the results of high-stakes testing.

The conflicting issues of accountability and autonomy in education will most likely continue to dominate thought and policy. However, this researcher believes that the results of this study should be considered in the timeframe of the 2009 to 2010 reform process. If the study had been conducted five years earlier, the results would have most likely been different. The results of the study were examined by research question and by the six constructs of the survey. This chapter will discuss the results, including recommendations for policymakers, school district and school site administrators, classroom teachers, and community stakeholders to consider when designing the curriculum reform process. It will conclude with recommendations for future research.

Discussion of Research Question One

What is the statistically significant variation among teachers' perceptions of professional discretion and satisfaction regarding the factors of curriculum control based on years of teaching experience?

There was not a statistically significant difference in perspectives of teachers based on years of teaching experience relating to curriculum control factors affecting professional discretion and satisfaction. The groups of teachers were in agreement in their overall ratings on five out the six constructs: Influence of Teacher Beliefs, Perceptions of Success and Satisfaction, Teacher Control of Pedagogy, Leadership, and Maintaining High Standards. Teachers agreed that the influence of teacher beliefs had some to considerable influence in determining content taught. Teachers indicated that they agreed slightly with the variables in both the perceptions of success and satisfaction and maintaining high standards constructs. Among the three groups of teaching experience, teachers agreed they had considerable control of pedagogy in the areas of planning and teaching. Teachers also agreed that leadership had the least influence in determining content taught. The only factor in which there was significant disagreement was within the construct of Influence of Tests and Curriculum Guides. Specifically, teachers with 21 or more years disagreed with less experienced teachers regarding the overall impact and influence of both state and district curriculum guides in determining the content taught.

It is concluded that for practical purposes teachers, regardless of years of teaching experience, agree on the impact of the variables identified in the constructs as they relate to curriculum control factors (both external and internal), professional discretion, and job satisfaction. Thus in considering curriculum control policies and possible effects on teachers' professional discretion and job satisfaction, policy makers, school district personnel, and stakeholders do not need to take into account the years of teaching experience when designing and implementing curriculum reform.

Discussion of Research Question Two

What is the statistically significant variation among teachers' perceptions of professional discretion and satisfaction regarding the factors of curriculum control based on level of teaching (middle or high school)?

There was a statistically significant difference in the perspectives of teachers regarding curriculum control factors affecting perceptions of professional discretion and satisfaction based on level of teaching. The area of significance was most notably within the construct of leadership. Teachers in high schools indicated that the decisions and guidance of school administrators, including departmental decisions and department-created common assessments, all had a significantly higher degree of influence on content taught. The only constructs in which high school teachers did not indicate a higher rate of agreement than middle school teachers were within the influence of tests and curriculum guides and maintaining high standards constructs. Even though middle

school teachers rated the variables within the above two constructs higher, the difference was not significant between the two levels of teaching. Thus in designing and restructuring curriculum control policies, the factors relating to leadership should be given due consideration as to affecting teachers' perceptions of professional discretion and job satisfaction. Policy makers, district personnel, and stakeholders need to take into account the level of teaching when designing and implementing curriculum reform.

Discussion of Research Question Three

What is the statistically significant variation among teachers' perceptions of professional discretion and satisfaction based on the varying degrees of curriculum control of the subjects they teach?

There were statistically significant differences in the perspectives of teachers regarding curriculum control factors affecting perceptions of professional discretion and satisfaction based on curriculum control categories. The teachers in each curriculum control category significantly disagreed in their overall ratings in four out the six constructs: Influence of Teacher Beliefs, Perceptions of Success and Satisfaction, Teacher Control of Pedagogy, and Leadership. The construct of influence of teacher beliefs reveals that teachers in the low control curriculum group reported significantly higher ratings than teachers in both medium and high curriculum control groups. This is also the case within the construct of teacher control of pedagogy. Teachers in the low curriculum control group indicated a higher rating of perceived control on each variable.

Teachers in the low curriculum control group also indicated that leadership had a significantly lower degree of influence in determining content taught. Within the construct of perceptions of success and satisfaction, teachers in the low curriculum control group reported significantly higher ratings on three out of five variables.

These results indicate there is a relationship among curriculum control policies and possible effects on teachers' perceptions of professional discretion and job satisfaction. Thus policymakers, district personnel, and stakeholders need to take into account the factors relating to the influence of teacher beliefs, leadership, teacher control of pedagogy, and their perceptions of success and satisfaction when designing and restructuring curriculum policies.

Additional Findings

Theoretically, teacher ratings of the external factors of curriculum control (state and district curriculum guides, state and district tests) should be higher in the high control subject areas (English, including reading, language arts and writing courses; mathematics; sciences) and the ratings of the internal factors influencing curriculum (teacher beliefs and control of pedagogy) should be lower. This was found to be the case, however an unexpected and significant difference was found between the middle and high school teachers regarding their ratings of the influence of tests and curriculum guides. For each of the four variables in the construct (state and district tests, state and district curriculum guides), high school teachers reported a lower influence. This difference may be due to the practice of some high schools providing more course

options for students who pass the state standardized test (FCAT) by the tenth grade, thus alleviating some influence of tests and curriculum guides on curriculum and pedagogy.

Leadership was found to be the only construct to reveal significant differences between both the levels of teaching and among the curriculum control categories. The researcher theorized that higher administrative and departmental influence would occur in the higher curriculum controlled subject areas. State and district curriculum policies had created a heightened need for collaboration among teachers and oversight, especially for the design and implementation of common assessments. In lower control subject areas, there is more of a laissez faire attitude regarding common assessments and therefore less need for teacher collaboration and oversight, and so administrative and departmental influence should be lower. Influence of leadership was significantly lower as indicated by teachers in the low control subject areas. However, the influence of leadership was also found to be significantly lower among middle school teachers. High school teachers rated administrative and departmental influence higher in three out of the four variables within the Leadership construct. The only variable not rated higher by the high school teachers surveyed was the influence of other teachers.

The researcher also found it interesting that the correlation ratings for the variables representing the influence of the main course textbook (item 9 on the survey) and the control over selecting textbooks and instructional materials (item 14 on the survey) were found to be nonsignificant and therefore not used for further analyses. This finding conflict's with Archbald and Porter's (1994) study in which they concluded "textbooks appeared to be a major influence under any level of curriculum control" (pp. 29-30). It was expected that the influence of the main course textbook and the control

over selecting instructional materials would have presented a stronger correlation in determining content. This assumption was also based on the increasing centralized practice in Florida school districts of selecting textbooks that are aligned with curriculum objectives and state and district-required tests, especially in the high control subject areas. However, the case in the district surveyed may be that not all teachers in the sample had to equally rely on textbooks or not all teachers may have experienced externally imposed tests and guides, thus allowing for greater perceptions of control over content and pedagogy.

The results of the initial MANOVA for the six identified constructs did not indicate significant differences when comparing groups of teachers by years of teaching experience. However, follow-up oneway ANOVA analyses using the regression factors revealed interesting patterns of responses to consider. The external factors influencing content taught were affected by years of teaching experience. Each group of teachers indicated that variables related to both the leadership and the tests and curriculum guides construct were less and less of an influence as they progressed in years of teaching. Classroom teachers reported a significant decline in the influence of leadership for each interval of teaching experience, from 0 to 10 years, 11 to 20 years, and to 21 or more years of experience. This same steady decline was revealed in the examination of means related to the influence of tests and curriculum guides. Regarding the internal factors of self, examination of the mean influence of teacher beliefs revealed a significant drop after ten years, an indication that the internal factors influencing content taught were no longer a strong influence for teachers in the group with 11-20 years of experience. The results of the mean perceptions of control of pedagogy also followed the same pattern, a

significant slump during the 11 to 20 year period. An examination of the other internal factors related to self, teachers' perceptions of success and satisfaction, also revealed a disturbing trend in that teachers perceived less and less success and satisfaction for each interval of teaching experience, from 0 to 10 years, 11 to 20 years, and to 21 or more years of experience.

Conclusions

The results of this study suggest that the rather substantial differences in curriculum control policies distinguishing the low-control from the high-control subject areas do not inherently produce similarly substantial differences at the classroom level. While observational and qualitative data is lacking, clearly teachers indicated that they predominantly relied on their own beliefs when determining content and pedagogy, therefore illustrating that their professional discretion was not sharply curtailed. However, results of this study also indicate concern regarding teachers' perceptions of success and satisfaction as they try to mediate and mitigate external factors of curriculum control.

What do the results of this study mean to those involved in the education reform process? How can the information from this study help inform policies to improve teachers' working conditions and promote teacher and leadership effectiveness? These questions are addressed in terms of what policy makers, school district administrators, and individual classroom teachers can and should do to implement and support meaningful curriculum reform.

A policy observer should not assume that massive curriculum control programs have a strong determining influence in shaping curriculum and instruction. Since the 1980s such massive reform policies have gained popularity with policymakers and the public because they can be viewed as relatively inexpensive quick fixes. The results of this study clearly indicate that such thinking may be flawed. For instance, once the mainstay of the curriculum reform process, state adopted course textbooks aligned with standardized curriculum course objectives no longer hold the dominant influence on teachers' decisions regarding content taught and teaching practices.

Individuals in a position to change education policy must ultimately be committed to providing teachers what they need to effectively implement curriculum reform and provide ongoing support to teachers during the process. Effective leadership is an integral component during education reform. Unless significant support is provided to individual classroom teachers, top-down curriculum policies will remain remote, not well understood, and easy to ignore with impunity. Such oversight has been a fatal flaw found in past reform efforts. This is evidenced in the pragmatic implications of not giving teachers strong support in their daily classroom activities: when core curricula are not carefully selected; when ongoing training for teachers to implement the curriculum with fidelity is neglected; when tools for gathering and analyzing student data of and for learning are not provided; and when there is not proper alignment between what is to be taught and the capacity of teachers (for example, the instructional time allotted and the class size) to address the continuum of fast to slow and struggling students. This study showed in particular that textbooks or curriculum guidelines adopted at the state or

district level do not preclude alternative decisions with respect to these matters at the school and classroom levels.

The responsibility of effective reform also lies with school administrators to implement state and national initiatives. School district administrators and school site administrators are responsible for creating an environment conducive to effective change, one in which the professional expertise of teachers is not only recognized, but viewed as an integral component of the feedback loop. Teachers must first be skillfully guided outside of their classroom-centric perspectives and belief systems to embrace new content and teaching practices. This study showed that the majority of teachers rated the influence of administrative leadership considerably low, indicating that there may be insufficient supervision, monitoring, feedback, and support to engender change. Regardless of other factors, if teachers do not view their administrators as effective curriculum leaders, the predominance of classroom-centric behaviors and practices may continue once classroom doors are closed, thus stifling any reform effort.

However, this is not to suggest that the responsibility for implementation of new curriculum standards rests solely with school administrators alone. While teachers have a great deal of autonomy in their classroom and much freedom to interpret guides to suit their individual interest and talents and to suit their beliefs regarding what their students need for future work and study, duty requires some adherence to policy. Teachers need to make a concerted effort to break from a predisposition to guard their professional culture as insulated and impervious to outside forces. Educators, as a professional community, must remain open to engage in an ongoing conversation regarding the reform process. Teachers make up the bulk of the staffing in most districts and schools, and they

are the anchor of the teaching profession. Therefore their expertise must be recognized and their voice must become a more significant force in the reform process. Classroom teachers in particular have a critical role to play by consistently demanding resources that ensure effective curriculum reform without the total and absolute release of local control. A state or district test, a new textbook aligned to new standards, a curriculum revision process – these policies pale in significance compared with the day to day curriculum planning, instructional activities, and societal demands making up teachers' working lives.

Does this suggest reform policies have made no difference in curriculum and pedagogy at the classroom level? Taking into account the increased influence on states by "Race to the Top" funding tied to the implementation of the National Common Core Standards, one could argue that a zone of discretion is shrinking in regards to curriculum. However, in relation to the overall scope of discretion teachers have and their ultimate veto-power in the classroom concerning what gets taught, the external factors studied here are relatively weak instruments of curriculum control. The district's policies studied here of alignment of guides, textbooks, and tests and their uses of tests for monitoring and accountability probably produce a measurable, if not substantial, influence on content taught and pedagogy. The data indicate this alignment is more true in the high control subject areas. The use by teachers of the same textbook for the same course increases the probability of more similar content coverage, especially if a guide prescribes coverage of particular topics and a test evaluates students on particular topics. However, that teachers use textbooks with much discretion to pick and choose their coverage and that teachers

exercise considerable discretions in their classrooms tend to temper the size of the effect of curriculum control policies on standardizing practice.

Since the 1980s public education has undergone an examination of what was being taught in its classrooms like none other in America's brief history. The expectation expressed by national, state and local leaders that all students can learn and will learn a specific curriculum has become a lasting mantra of politicians along with repeated cries for accountability. The perspectives of teachers regarding specific variables that impact teachers' professional discretion and satisfaction need to also be heard in order to design a more effective reform process. As stewards of the local educational system, educators must continually seek ways to ensure the requirements of state and national governments are met while creating schools designed to meet the needs of the local communities. As partners in the curriculum reform process, district administrators, school site administrators, and classroom teachers, along with community stakeholders, can create these schools.

Most reformers, across the ideological spectrum, have paid little attention to the holistic interplay of factors that govern lasting change where it counts the most, that being in the daily interactions of teachers and students in the classroom. Instead, most reform policies have focused on singular external components in efforts to influence change: textbook content, standardized curriculum guides, standardized testing, accountability measures to reward or punish students, teachers and schools. If reform is intended to actually improve teaching and learning, then efforts need to be more squarely focused where significant change can happen, with the teacher in the classroom. Unless a collaborative effort of transformation is sought, one that recognizes and engages the

expertise of teachers, then actual change in teaching and learning in the classroom trenches will be increasingly arduous, incremental, and difficult to manage. The future of school reform will not succeed otherwise.

Discussion and Recommendations for Practice

National, state, and district initiatives to raise standards and improve curriculum through test, textbook, and course content policies raise complex issues about education reform. These policies may be well intended in efforts to improve curriculum quality and equity for the children in our nation's public school system. But these same policies may have the unintended consequence of undercutting school-based curriculum control and the professional discretion of teachers; they may have little effect on classroom practices at all, positive or negative. This research intended to probe those issues.

In this era of state mandated curriculum reform combined with increasing national pressures, it is critical that school district personnel, especially school-site administrators, understand the dynamic and complex relationship of teachers' perceptions of professional discretion and satisfaction inherent in the reform process. It is the responsibility of school district administrators to implement state and national initiatives. Knowing the perspective of teachers is key to the development of an effective curriculum reform process. Quite simply, telling teachers what to do or providing scripted curriculum plans and accompanying textbooks is not enough. The reform practice must address those areas that teachers believe are important to effectively implement new curriculum standards and teaching practices.

Curriculum Control and Influences on Professional Discretion

A main emphasis of this study was to examine the effects of curriculum control policies on teacher control over classroom content and pedagogy. The possibility that prescriptive curriculum regulations may prevent teachers from feeling ownership over curriculum has been a concern in the debate regarding reform efforts. Critics of centralized curriculum control have argued that teachers are experiencing a loss of control over curriculum under the constraints of the reform process. One concern is that centralized control policies prevent teachers from making content or instructional decisions that would better meet the needs of their students than the curriculum prescribed by policy. This concern assumes that curriculum control policies exercise a certain level of influence that can prevent teachers from following their own beliefs about content and instructional methods, and that their beliefs would differ from prescribed curriculum. Certainly results of this study indicate that teachers' beliefs have predominance in determining content and practice. There may be instances in which, but for curriculum policy, a teacher's choices or instructional approach would be entirely different. However, results of this study raise doubt as to whether this was the general pattern for policies and practices within the school district sampled.

According to Archbald and Porter's (1994) curriculum control model, "the greater the control over curriculum, the lower should be the reported control by teachers over both content and pedagogy in the classroom" (p. 30). Results of this study are fairly consistent with the centralized curriculum control model regarding teachers' ratings of perceived external control over content among the different curriculum control groups (high, medium, and low). With respect to content, teachers' ratings of control were the

highest in the low control subject areas, with decreasing ratings to medium and then high control subject areas as expected. This result and the higher ratings of policy influences from teachers in more prescribed curriculum subject areas, indicates teachers believe policies of the types examined here can influence teachers' professional discretion regarding content. An examination of the overall sample means of items which influence content (items 1 to 18 on the survey) also provides evidence that curriculum control policies exert influence on teachers' professional discretion. Teachers indicated that their own perceived control over selecting content, topics, and skills was far lower than the perceived control of all external factors, with the exceptions of the main course textbook and district tests. The variables representing the main course textbook (items 9 and 14 on the survey) proved to be nonsignificant. District tests were not in place district-wide for each subject area at the time of this study. These results indicate that teachers perceived the external factors of testing and curriculum guides had a much greater influence over their own determinations of content taught.

The results of teachers' perceived control over pedagogy are a little more mixed. Teachers did indicate that their perceived control over selecting teaching techniques was greater than the influence of all external content control factors including state and district curriculum guides and tests. Further examination of the means for all items indicating how much control teachers felt they had in their classrooms (items 14 to 18 on the survey) reveals the greatest perceived control was in selecting the amount of homework to be assigned, which was rated higher than the perceived control of selecting teaching techniques. But overall, the means for these items were only slightly above the scale midpoint, suggesting that teachers' feelings of control over pedagogy may be

adversely affected by curriculum control policy reforms. These results also indicate that whatever the level of influence of the prescribed curriculum, teachers exercise a certain amount of professional discretion regarding teaching practices used in the classroom.

Curriculum Control and Influences on Teacher Satisfaction

A second emphasis of this study was to examine the conditional aspect of whether teachers' feelings of decreased ownership over curriculum would diminish their sense of responsibility for learning outcomes as evidenced in decreasing perceptions of success and satisfaction. Some contend that centralized curriculum control threatens to demoralize and de-professionalize teachers. The question here is what is the evidence that centralized curriculum control policies affect teachers' perceptions of success and satisfaction? On the construct of perceptions of success and satisfaction there were statistically significant differences between the teachers in the low and the high curriculum control areas, which would indicate concerns about the effects of centralized curriculum control policies on teacher job satisfaction are justified.

If it is true that curriculum control policies exert a fairly modest influence on teachers' curriculum decisions and practices, then it is not surprising that teachers working in subject areas with more prescribed curriculum guides report lower perceptions of success and satisfaction. This is not to say that all teachers in high control subject areas have the same attitudes about curriculum control policies. At the same time, it cannot be assumed that teachers unequivocally oppose these policies. Whatever the individual variation in teachers' attitudes and beliefs about these particular policies, it appears on the whole these policies are neither intrusive nor unpopular enough to engender significant adverse ratings of job satisfaction or personal efficacy.

However, the overall means on these scales were also only slightly above the scale midpoint, suggesting that efficacy and job satisfaction may be somewhat of a problem. While these items clearly cannot capture the complexity of teachers' feelings about their work and about the effects of curriculum policies, they do indicate empirical evidence that on-the-job efficacy is important information that should be included in the debate regarding the curriculum reform process. Reform planners can use the knowledge of these specific significant differences to customize the process according to the teacher audience, but should keep in mind that teachers have similar perspectives.

Recommendations for Future Research

1. Conduct a longitudinal study with the same sample of teachers. Include focus groups with classroom teachers and conduct interviews to determine specifics regarding the variables impacting teachers' perceptions of professional discretion and satisfaction during the reform process. Interview questions should also inquire as to how teachers define "professional discretion" and "job satisfaction."
2. Conduct a study with principals to find out what they perceive to be the greatest factors affecting teachers' professional discretion and satisfaction, especially in relation to the curriculum reform process. Also examine what principals perceive to be their role in the implementation of new curriculum standards and assessments and what they see as their strengths and weaknesses of the existing reform process.
3. Conduct a study with district level administrators to find out what they perceive their role to be in the implementation of new curriculum standards and assessments and what they see as the strengths and weaknesses of the existing reform process.

4. Conduct a similar study with teachers in elementary schools, but replace categories of curriculum control with grade level categories to see if there is there are similar effects on professional discretion and satisfaction.
5. Conduct a longitudinal of cohort groups of teachers and students to determine the relationship between perceived curriculum control and student achievement. Develop a scale that could compare teachers' ratings of professional discretion and satisfaction with student achievement variables, such as grade point average, standardized test scores, and progress-monitoring test scores.
6. Conduct a study to further examine the reasoning behind the significant differences found among the groups of teachers with varying years of teaching experience, especially in regards to the decline of internal, locus of control, factors relating to the influence of teacher beliefs, control of pedagogy, and perceptions of success and satisfaction.
7. Conduct a study to examine the data from this study with comparable data collected and analyzed by the National Center for Education Statistics (NCES), in particular the variables that attempt to gauge teachers' perceptions of success and job satisfaction, items 19 to 25 on the survey.

APPENDIX A: SURVEY INSTRUMENT

CURRICULUM CONTROL AND TEACHERS' PERCEPTIONS OF PROFESSIONAL DISCRETION AND SATISFACTION
by Donald May

START HERE

Directions: Rate ***how big an influence*** each factor below has in determining the content (information, concepts, skills) of the course you teach.

		No Influence	Minimal Influence	Little Influence	Some Influence	Considerable Influence	Major Influence
	Please circle one:						
1.	State curriculum guidelines	0	1	2	3	4	5
2.	**District curriculum guidelines**	0	1	2	3	4	5
3.	School administrators' decisions and guidance	0	1	2	3	4	5
4.	**Departmental decisions and guidance**	0	1	2	3	4	5
5	Other teachers' decisions and guidance	0	1	2	3	4	5
6.	**State tests**	0	1	2	3	4	5
7.	District tests	0	1	2	3	4	5
8.	**School / department common assessments**	0	1	2	3	4	5
9.	The main course textbook	0	1	2	3	4	5
10.	**My own beliefs about what topics are important**	0	1	2	3	4	5
11.	My own knowledge of particular topics	0	1	2	3	4	5
12.	**What my students are capable of understanding**	0	1	2	3	4	5
13.	What my students need for future study and work	0	1	2	3	4	5

Directions: Rate ***how much control*** you feel you have in your classroom over each of the following areas in your planning and teaching.

		No Control	Minimal Control	Little Control	Some Control	Considerable Control	Major Control
	Please circle one:						
14.	**Selecting textbooks / instructional materials**	0	1	2	3	4	5
15.	Selecting content, topics, and skills	0	1	2	3	4	5
16.	**Selecting teaching techniques**	0	1	2	3	4	5
17.	Determining amount of homework to be assigned	0	1	2	3	4	5
18.	**Setting standards for grading and achievement in my class**	0	1	2	3	4	5

Please Continue on the Back

CONTINUE HERE

Directions: Please circle one answer for each statement below:

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
19.	My success or failure in teaching is due primarily to factors beyond my control rather than to my own effort and ability.	1	2	3	4	5	6
20.	I sometimes feel it is a waste of time to try to do my best as a teacher.	1	2	3	4	5	6
21.	Teachers are not a very powerful influence on student achievement when all factors are considered.	1	2	3	4	5	6
22.	I usually look forward to each working day at this school	1	2	3	4	5	6
23.	I feel that I am making a positive difference for the majority of my students.	1	2	3	4	5	6
24.	Staff members maintain high standards of performance for themselves.	1	2	3	4	5	6
25.	The teachers in this school push the students pretty hard in their academic subjects.	1	2	3	4	5	6

Demographic Information: Please mark an "X" after your answer for each statement below.

26. Respondent's number of years as a classroom teacher:

0-5 years:		6-10 years:		11-15 years:		16-20 years:		21-25 years:		26 or more years:	

27. Respondent's age:

20-29 years:		30-39 years:		40-49 years:		50 or more years:	

28. Respondent's gender:

Female:		Male:	

29. **Respondent's teaching assignment** - Please list below the subject(s) and grade level(s) of the course(s) you currently teach:

Subject(s): **Grade level(s):**

****Thank you for your time in completing this questionnaire.****

APPENDIX B: COMPLETE ROTATED FACTOR MATRIX

Rotated Factor Matrix[a] (Including All Factor Loadings)

	Factor					
	1	2	3	4	5	6
My own beliefs about what topics are important (Q# 10)	.826			.130		
My own knowledge of particular topics (Q# 11)	.815					
What my student are capable of understanding (Q# 12)	.597		.170	.117		.120
What my students need for future study and work (Q# 13)	.554		.289	.154		.118
Selecting content, topics, and skills (Q# 15)	.505	-.165	.197	.352		
District tests (Q# 7)		.814		-.132		
State tests (Q# 6)		.769			.102	
District Curriculum Guides (Q# 2)	-.201	.590		.120	.236	
State Curriculum Guides (Q# 1)	-.104	.572		.285	.188	.115
Main Course Textbook (Q# 9)		.299	-.131		.137	
Personal degree of whether to try to do my best as teacher (Q# 20)			.755	.115		
Teachers are a very powerful influence on student achievement (Q# 21)	.154		.656	.133		.122
I feel that I am making a positive difference for the majority of my students (Q# 23)	.192		.534	.206		.326
I usually look forward to working each day at this school (Q# 22)			.530	.152	.120	.243
Perception of control over success or failure in teaching (Q# 19)	.109	-.119	.488	.153		
Selecting amount of homework to be assigned (Q# 17)	.117		.184	.765		.158
Selecting standards grading and achievement (Q# 18)	.225		.191	.675		.144
Selecting teaching techniques (Q# 16)	.270		.322	.652		
Selecting textbooks and instructional materials (Q# 14)	.258	-.114	.235	.314	.126	
Departmental decisions and guidance (Q# 4)		.228			.831	
Other teachers' decisions and guidance (Q# 5)	.172	.167			.540	
School Administrators' decisions and guidance (Q# 3)		.366	.142		.534	.161
School / Dept Common Assessments (Q# 8)		.379			.406	.145
Staff members maintain high standards of performance for themselves (Q# 24)			.211	.158	.134	.831
Teachers in this school push the students pretty hard in their academic subjects (Q# 25)			.206	.161	.110	.692

Note: a. Rotation converged in 7 iterations. Extraction Method: Maximum Likelihood. Rotation Method: Varimax with Kaiser Normalization.

APPENDIX C: PERMISSION TO USE SURVEY INSTRUMENT

1404 Live Oak Street
New Smyrna Beach, FL 32168

January 12, 2010

Dr. Douglas Archbald
103E Willard Hall Education Building
University of Delaware
Newark, DE 19716

Dear Dr. Doug Archbald:

I am completing a doctoral dissertation degree at the University of Central Florida entitled "Curriculum Control and Professional Discretion." I would like your permission to use and adapt the questionnaire you developed in the following study:

Archbald, D. A., & Porter, A. C. (1994). Curriculum control and teachers' perceptions of autonomy and satisfaction. *Educational Evaluation and Policy Analysis, 16*(1), 21-39. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ484356&site=ehost-live

I have also attached / enclosed a copy of the survey adapted from your original instrument to be used for the purposes of my dissertation research.

The requested permission extends to any future revisions and editions of my dissertation, including non-exclusive world rights in all languages, and to the publication of my dissertation on demand by UMI. These rights will in no way restrict republication of the material in any other form by you or by others authorized by you. Your signing of this letter will also confirm that you own or your company owns the copyright to the above-described material.

If these arrangements meet with your approval, please sign this letter where indicated below and return it to me in the enclosed return envelope. Thank you for your attention in this matter.

Sincerely,

Donald S. May

PERMISSION GRANTED FOR THE USE REQUESTED ABOVE:

By: _____ Date: Jan 19, 2010
Dr. Douglas Archbald

APPENDIX D: VOLUSIA COUNTY SCHOOLS LETTER OF PERMISSION

Dr. Margaret A. Smith
Superintendent of Schools

P.O. Box 2118
DeLand, Florida 32721-2118

200 North Clara Avenue
DeLand, Florida 32720

DeLand (386) 734-7190
Daytona Beach (386) 255-6475
New Smyrna Beach (386) 427-5223
Osteen (386) 860-3322

November 23, 2009

Mr. Donald S. May
Silver Sands Middle School
1300 Herbert Street
Port Orange, FL 32129

Dear Mr. May:

I have received your request to conduct research within Volusia County Schools. I have approved your request to conduct research on the topic of "Curriculum Control and Teachers' Perceptions of Professional Discretion and Satisfaction." As with all requests to do research; participation is at the sole discretion of the principals, teachers and parents of all students involved. Parent Consent Forms will be necessary for all data gathered from the students of Volusia County Schools.

By copy of this letter, you may contact the school principals who allow this research to be conducted with their faculty and students. We request that you conduct your survey with as little disruption to the instruction day as possible.

I would appreciate receiving a copy of your project at the completion of your study.

Sincerely,

C/ Colwell

Chris J. Colwell, Deputy Superintendent
Instructional Services

CJC/mh

APPENDIX E: UNIVERSITY OF FLORIDA INSTITUTIONAL REVIEW BOARD PERMISSION

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

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Donald S. May, Jr.**

Date: **December 02, 2009**

Dear Researcher:

On 12/2/2009, the IRB approved the following activity as human participant research that is exempt from regulation:

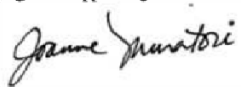
Type of Review:	Exempt Determination
Project Title:	Curriculum Control and Teachers' Perceptions of Professional Discretion and Satisfaction
Investigator:	Donald S May, Jr.
IRB Number:	SBE-09-06574
Funding Agency:	
Grant Title:	
Research ID:	N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Joseph Bielitzki, DVM, UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 12/02/2009 10:53:17 AM EST



IRB Coordinator

LIST OF REFERENCES

A Nation At Risk (1983) available from http://www.ed.gov/pubs/NatAtRisk/risk.html

Alderfer, C. P. (1972). *Existence, relatedness, and growth; human needs in organizational settings*. New York: Free Press.

Allen, R. (2009). Has the time come for national standards? *ASCD Infobrief, 15*(2), 1-8. Retrieved June 10, 2009, from http://www.ascd.org/publications/newsletters/infobrief/vol15/issue2/toc.aspx

Anderman, E. M., & Wolters, C. A. (2006). Goals, values, and affect: Influences on student motivation. In P. A. Alexander, P. H. Winne, P. A. Alexander & P. H. Winne (Eds.), *Handbook of educational psychology.* (pp. 369-389). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2006-07986-017&site=ehost-live

Apple, M. W. (1990). Restoring the voice of curriculum specialists. *Education Digest, 56*(2), 48-52. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=9011120907&site=ehost-live

Apple, M. W. (2004). *Ideology and curriculum* (2nd ed.). New York: Routledge.

Apple, M. W. (2006). *Educating the 'Right' way: Markets, standards, god, and inequality* (2nd ed.). New York: Routledge.

Apple, M. W. (2009) Series editor's introduction. In W. Au, *Unequal by design: High-stakes testing and the standardization of inequality* (pp. vii-ix). New York: Routledge.

Archbald, D. A., & Porter, A. C. (1994). Curriculum control and teachers' perceptions of autonomy and satisfaction. *Educational Evaluation and Policy Analysis, 16*(1), 21-39. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ484356&site=ehost-live

Associated Press. (2009, Monday, June 15, 2009). U.S. to spend up to $350 million for uniform tests in reading, math. *The Washington Post,* pp. 1-1. Retrieved October 8, 2009, from http://www.washingtonpost.com/wp-dyn/content/article/2009/06/14/AR2009061402660.html

Au, W. (2009). *Unequal by design: High-stakes testing and the standardization of inequality*. New York: Routledge.

Babbie, E. (2001). *The practice of social research. (9th ed.).* Belmont, CA: Wadsworth/Thomason Learning.

Bandura, A. (1986). *Social foundations of thought and action : A social cognitive theory*. Englewood Cliffs, N.J.: Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W H Freeman.

Bandura, A. (2008). An agentic perspective on positive psychology. *Positive psychology: Exploring the best in people, vol 1: Discovering human strengths.* (pp. 167-196). Westport, CT US: Praeger Publishers/Greenwood Publishing Group. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2008-13953-009&site=ehost-live

Bauer, S. (2009, 9/09/2009). States scramble for reform to get stimulus money. *Associated Press,* pp. 1-1. Retrieved from http://www.google.com/hostednews/ap/article/ALeqM5irQ98Fr6me-yudqhyVUlUEfEfPTQD9AK0JN80

Bogler, R. (2001). The influence of leadership style on teacher job satisfaction. *Educational Administration Quarterly, 37*(5), 662. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=5712379&site=ehost-live

Boote, D. N. (2006). Teachers' professional discretion and the curricula. *Teachers & Teaching, 12*(4), 461-478. doi:10.1080/13450600600644319

Boote, D. N., & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational Researcher, 34*(6), 3-15. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ727645&site=ehost-live; http://www.aera.net/publications/?id=813

Bracey, G. W. (2008). The leaning (toppling?) tower of PISA. *Principal Leadership, 9*(2), 49-51. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ812691&site=ehost-live; http://www.principals.org/s_nassp/sec_inside.asp?CID=43&DID=43

Bruner, J. S., Goodnow, J. J., & Austin, G. A. (1962). *A study of thinking.* New York: Science Editions.

Caprara, G. V., Barbaranelli, C., Borgogni, L., & Steca, P. (2003). Efficacy beliefs as determinants of teachers' job satisfaction. *Journal of Educational Psychology, 95*(4), 821-832. doi:10.1037/0022-0663.95.4.821

Castle, K. (2006). Autonomy through pedagogical research. *Teaching & Teacher Education: An International Journal of Research and Studies, 22*(8), 1094-1103. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ744998&site=ehost-live; http://dx.doi.org/10.1016/j.tate.2006.07.001

Cornett, J., & Knight, J. (2009). Research on coaching. *Coaching: Approaches & perspectives.* (pp. 192-216). Thousand Oaks, CA US: Corwin Press. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2008-15298-009&site=ehost-live

Costa, A. (2009, November) *The climate of education: Reading between the lines.* Speech presented at the National Council of Teachers of English Annual Convention, Philadelphia, PA.

Craig, S. J., & Ross, V. (2008). Cultivating the image of teachers as curriculum makers. In F. M. Connelly, M. Fang He & J. Phillion (Eds.), *The SAGE handbook of curriculum and instruction* (pp. 282-7). Los Angeles: Sage Publications.

Crocco, M. S., & Costigan, A. T. (2007). The narrowing of curriculum and pedagogy in the age of accountability. *Urban Education, 42*(6), 512-535. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=27246092&site=ehost-live

Cronbach, L. J. (1988). Internal consistency of tests: Analyses old and new. *Psychometrika, 53*(1), 63-70. doi10.1007/BF02294194.

Crossman, A., & Harris, P. (2006). Job satisfaction of secondary school teachers. *Educational Management Administration & Leadership, 34*(1), 29-46. doi:10.1177/1741143206059538

Day, C., Elliot, B., & Kington, A. (2005). Reform, standards and teacher identity: Challenges of sustaining commitment. *Teaching & Teacher Education, 21*(5), 563-577. doi:10.1016/j.tate.2005.03.001

Day, C., & Smethem, L. (2009). The effects of reform: Have teachers really lost their sense of professionalism? *Journal of Educational Change, 10*, 141-157. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ838338&site=ehost-live; http://dx.doi.org/10.1007/s10833-009-9110-5

De Jesus, S. N., & Lens, W. (2005). An integrated model for the study of teacher motivation. *Applied Psychology: An International Review, 54*(1), 119-134. doi:10.1111/j.1464-0597.2005.00199.x

Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=3926504&site=ehost-live

Dembele, M., & Schwille, J. (2006). Can the global trend toward accountability be reconciled with ideals of teacher empowerment?: Theory and practice in guinea. *International Journal of Educational Research, 45*, 302-314. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ765052&site=ehost-live; http://dx.doi.org/10.1016/j.ijer.2007.02.005

Dillman, D. A. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). Hoboken, N.J.: Wiley & Sons.

Dillon, S. (2010, March 5). 16 Finalist Are Named For School Grant Program. *New York Times,* p. 15. Retrieved from Academic Search Premier database.

Dinham, S., & Scott, C. (1998). A three domain model of teacher and school executive career satisfaction. *Journal of Educational Administration, 36*, 362-78. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ571817&site=ehost-live

Domenech, D. A. (2009). Our move toward common standards. *School Administrator, 66*(7), 45-45. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=43395559&site=ehost-live

Eisner, E. W. (2002). What can education learn from the arts about the practice of education? *Journal of Curriculum and Supervision, 18*(1), 4-16. http://search.ebscohost.com.ezproxy.lib.ucf.edu

Eisner, E. W. (2006). *Two visions of education*. Brooklyn, NY: The New Teacher Center.

Elementary and Secondary Education Act of 1965 (ESEA, Public Law 89-10) available from http://www.ed.gov/policy/elsec/leg/esea02/index.html

Feldman, J., Tung, R., & Center for, C. E. (2002). *The role of external facilitators in whole school reform: Teachers' perceptions of how coaches influence school change* Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED470680&site=ehost-live

Field, A. (2009). *Discovering statistics using SPSS (3rd ed.)* Thousand Oaks, CA: Sage Publications, Inc. Retrieved from PsycINFO database.

Frymier, J. (1987). Bureaucracy and the neutering of teachers. *Phi Delta Kappan, 69*(1), 9-14. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ359283&site=ehost-live

Fullan, M. (2009). Large-scale reform comes of age. *Journal of Educational Change, 10*, 101-113. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ838336&site=ehost-live; http://dx.doi.org/10.1007/s10833-009-9108-z

Gallagher, K. (2009). *Readicide: How schools are killing reading and what you can do about it*. Portland, ME: Stenhouse Publishers.

Giroux, H. A. (1988). *Teachers as intellectuals: Toward a critical pedagogy of learning*. Granby, Mass.: Bergin & Garvey.

Goodlad, J. (1984). *A Place Called School.* New York: McGraw-Hill.

Gregoire, M. (2003). Is it a challenge or a threat? A dual-process model of teachers' cognition and appraisal processes during conceptual change. *Educational Psychology Review, 15*(2), 147. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=10006564&site=ehost-live

Guskey, T. R. (.). (2009). *Practical solutions for serious problems in standards-based grading*. Thousand Oaks, CA US: Corwin Press. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2008-12124-000&site=ehost-live

Hannaway, J., & Carnoy, M. (1993). *Decentralization and School Improvement.* San Francisco: Jossey-Bass.

Heller, H. W., Clay, R., & Perkins, C. (1993). The relationship between teacher job satisfaction and principal leadership style. *Journal of School Leadership, 3*(1), 74-86. Retrieved from http://search.ebscohost.com.exproxy.lib.ucf.edu

Hilferty, F. (2008). Theorising teacher professionalism as an enacted discourse of power. *British Journal of Sociology of Education, 29*(2), 161-173. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ787622&site=ehost-live; http://www.informaworld.com/openurl?genre=article&id=doi:10.1080/01425690701837521

Hipp, K. A. (1996). *Teacher efficacy: Influence of principal leadership behavior* Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED396409&site=ehost-live

Hipp, K. A. (1997). *Documenting the effects of transformational leadership behavior on teacher efficacy* Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED407734&site=ehost-live

Hurst, M. D. (2004). Textbook shortages spur digital alternatives. *Education Week, 23*(34), 5-5. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=13219458&site=ehost-live

Ingersoll, R. M. (2003). *Who controls teachers' work? power and accountability in america's schools* Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED478006&site=ehost-live

Jorgensen, M., & Hoffman, J. (2003). *History of the no child left behind act of 2001 (NCLB)*. San Antonio, TX: Pearson Education, Inc.

Katz, I. & Assor, A. (2007). When choice motivates and when it does not. *Educational Psychology Review, 19*(4), 429-442. Retrieved from ERIC database.

Kirby, P., Paradise, L., & King, M. (1992). Extraordinary leaders in education: Understanding transformational leadership. *Journal of Educational Research, 85*(5), 303-11. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ452326&site=ehost-live

Klein, M. F. (1991). *The politics of curriculum decision-making: Issues in centralizing the curriculum*. Albany: State University of New York Press.

Klassen, R. M., & Anderson, C. J. K. (2009). How times change: Secondary teachers' job satisfaction and dissatisfaction in 1962 and 2007. *British Educational Research Journal, 35*(5), 745-759. doi:10.1080/01411920802688721

Klymkowsky, M. W. (2007). Teaching without a textbook: Strategies to focus learning on fundamental concepts and scientific process. *CBE - Life Sciences Education, 6*(3), 190-193. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ826042&site=ehost-live; http://dx.doi.org/10.1187/cbe.07-06-0038

Knight, J. (2009). Coaching: The key to translating research into practice lies in continuous, job-embedded learning with ongoing support. *Journal of Staff Development, 30*(1), 18-20,. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ827536&site=ehost-live; http://www.nsdc.org/news/articleDetails.cfm?articleID=1785

Koh, W. L., Steers, R. M., & Terborg, J. R. (1995). The effects of transformation leadership on teacher attitudes and student performance in singapore. *Journal of Organizational Behavior, 16*(4), 319-333. doi:10.1002/job.4030160404

Kozol, J. (2007). High-stakes tests and other modern miseries. *Letters to a young teacher* (1st ed., pp. 111-19). New York: Crown Publishers

Latifi, S. (2009, Aug 27, 2009). Durham defends reading program. *The News & Observer,* pp. 1-2. doi:http://www.newsobserver.com/news/story/1663867.html

Leroy, N., Bressoux, P., Sarrazin, P., & Trouilloud, D. (2007). Impact of teachers' implicit theories and perceived pressures on the establishment of an autonomy supportive climate. *European Journal of Psychology of Education - EJPE, 22*(4), 529-545. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=28832877&site=ehost-live

Levine, T. H., & Marcus, A. S. (2007). Closing the achievement gap through teacher collaboration: Facilitating multiple trajectories of teacher learning. *Journal of Advanced Academics, 19*(1), 116-138. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=30045662&site=ehost-live

Lewin, K. & Gold, M. (1999). *The complete social scientist: A Kurt Lewin reader.* Washington, DC: American Psychological Association.

Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services*. New York: Russell Sage Foundation.

Lucey, T. A., & Hill-Clarke, K. (2008). Considering teacher empowerment: Why it is moral. *Teacher Education and Practice, 21*(1), 47-62. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ833602&site=ehost-live; http://www.rowmaneducation.com/Journals/JTEP/Winter08.shtml

Madaus, G. F., Higgins, J., Higgins, J., & Russell, M. K. (2009). *The paradoxes of high stakes testing: How they affect students, their parents, teachers, principals, schools, and society*. Charlotte, N.C.: Information Age Pub.

Margolis, J. (2008). When teachers face teachers: Listening to the resource "right down the hall". *Teaching Education, 19*(4), 293-310. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ817393&site=ehost-live; http://www.informaworld.com/openurl?genre=article&id=doi:10.1080/10476210802425628

Marshall, K. (2005). It's time to rethink teacher supervision and evaluation. *Phi Delta Kappan 86*(10), 727. Retrieved from http://search.ebscohost.com.exproxy.lib.ucf.edu

Marzano, R. J., Association for Supervision and Curriculum Development, & NetLibrary, I. (2006). *Classroom assessment & grading that work [electronic resource]*. Alexandria, VA: Association for Supervision and Curriculum Development. Retrieved from Click here for FULL TEXT from NetLibrary. http://login.ezproxy.lib.ucf.edu/login?url=http://www.netLibrary.com/urlapi.asp?action=summary&v=1&bookid=179528 xnoindex

Marzano, R., & Kendall, J. S. (1998). *Awash in a sea of standards*. Denver, CO: Mid-Continent Research for Education and Learning.

Maslow, A. H. (1970). *Motivation and personality* (2d ed.). New York: Harper & Row.

Maxwell, J. A. (2006). Literature reviews of, and for, educational research: A commentary on Boote and Beile's "scholars before researchers". *Educational Researcher, 35*(9), 28-31. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ759779&site=ehost-live; http://www.aera.net/publications/Default.aspx?menu_id=38&id=2038

McClelland, D., Atkinson, J. W., Clark, R. W., & Lowell, E. L. (1953). *The achievement motive.* New York: Appleton-Century-Crofts.

McNeil, L. M. (1988). Contradictions of control, part 1: Administrators and teachers. *Phi Delta Kappan, 69*(5), 333-39. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ364788&site=ehost-live

McNeil, L. M. (2000). *Contradictions of school reform: Educational costs of standardized testing*. New York: Routledge.

McNeil, L., & Valenzuela, A. (2000). *The harmful impact of the TAAS system of testing in texas: Beneath the accountability rhetoric* Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED443872&site=ehost-live

Meier, D., & Wood, G. H. (2004). *Many children left behind: How the no child left behind act is damaging our children and our schools*. Boston: Beacon Press.

Mulcahy, D. E., & Irwin, J. (2008). The standardized curriculum and delocalization: Obstacles to critical pedagogy. *Radical History Review,* (102), 201-213. ERIC doi:10.1215/01636545-2008-024.

Nichols, S. L., & Berliner, D. C. (2007). *Collateral damage: How high-stakes testing corrupts America's schools*. Cambridge, Mass.: Harvard Education Press.

Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education, 7*(2), 133-144. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ845602&site=ehost-live; http://dx.doi.org/10.1177/1477878509104318

Pak, T. N., & Tan, C. (2009). Community of practice for teachers: Sensemaking or critical reflective learning? *Reflective Practice, 10*(1), 37-44. doi:10.1080/14623940802652730

Parkison, P. (2008). Space for performing teacher identity: Through the lens of Kafka and Hegel. *Teachers and Teaching: Theory and Practice, 14*(1), 51-60. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ811900&site=ehost-live; http://www.informaworld.com/openurl?genre=article&id=doi:10.1080/13540600701837640

Pearson, L. C., & Moomaw, W. (2005). The relationship between teacher autonomy and stress, work satisfaction, empowerment, and professionalism. *Educational Research Quarterly, 29*(1), 37-53. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=18096754&site=ehost-live

Pelletier, L. G., Séguin-Lévesque, C., & Legault, L. (2002). Pressure from above and pressure from below as determinants of teachers' motivation and teaching behaviors. *Journal of Educational Psychology, 94*(1), 186-196. doi:10.1037/0022-0663.94.1.186

Pelletier, L. G., & Sharp, E. C. (2009). Administrative pressures and teachers' interpersonal behaviour in the classroom. *Theory and Research in Education, 7*(2), 174-183. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ845601&site=ehost-live; http://dx.doi.org/10.1177/1477878509104322

Pinar, W. F. (1992). "Dreamt into existence by others": Curriculum theory and school reform. *Theory into Practice, 31*(3), 228-35. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ453757&site=ehost-live

Reeves, D. B. (2004). The case against the zero. *Phi Delta Kappan, 86*(4), 324. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ708402&site=ehost-live

Richardson, V. (1994). *Teacher change and the staff development process: A case in reading instruction*. New York: Teachers College Press, Teachers College, Columbia University.

Robinson, K., & Azzam, A. M. (2009). Why creativity now? *Educational Leadership, 67*(1), 22. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=ulh&AN=43971755&site=ehost-live

Rosenholtz, S. (1989). *Teacher's workplace: The social organization of schools.* New York: Longman.

Rosenholtz, S. J., & Simpson, C. (1990). Workplace conditions and the rise and fall of teachers' commitment. *Sociology of Education, 63*(4), 241-57. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ423730&site=ehost-live

Ryan, R. M., & Brown, K. W. (2005). Legislating competence: High-stakes testing policies and their relations with psychological theories and research. *Handbook of competence and motivation.* (pp. 354-372). New York, NY US: Guilford Publications. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2005-08058-020&site=ehost-live

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78. doi:10.1037/0003-066X.55.1.68

Ryan, R. M., & Weinstein, N. (2009). Undermining quality teaching and learning: A self-determination theory perspective on high-stakes testing. *Theory and Research in Education, 7*(2), 224-233. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ845611&site=ehost-live; http://dx.doi.org/10.1177/1477878509104327

Schmidt, W. H., & Cogan, L. S. (2009). The myth of equal content. *Educational Leadership, 67*(3), 44-47. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=45003394&site=ehost-live

Schmidt, W. H., Houang, R., & Shakrani, S. (2009). *International lessons about national standards*. Policy Brief by The Thomas B. Fordham Institute, Washington D.C. Retrieved June 8, 2009, from http://www.edexcellence.net/international_education_standards/policy_brief.pdf

Schwab, J. J. (1970). *The practical: A language for curriculum*. Schools for the 70's: Auxilliary Series. Washington: National Education Association, Center for the Study if Instruction.

Schwille, J. (1986). *State policy and the control of curriculum decisions: Zones of tolerance for teachers in elementary school mathematics* No. ED274540). East Lansing, MI: Institute for Research on Teaching, College of Education, Michigan State University.

Sizer, T. R. (2004) Preamble: A reminder for Americans. In D. Meier & G. Wood (Eds.), *Many children left behind: How the No Child Left Behind Act is damaging our children and our schools*. (pp. xvii–xxii). Boston: Beacon Press.

Silins, H. C. (1992). Effective leadership for school reform. *Alberta Journal of Educational Research, 38*(4), 317-34. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ460234&site=ehost-live

Slavin, R. (2008). Education reform requires teachers to apply research-proven methods. *Education Journal,* (110), 7-10. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=36632075&site=ehost-live

Sternberg, R. J. (2006). Creativity is a habit. *Education Week, 25*(24), 64-47. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=19998646&site=ehost-live

Swope, K., Miner, B., & Rethinking Schools, Ltd. Milwaukee, WI. (2000). *Failing our kids: Why the testing craze won't fix our schools* Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED458310&site=ehost-live

Taylor, D. L., & Tashakkori, A. (1995). Decision participation and school climate as predictors of job satisfaction and teachers' sense. *Journal of Experimental Education, 63*(3), 217. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=ulh&AN=9509266042&site=ehost-live

Thomas B. Fordham Foundation, W. (2004). The Mad, Mad World of Textbook Adoption. *Thomas B. Fordham Foundation and Institute,* Retrieved from the ERIC database.

Tomlinson, C. A., & Jarvis, J. (2006). Teaching beyond the book. *Educational Leadership, 64*(1), 16. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=mih&AN=22288317&site=ehost-live

Tyler, W. (1988). *School Organization.* New York: Croom Helm.

Valli, L. (1997). Listening to other voices: A description of teacher reflection in the united states. *Peabody Journal of Education, 72*(1), 67-88. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ582891&site=ehost-live

Van Manen, M. (1994). Pedagogy, virtue, and narrative identity in teaching. *Curriculum Inquiry, 24*(2), 135. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=9501103176&site=ehost-live

Walkington, J. (2005). Becoming a teacher: Encouraging development of teacher identity through reflective practice. *Asia-Pacific Journal of Teacher Education, 33*(1), 53-64. doi:10.1080/1359866052000341124

Weick, K. (1976). Educational Organizations as Loosely Coupled Systems. Administrative Science Quarterly. Retrieved from ERIC database.

White, P. A. (1992). Teacher empowerment under "ideal" school-site autonomy. *Educational Evaluation and Policy Analysis, 14*(1), 69-82. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ446666&site=ehost-live

Wills, J. S., & Sandholtz, J. H. (2009). *Constrained professionalism: Dilemmas of teaching in the face of test-based accountability* Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=37567889&site=ehost-live

Zeichner, K. M., & Liston, D. P. (1987). Teaching student teachers to reflect. *Harvard Educational Review, 57*(1), 23-48. Retrieved from http://ezproxy.lib.ucf.edu/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ351847&site=ehost-live

Zembylas, M. (2003). Interrogating "teacher identity": Emotion, resistance, and self-formation. *Educational Theory, 53*(1), 107-127. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ668986&site=ehost-live

Zembylas, M., & Papanastasiou, E. C. (2005). Modeling teacher empowerment: The role of job satisfaction. *Educational Research & Evaluation, 11*(5), 433-459. doi:10.1080/13803610500146152