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What is the nature of legislative resistance to national education standards?

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Abstract of the Dissertation

What is the nature of legislative resistance to national education standards?

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Abstract

During the past three decades there has been ongoing national discourse over the increasing deterioration of our public education system. There is universal agreement that education is a critical component of our societal infrastructure that is necessary for the future of our economy and our democratic way of life. From the outset, one reform that has been proposed as essential is the establishment of national standards for K – 12 education, to assure that all students will be provided access to a curriculum that will prepare them for higher education and participation in the civic life of our society. Proposals for education reform that incorporate national standards have aroused vigorous opposition from a variety of stakeholders, for a variety of reasons, which has contributed to the inability of policy makers to adopt effective reforms. Congress has passed only one bill calling for the voluntary establishment of national education standards, but there has been no progress since that legislation was signed into law almost two decades ago. This paper builds on a 1999 study by David Merrett, who examined the voting patterns of the legislators who considered the 1994 Goals 2000 legislation that called for the establishment of national education standards. The purpose of this study is to examine those voting patterns to determine whether there is a common theme that might lend coherence to the disparate opposition to national education standards. The identification of such a common theme could enable policy makers to work together more effectively in the pursuit of education reform. Regression analysis demonstrates that legislators who opposed other social reforms were likely to oppose national education standards as well. This tendency can be explained by a 1986 analysis by Strickland and Whicker, who propose that social issues tend to be bi-modal issues that motivate policy makers to adopt extreme and inflexible positions. The conclusion of this study is that national education standards represent an approach to education reform that is bi-modal in nature. To make progress, policy makers will need to recognize the legitimate concerns of all stakeholders, in order to garner the support that a successful reform initiative will require.

Dedication

This work is dedicated to:

Mary and Anthony Parente

whose compassion and Christian charity allowed me to persevere and grow,

and

Ronit Herzfeld

who they brought into my life to show me the way.

I am forever grateful.

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Chapter 1: Introduction

During the past several decades, there has been growing awareness that our public education system is dysfunctional, and an increasing concern over the failure of policy makers and educators to address the persistent systemic problems (Anyon, 2005, Barlow, 2006, Isaacson, 2009, Lief, 1992, National Commission on Excellence in Education, 1983, Njuguna, 2009, "The President's Education Plan," 1997, Schmidt, Houang & Shakrani, 2009, Vinovskis, 1996).

Education reform in the United States predates the republic, as our founding fathers believed an educated citizenry was necessary for building and maintaining the strong civic institutions that were essential for the survival of our democracy (Profriedt, 2010). By the early nineteenth century, reform movements in public education evolved into a series of social engineering experiments, most of which were doomed to failure (Gutek, 2002, Heffner, 1994, Hunt, 2005, Profriedt, 2010).

Following the devastating report on the state of our public education system (National Commission on Excellence in Education, 1983), a new wave of education reform initiatives has swept the country. These include standardized testing, the micro-managing of the classroom environment, adopting a business model for public schools involving cost effectiveness and efficiency, semi-privatization of public education in the form of charter schools and vouchers to attend private schools, and curriculum standardization (Lutz, 1986). These new reform initiatives have been conducted in a radically changed educational culture, where economic success has replaced civic virtues as the prize for educational achievement (Profriedt, 2010). Not surprisingly, these initiatives have not been more successful than those that preceded them (Heffner, 1994).

Of all the modern education reform initiatives, the proposal for national education standards is the one that appears to be most aligned with the old fashioned motivation for public education to produce good citizens and strong civic institutions. On the face of it, the proposal to adopt national education standards is an expression of the commitment to afford all students, regardless of their circumstances and regardless of where they live, an equal opportunity for a quality education and equal access to the American dream (Darling-Hammond, 1994, Gagnon, 1994, Hardy, 1995, Kozol, 1992). That was the intent of our founding fathers and the reformers of the nineteenth century.

On the other hand, national education standards appear to threaten cherished principles for various stake holders. For many politicians, national education standards represent an abrogation of states' rights ("Getting Testy," 1997, Hardy, 1995, Isaacson, 2009, Kean, 1995). For many parents, national education standards represent the loss of local control over their children's education (Cano, 2004, Hill, 1997, Labaree, 2000). For educators, national education standards represent the assertion of hierarchical control over their autonomy in the classroom

(Day & Smethem, 2009, "Getting Testy," 1997, Hinde & Perry, 2007, Iatarola & Fruchter, 2004, Meier, 1997, Siegel & Siegel, 2004, Traver, 2006, Wong & Shen, 2003). Even progressive thinkers who are committed to affording all students a quality education are concerned that national education and assessment standards will stigmatize poor performance ("Getting Testy," 1997, Isaacson, 2009, McGee Banks, 1997, Schrag, 1997) and widen the gap between already disadvantaged students and their peers if the current disparity in resources between poor and affluent school districts persists (Berube, 1996, Cohen, 1995, Kozol, 1992, Merrett, 1999).

The more restrictive policies of closer teacher supervision, standardized testing, cost effectiveness and efficiency, charter schools, and even state mandated curriculum standards have all been widely implemented. Yet the proposal for national education standards has consistently failed to gain the approval of Congress, the public and educators. This proposal is as aggressively promoted by some policy makers as it is tenaciously resisted by many politicians, educators and parents (Hardy, 1995, Kirst, 1994, Schrag, 1997).

It is to be expected that a policy issue as complex as education reform should generate such divergent positions, and each of the stake holders appears to have reasonable concerns. The proponents of national standards might wonder why the opposition is so determined, while opponents might wonder why those who advocate national standards are so passionate. The challenge is, first, to determine whether the advantages of national education standards are sufficiently compelling as to warrant their implementation, and, if they are, to understand the nature of the opposition, so that a consensus about national standards might be achieved.

It is the purpose of this study to parse the discussion about national education standards in order to identify the nature of the opposition to this potential reform and why it is so difficult to achieve a workable consensus. It is possible that there is a common theme that can explain the opposition to education reform that is based on the adoption of national education standards that is not readily apparent from what is being expressed by the various stake holders. That such a theme exists is suggested by chaos theory, which postulates that there is an underlying rhythm and order in every seemingly chaotic and complex system (Chou, 2004, Hung & Tu, 2009, Kayuni, 2010, Keaten, Nardin, Pribyl & Vartanian, 1994, Snell, Coll, Noble, Cangemi, Payne, Kowalski & Casimir, 1999, Snell, 2009, Snyder, Acker-Hocevar & Wolf, 1995, Warren, Franklin & Streeter, 1998) This study will explore the recent history of education reform efforts in this country and the efforts to adopt national education standards, to examine whether there is such a common theme to the opposition.

The proposed research will build on a study that examined the opposition to the most recent congressional legislation that called for the establishment of national education standards, from the perspective of the polarization between the progressive and conservative cultures in our society. This study will refine that focus to examine the opposition to that legislation and the opposition to other reform based legislation during the same congressional term.

If this study succeeds in achieving a better understanding of the opposing positions on national education standards, that knowledge could potentially help policy makers to build a consensus and formulate effective policy reforms.

Chapter 2: Literature Review

1. Historical Context:

Even before the founding of the republic, Benjamin Franklin exercised a major influence on education in the colonies (Profriedt, 2010). According to Profriedt, Franklin was driven by motives as complex as the man himself. Born to humble origins, he sought the approval of the ruling class and he was gratified when it was bestowed. For Franklin, education, and performance that was recognized by others, was the way to material and worldly success. Profriedt argues that Franklin's position that birth origins should not matter, and that people should be judged on their merits, opened the door to the thinking that drives education policy and practice today. Profriedt concludes that the single minded view that equates education with economic success originated in our past in a more benevolent form.

Profriedt (2010) reports that Franklin was motivated by much more than his concern with how others judged his performance. An examination of Franklin's life, and his educational practices, reveals that he was open minded, he was always willing to rethink a position, he adopted a broad definition of what was useful knowledge, and he undertook various projects to disseminate information among the common people. These were all part of the complex education agenda adopted by Franklin.

Thomas Jefferson, and others among the Founding Fathers, were concerned about the viability of the American experiment. Their focus was on the civic aspects of education, to produce a class of people with the skills and integrity to lead the country, and citizens who had the capability to evaluate their leaders (Profriedt, 2010).

By the early to mid nineteenth century, education reform evolved from the notion of building and strengthening our civic institutions and civic minded citizens into attempts at social engineering through public and private education. Profriedt (2010) noted that Horace Mann championed public education, first in Massachusetts, and then across the country, as a means of turning unruly and undisciplined children into responsible, productive citizens. He worried about the moral integrity of the new groups of voters, because "intemperate, self-interested men were a threat to the Republic" (p. 86). Catharine Beecher in turn concerned herself with furthering the education of women, and she promoted the idea that women, not men, should teach our children.

W.E.B. DuBois considered education to be critical for African Americans, to understand their history as victims of slavery, and their current situation as continuing victims of unemployment, housing discrimination, prejudicial social policies, and the prejudices of the white Americans who surround them. For DuBois, the schools needed to prepare African American students to not only be a critical part of the labor pool in the economy of the American South, but also to participate in policy formulation and planning the future of their society (Profriedt, 2010).

These well intentioned social engineering experiments had a dark side that continues to plague our public education system today. According to Hunt (2005), Americans share two basic beliefs, that we can solve all our social problems, and that our schools are the ideal venue for doing so. Horace Mann asserted that our schools would eliminate crime and poverty from American society. These "panaceas," starting with Bible reading in the schools, as well as readings from other moral texts that would help all students develop good character, evolved by the early twentieth century into ever more ambitious projects. Children of the immigrants who were arriving in large numbers would be converted by the public schools into good, loyal citizens. In the mid twentieth century, American children would be prepared for satisfying and civically productive lives by the "Life-Adjustment" curriculum. Following the launch of the first Soviet satellite, the Sputnik, support for science and math provided through the National Defense Education Act would help us to overtake the Soviets before they could militarize space. Academic education would become more rigorous, and our gifted students would be more challenged.

Ambitious reforms continued to be introduced in ever greater numbers (Hunt, 2005). The open education movement, which eliminated academic entry barriers, would promote natural learning for American youth. Public education would play a central role in President Lyndon Johnson's War on Poverty. Accountability systems would hold our public schools accountable to their constituents. Behavioral objectives would be used as a fail-safe means to achieve the goals of effective teaching and learning. Other pedagogical tools such as modular scheduling would enhance the curriculum's organization. The site-based management movement would alleviate the educational problems that result from the massive bureaucracies. As Gutek (2002) observes, these reform initiatives reflected both continuity and change, but for the most part they did not achieve their social engineering goals.

Hunt (2005) explores the forces that drive the continuing wave of unrealistic education reforms that he refers to as panaceas. He points out that not only are we a young country, but we are a society largely unaware of our own history, or the history of our schools. We therefore do not avail ourselves of our cumulative experience, and we persistently under estimate the complexity of the social issues we are trying to address. Reform initiatives that are developed in such circumstances cannot possibly succeed. Hunt also points to our attraction to new ideas, many of which turn out to simply be fads, and our propensity for embracing the latest reform initiatives without thinking them through. Add to that the crusading nature of reformers who characterize current policies as worthless and their own ideas as sure-fire solutions, their tendency to promote simplistic, one-shot solutions, and the American impatience that drives us to always get things done in a hurry, and it is easy to see why most reform initiatives do not succeed. Policy makers tend to forget that schools are limited institutions with limited capacity for addressing social issues other than education. Hunt asserts that people, not movements or institutions, are responsible for progress. People often report that their most positive school memories are of a teacher who took an interest in them and motivated them to succeed.

Profriedt (2010) laments that modern education reformers have adopted only one part of Franklin's educational ideal, the emphasis on educational achievement as a means of achieving economic success, a notion that has become pervasive in our culture. Even before the 1983 report on the state of our public education system, none other than Admiral Hyman Rickover

asserted bluntly that students who do not take their schooling seriously will not be able to participate in the economic well being of American mainstream society. They will be condemned to work at menial, underpaid jobs, or to intermittent or chronic unemployment.

Hunt (2005) discusses the basic contradiction of the career education movement of the 1970s that was to prepare students for productive employment. The educators who characterized all labor as dignified ignored the fact that our capitalist system emphasizes the value of capital over labor. The profit motive leads management to simplify and eliminate jobs, resulting in unemployment or under-employment. Thus, schools that are tasked with developing human resources are not really serving our economic system.

Hunt (2005) laments that policy makers focus on the process of getting schools and teachers to change, rather than the substance of what the schools need to accomplish. He asserts that curricular change is sometimes depicted as being attractive on its own terms, rather than for any improvement it can achieve, and that such change tends to be more for public relations purposes rather than pedagogical purposes. Yet, those who strive to preserve what is working in education are often dismissively referred to as "traditionalists or stand-patters" (p. 85), while policy makers are not required to analyze how their reform initiatives will affect the educational environment.

Hunt (2005) discusses the wave of education reform initiatives that has swept the country over the past several decades:

a) Education Standards:

Most states have mandated curricular standards for all public schools, and standardized assessment to assure that students, and their schools, are performing up to those standards.

b) Year-Round Education:

This reform proposal goes further than the extended school day reform that is based on the belief that more hours spent learning will result in greater achievement. Year-round education is based on the belief that during the summer vacation students lose much of what they have learned during the school year.

c) Differentiated Staffing:

Differentiated staffing recognizes the varying levels of experience and skills amongst a school's teaching staff. Credentialed teachers who have demonstrated success in the class room are assigned as master teachers or lead teachers, positions from which they mentor or coach new teachers or teachers who have been identified as needing improvement.

d) Minimum Competencies:

This policy involves the establishment of minimum performance standards for students and their schools, and consequences for those who do not meet those standards. The *No Child*

Left Behind Act of 2001 was only one in a series of education reform initiatives that were based on the minimum competencies strategy.

e) Self-Paced Instruction:

Self-paced instruction is a type of learning that proceeds based on students' responses rather than requiring the immediate response of an instructor. Students advance from one topic or section of the instruction to the next at their own speed and their own comfort level.

f) Competency-Based Teacher Education:

This is a method for teacher training that defines specific competencies to be learned by the teacher trainee and explicit criteria for assessing whether the teacher trainee has acquired the necessary skills for teaching. According to Arends, Masla and Weber (1971) the three criteria used to assess the teacher trainee's competency are knowledge, performance and product (Bowles, 1973).

g) Management by Objectives:

The essence of Management by Objectives (MBO) is participatory goal setting, decision making, and defining courses of action. In the school setting, administrators and teaching staff will agree on the objectives for the school year and assign responsibility for specific tasks to all the individuals involved.

h) School-to-Work:

The school-to-work program is a re-invention of the career education program of the 1970s, like other programs of the past that have been recycled.

i) Block Scheduling:

With block scheduling, students have fewer classes each day, but some are of longer duration. This is intended to allow students greater focus on critical subjects such as math, science and language arts.

j) Continuous Progress:

Continuous progress establishes a group of students and several teachers who will stay together for the first five years of elementary school, offering students continuity, stability and a comfortable, family-like learning environment. Teachers must adapt to the range of ages and abilities, using a cooperative learning approach and process-oriented instruction, where students learn to work together to solve problems.

k) Value-Added Leadership:

Leaders do more than manage, instruct and supervise their subordinates. They are risk takers who get up in front of subordinates and model how things should be done effectively. In the school setting, administrators using the value-added leadership model get in front of the class room when necessary to model instruction techniques and to coach and inspire the teacher.

l) Technology:

Over the past two decades, efforts have been made to provide students with computers and Internet access, and to provide teachers with "smart boards," interactive electronic boards to replace the traditional chalk boards. These technology initiatives require thorough planning, significant infrastructure investment, and even more significant training of teachers and students.

m) School Choice:

This controversial initiative allows parents to place their children in schools outside of their children's zones. An even more controversial variation on this policy allows some parents to place their children in private schools and provide them with vouchers to cover part of the tuition expense. Opponents of this reform claim that it only undermines our public education system and makes genuine reform more difficult.

n) Charter Schools:

Charter schools are quasi-public schools that are supported at least in part by public education funds. Charter schools are freed from the bureaucracies of their local school districts and accountable only to their state education authorities. Charter schools must allow students equal access to admissions through a lottery system. On the other hand, they are free to experiment with new educational models, and they can choose whether or not their teaching staff will be unionized. Many consider the charter school movement to be a threat to public education, as it is a step toward privatization of our public schools.

o) High-Stakes Testing:

High stakes standardized testing is a by-product of the minimum competencies strategies and the education standards reform initiative. Opponents lament that standardized testing has shifted the focus of our schools from learning to test taking.

It appears that standardized testing, and curriculum standards on the state level if not on the national level, will be with us for the foreseeable future. Profriedt (2010) observes that the current standards-based reforms are driven by the motivation to help students to achieve economic success. Hunt (2005) is concerned with another superficial expression of the current standards-based reform movement. Schools are considered to be successful if they align their curriculum with the state mandated standards, and they design clever strategies to teach to the standards and help their students get good scores on the state standardized assessment tests.

Schools that implement such strategies successfully are considered to be improving, even if their students are not really learning much that is substantive.

In spite of these distortions of standards-based reform, I believe that national education standards hold great potential for assuring that all our youth are provided a meaningful education, provided that the education infrastructure is properly supported. The remainder of this study will be devoted to exploring why it is so difficult to achieve a consensus about this particular education reform initiative.

2. Background:

Concern about the deterioration of our public education system resulted in the publication of *A Nation At Risk: The Imperative For Educational Reform* in 1983. The report quoted an ominous conclusion from analyst Paul Copperman:

> Each generation of Americans has outstripped its parents in education, in literacy, and in economic attainment. For the first time in the history of our country, the educational skills of one generation will not surpass, will not equal, will not even approach, those of their parents (p. 4).

Nation at Risk (1983) called attention to the importance of education, and the ability of people to think critically and make informed decisions, that has been recognized since the time of our nation's founding. The report also emphasized the importance of public support for education and suggested that there is a strong sentiment in favor of federal support for quality public education.

Given the public's desire for education reform, and the universal declarations of support for such reform by policy makers, politicians and educators, why has there been no meaningful progress over the past several decades? A number of themes emerge from the literature:

1. Reform initiatives are generally formulated by policy makers who are not educators and who are not in touch with what actually occurs in the class room, and they are mostly based on theoretical conceptions rather than empirically supported ideas. Not surprisingly, those policies are poorly thought out, and they fail to produce the promised results (Barlow, 2006, Berube, 1996, Glenn, 2009, Kantor, 1988, Levin, 1998, Porter, 1994).

2. Reform initiatives generally result from a perceived crisis, are hastily implemented, and just as hastily discarded (Burrill, 1997, Hoffa, 1994, Vinovskis, 1996).

3. Reform initiatives are easier to formulate than they are to implement. The difficulties that arise inhibit thorough follow up and contribute to the abandonment of the programs (Porter, 1994, Spillane, Reiser & Reimer, 2002, Wood, 1999).

4. The tendency of policy makers to issue unfunded mandates is a limiting factor in education reform as it is in other policy areas. Even well conceived initiatives with the potential to be effective are usually still born when the required resources are not made available to those who have to implement the programs (Berube, 1996, Burrill, 1997, Darling-Hammond, 1994, Hardy, Koski & Weis, 2004, Kozol, 1992, McGee Banks, 1997, Merrett, 1999).

5. Teachers, who are on the front lines of education, are rarely consulted or included in policy making. Reform programs are mandated without consideration for teacher morale and teacher resistance (Brunner, Fasca, Heinze, Honey, Light, Mardinach & Wexler, 2005, Day & Smethem, 2009 , Iatarola & Fruchter, 2004, Johnson, 2002, Meier, 1997, Siegel & Siegel, 2004, Traver, 2006, Wong & Shen, 2003).

On the other hand, on those occasions that reform initiatives have included and encouraged teacher participation, it has been demonstrated that effective education reform is possible (Ancess & Allen, 2006, Grady, Rothman, Smith & Balch-Gonzalez, 2006, Lief, 1992, Shulman & Armitage, 2005).

These challenges, and more, apply to efforts to introduce or improve education standards, especially national standards. The very term "national education standards" is polarizing, evoking concerns about who should control the education process, how equity will be maintained, with or without such standards, and the cultural and religious convictions that weigh on what parents and politicians want to include and exclude from curricular content (Isaacson, 2009, Merrett, 1999, Schrag, 1997).

Bulterman-Bos, Verloop, Terwel and Wardekker (2003) observe that another factor in the debate over national education standards is whether education standards are used for "selection decisions" (p.346), or to support the learning process. The No Child Left Behind (Library of Congress, 2002) legislation imposed sanctions on schools not meeting the required state standards, causing states to lower their standards in a desperate attempt to protect their failing schools (Isaacson, 2009). According to many scholars, the consequent pressure to "teach to the test" undermines the use of standards to support learning (Boser, 2000, Higgins, Miller & Wegmann, 2006, Popham, 2001, Seeley, 2006, Volante, 2004).

Public education in this country remains an essentially political process, dependent on tax funding, and administered according to policies determined by elected school boards and politicians, and politically appointed officials (Berube, 1996, Kirst, 1994). To date we have failed to muster the necessary consensus for effective education reform, while other countries have adopted national education standards to improve their public education (Nieto, 1994, Schmidt, Houang & Shakrani, 2009).

The proposal for stringent national education standards was first set forth, with some specificity, in *Nation at Risk* (1983). The first effort to implement the report's suggestions was the *America 2000* (Library of Congress, 1990) legislation, which was defeated by a Republican filibuster at the end of the first Bush administration (Kean, 1995). The *Goals 2000* (Library of Congress, 1994) legislation that was signed into law by President Clinton in 1994 was the first,

and to date the only, legislation that calls for national education standards that has been enacted. Although participation by individual states was voluntary (Kean, 1995), the legislation met strong resistance from conservatives (Merrett, 1999). Just one year later, to placate those conservatives, and to avoid repeal of the entire *Goals 2000* program, a congressional committee approved a measure to eliminate the National Education Standards and Improvement Council (Wells, 1995). The No Child Left Behind Act of 2001 (Library of Congress, 2001), on the other hand, called upon the fifty states to establish and implement their own education standards, and to conduct their own assessments.

Hamilton (1997) suggests that resistance to national education standards might be tempered if those standards were not formulated by the federal government. In fact, with President Obama's commitment to refocus the No Child Left Behind legislation to reward improving schools, forty one states have now come together to voluntarily develop common curriculum standards (Njuguna, 2009).

It is noteworthy that with all the continuing controversy and discussion about national education standards, there are no definitions for education standards that are universally recognized by educators, policy makers and researchers (Gagnon, 1994).

3. What are education standards?

Nation at Risk (1983) set forth specific suggestions about the types of standards that should be adopted, but no attempt was made to describe exactly what was meant by education standards. The *Goals 2000* (Library of Congress, 1994) legislation was the first attempt by Congress to define education standards:

1. The term "content standards" means broad descriptions of the knowledge and skills students should acquire in a particular subject area.

2. The term "opportunity-to-learn standards" means the criteria for, and the basis of, assessing the sufficiency or quality of the resources, practices, and conditions necessary at each level of the education system (schools, local educational agencies, and States) to provide all students with an opportunity to learn the material in voluntary national content standards or State content standards.

3. The term "performance standards" means concrete examples and explicit definitions of what students have to know and be able to do to demonstrate that such students are proficient in the skills and knowledge framed by content standards.

4. The term "State assessment" means measures of student performance which include at least one instrument of evaluation, and may include other measures of student performance, for a specific purpose and use which are intended to evaluate the progress of all students in the State toward learning the material in State content standards in one or more subject areas.

These definitions are not necessarily shared by the community of educators, academics, politicians and policy makers who are concerned with education reform and the issue of education standards.

Siegfried and Meszaros (1997) discuss why and how the standards for pre-college economics education should be developed differently from the standards for other academic disciplines, emphasizing concepts rather than facts. The National Business Education Association [NBEA] defines a standard as a "criterion for measurement" (NBEA Policy Statement 62, p. 1). Raizen (1998) discusses three divergent interpretations of education standards, from guidelines with "measurable objectives," to "best practice" that is meant to inspire, to a mechanism to "hold schools accountable for what students learn" (p. 72). Cohen (1995) observes that the very language of standards is not well defined, and hardly understood by any other than the reformers who are active in the standards movement. McGee Banks (1997) challenges any approach to education standards that does not consider the unique needs of our multicultural society that emphasizes the importance of diversity.

It would be helpful if the educators, academics, politicians and policy makers could achieve a consensus, but, as Gagnon (1994) observes, the confusion over what is meant by education standards is an impediment to developing sound education reform initiatives.

4. Are national education standards the answer?

The continuing struggle over national education standards raises the question whether adopting such standards would provide the promised reform for our public education system. Even proponents of national education standards generally agree that they will not prove to be the solution absent other reforms (Berube, 1996, Cohen, 1995, Eisner, 1995, Ravitch 1995).

It has already been noted that there is a tendency to mandate education standards without adequate resources to support their implementation, yet some researchers have identified lack of equity in opportunities to learn as a primary causation of our failing public education system (Darling-Hammond, 1994, Kozol, 1992).

Anyon (2005) argues that education reform policy should also address the social issues such as poverty and unequal access to housing and work that are just as responsible for the failure of urban schools as curriculum, teaching and testing. It is no small irony, then, that we continue to depend on our public education system to address our society's social and economic problems (Gagnon, 1994, Vinovskis, 1996).

The literature proposes that there are four critical elements required for education reform in addition to education standards:

1. Highly qualified teachers (Barlow, 2006, Burrill, 1997, Darling-Hammond, 1994, Delandshere & Arens, 2001, Koski and Weis, 2004);

2. Adequate facilities (Darling-Hammond, 1994, Koski & Weis, 2004, Kozol, 1992);

3. Good and up-to-date instructional materials (Burrill, 1997, Koski & Weis, 2004); and

4. Access to technology (Burrill, 1997, Koski & Weis, 2004).

Another challenge to effective education reform policy is to develop national education standards that are reflective of the many racial, ethnic, cultural and social class groups in our diverse society, to assure the equal opportunity that such standards promise (McGee Banks, 1997).

It is clear that national education standards alone cannot provide the education reform that presumably all stake holders aspire to achieve, yet those who support their development maintain that they are a necessary ingredient to assure that all our students can have access to the same quality education, regardless of where they receive their schooling.

To understand the continuing resistance to what so many consider an essential reform it might be instructive to further examine the sources of that opposition.

5. Opposition to national education standards:

Some scholars see the resistance to national education standards in binary terms. Progressives are concerned that standardized testing is unfair to the disadvantaged and stigmatizes poor performance, while conservatives are suspicious of federal control of the education process ("Getting Testy", 1997, Isaacson, 2009, Schrag, 1997).

There are more subtle forces at work, however. "Getting Testy" (1997) observes, that the prospect of national education standards also threatens many administrators and teachers from the low performing schools and school districts that are generally found in impoverished areas. Hinde and Perry (2007) analyzed the comments submitted at a public hearing about proposed education standards in Arizona and found that many teachers used Piaget's theories concerning cognitive development to refute the proposed standards, thus stifling the substantive debate that is needed for reform.

Cano (2004) and Labaree (2000) observe that the history of the resistance to national education standards suggests that there are three factors motivating the opposition:

1. A commitment to local control of schools, which is aligned with the traditional tension over federal interference with state and local affairs;

2. A commitment to expansion of educational opportunity, the concern being that raising standards will make it more difficult for many students to progress academically; and

3. A commitment to form over substance, whereby the time students spend in school, and the credits and degrees earned, are valued more than what those students actually learn.

Schrag (1997) asserts that proponents of national education standards are in denial about the significant issues raised by nationwide standardized testing. If, as equity may dictate, there is

only one test with one set of questions, then that test will need to be administered at the same time from Maine to Hawaii, a geographical area that spans seven time zones. Additionally, if, for the sake of transparency, the test questions and answers are published after the tests are administered, as President Clinton proposed to do, then new tests will need to be developed and validated every year so that the results can be reliably compared from year to year. Finally, there will need to be assurance that those who grade the open-ended essay portion of the tests will strictly adhere to the same standard wherever they are located. That alone constitutes a "huge, psychometrically unreliable undertaking" (p. 16).

Hill (1997) observes how differing cultural and ideological values often drive the opposition to national content standards, especially in areas of study such as history and social studies. The struggle over how we portray our past is also reflective of our visions for the future, and the traditions that we want to pass on to our children. The issue, as Hill puts it, is not only about the substance of the content, but about who determines what the content should be. Merrett (1999) offers the provocative suggestion that conservatives have attempted to use America's cultural divide to undermine congressional efforts to reform our public schools through the adoption of national education standards.

A number of scholars observe that the standards movement is a regression to the traditional method of learning by rote memorization of facts, at the expense of the critical thinking and problem solving skills that progressives have long held is an imperative of modern education. Students will potentially miss significant opportunities to explore the implications of the facts they acquire in class rooms where content is mandated by standards and outcomes are assessed by standardized tests (Berube, 1996, Brady, 2000, Eisner, 1995). Brady (2000) asserts that education standards are driven by a basic and unexamined assumption that our children need to learn what we know. He laments that the proponents of education standards are not exploring the larger concepts needed to organize the enormous amount of facts that students would be required to learn.

It is evident, as Eisner (1995) observes, that education reform driven by national standards, while well intentioned, is often pursued in an inadequate and superficial manner. Nevertheless, national education standards may offer our best, perhaps our only, opportunity to assure all our children equal access to a quality education.

The question is whether our society has sufficient commitment to affording all children an equal opportunity for a quality education to formulate effective education reform that includes national education standards.

6. Equal Opportunity:

Equal opportunity for all people is one of the fundamental tenets of our democratic republic. It is enshrined in bold terms in our Declaration of Independence:

> We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain

> unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.

The right to equal opportunity, or at the least equal treatment under the law, is also guaranteed by our Constitution.

It has long been held that a free and democratic society depends on educated and well informed citizens. Aristotle noted that "all who have meditated on the art of governing mankind have been convinced that the fate of empires depends on the education of youth" (p. 706), while Thomas Jefferson observed that "if a nation expects to be ignorant and free, it expects what never was and never will be" (Hardy, 1995, p. 706).

Nation at Risk (1983) includes the following observation in its opening statements:

> For our country to function, citizens must be able to reach some common understandings on complex issues, often on short notice and on the basis of conflicting or incomplete evidence. Education helps form these common understandings, a point Thomas Jefferson made long ago in his justly famous dictum:
>
> > I know of no safe repository of the ultimate powers of society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them but to inform their discretion (p. 2).

These are inspirational ideals, but it is important to remember that our society has been guided by imperfect notions of equal opportunity from its inception. The primary drafter of the Declaration of Independence and many of its signers were slave holders. The Constitution set forth that only three-fifths of the slaves be counted for purposes of a state's representation in Congress, and slavery continued to be practiced in much of this country for almost a century following independence. Suffrage was granted to the common citizenry incrementally, and universal suffrage took 150 years to achieve.

Parity in education has been slower in coming. Females, Native Americans and Negros were excluded at first. It was only in 1954 that the U.S. Supreme Court, in the landmark Brown v. Board of Education case, struck down the notion of "separate but equal" education for African Americans and ordered that schools be integrated. The result has been that those African Americans who are fortunate enough to come from intact middle class homes now have the opportunity to attend better schools, but impoverished children from all backgrounds continue to be denied a quality education. Yet, as Hardy (1995) observes, amongst its many functions, "modern American education is expected to…serve as a mechanism for social leveling" (p. 706).

Hardy goes on to say:

> Those who espouse revitalization of public education generally stress the importance of equality. Public education advocates argue that only a public education can guarantee equal treatment for all children, and that only a truly public education can expose children to the rich ethnic and cultural diversity that makes up America (p. 707).

Education reform in the past has not always been driven by ideals, but rather the pragmatic need to address crises such as the Cold War arms race and space race, global economic competition, or racial unrest (Gagnon, 1994, Vinovskis, 1996).

Reformers recognize the need for equity in our education system, so that all our children will have access to a quality education (Burrill, 1997, Gagnon, 1994, Hardy, 1995), yet, as noted earlier, some critics of national education standards contend that the quality of the educational experience that all our students are offered will be diminished if national standards are adopted. *Nation at Risk* (1983) addresses that concern:

> We do not believe that a public commitment to excellence and educational reform must be made at the expense of a strong public commitment to the equitable treatment of our diverse population. The twin goals of equity and high-quality schooling have profound and practical meaning for our economy and society, and we cannot permit one to yield to the other either in principle or in practice. To do so would deny young people their chance to learn and live according to their aspirations and abilities. It also would lead to a generalized accommodation to mediocrity in our society on the one hand or the creation of an undemocratic elitism on the other (p. 5).

The report offers only abstract ideals, however, rather than pragmatic solutions:

> It is our conviction that the essential raw materials needed to reform our educational system are waiting to be mobilized through effective leadership:
>
> 1. the natural abilities of the young that cry out to be developed and the undiminished concern of parents for the well-being of their children;
>
> 2. the commitment of the Nation to high retention rates in schools and colleges and to full access to education for all;
>
> 3. the persistent and authentic American dream that superior performance can raise one's state in life and shape one's own future;

4. the dedication, against all odds, that keeps teachers serving in schools and colleges, even as the rewards diminish;

5. our better understanding of learning and teaching and the imply cautions of this knowledge for school practice, and the numerous examples of local success as a result of superior effort and effective dissemination;

6. the ingenuity of our policymakers, scientists, State and local educators, and scholars in formulating solutions once problems are better understood;

7. the traditional belief that paying for education is an investment in ever-renewable human resources that are more durable and flexible than capital plant and equipment, and the availability in this country of sufficient financial means to invest in education;

8. the equally sound tradition, from the Northwest Ordinance of 1787 until today, that the Federal Government should supplement State, local, and other resources to foster key national educational goals; and

9. the voluntary efforts of individuals, businesses, and parent and civic groups to cooperate in strengthening educational programs (p. 6).

Some researchers address the challenges on a more practical basis. Eisner (1995) poses the question: "If national policy dictates that there will be uniform national standards for student performance, will there also be uniform national standards for the resources available to schools? To teachers? To administrators?" (p. 763) Merrett (1999) offers the same observation as a statement: "Students from poor rural or inner city school districts should not be held to the same standards as students from wealthy suburbs unless all school districts have the same funding base" (p. 601). McGee Banks (1997) states the case equally bluntly: "When questions related to equity are raised by people inside the standards movement, they are addressed with a promise of high standards for all students. However, this promise will go unfulfilled if it is not accompanied by essential resources" (p. 126). On the other hand, Anyon (2005) claims a more fundamental need: "In order to solve the systemic problems of urban education, then, I argue…that we need not only better schools but also the reform of these public policies…to eliminate poverty-wage work and housing segregation (for example)" (p.66).

Perhaps the greatest challenge is to offer our children an education that is not only accessible to all, and not simply to a high standard, but also meaningful. As noted earlier, education standards that require only the acquisition of facts through rote memorization deprive our children of the opportunity to develop critical thinking skills and the ability to solve problems and exercise good judgment. More important, an education culture that is driven by economic considerations, the pressures of globalization, and the need for a competent and skilled

labor pool likewise deprives our children of the opportunity for a well rounded education. Gagnon (1994) offers the following story to illustrate this point:

> Years ago a school teacher in a working-class suburb of Paris challenged an American visitor: 'How can you say your schools are democratic, when they do not require all students to study history, literature, the arts and language, philosophy, and different ideas of politics and economics--are you trying to disarm your lower classes?' (p. 1)

7. Can opposition to national standards be predicted?

A number of researchers have attempted to identify predictors for how legislators might vote on specific issues, by examining variables such as party affiliation, religious affiliation, ideology, gender, constituency demographics, personality traits, and the like (Chressanthis, Gilbert & Grimes, 1991, Crichlow, 2002, Eccles, 1978, Gohmann & Ohsfeldt, 1990, Granberg, 1985, Medoff, 1989, Strickland & Whicker, 1986, Tatalovich & Schier, 1993, Vinovskis, 1979).

Tatalovich and Schier (1993) report that the National Abortion Rights Action League (1979) "perceptively argued" (p. 127) that Congressional Representatives who voted against liberalizing abortion also opposed other reformist legislation. Welch (1982) analyzed the voting patterns of legislators to determine whether special interest groups use political campaign contributions to influence legislation. Clausen (1973) developed a regression model to predict legislators' votes based on scoring the legislators on the policy dimensions he defines for various policy domains. Poole and Rosenthal (1985, 1991) developed a regression model, D-NOMINATE, to predict legislators' votes based on their voting records over a period of time. In addition, a number of interest groups have developed ideological ratings of legislators based on their voting records on legislation recommended by these groups. While there were more than seventy such organizations rating legislators by 1981 (Fowler, 1982), the literature reveals that researchers for the most part use only several of those ratings as a measure of legislator ideology (see Table 1).

Table 1 – Legislator Ideology Ratings by Special Interest Groups

Group Name	Ideology	Cited By
Americans for Democratic Action (**ADA**)	Liberal	Chressanthis et al (1991), Granberg (1985), Green and Guth (1991), Poole and Rosenthal, (1985), Tatalovitch and Schier (1993), Vinovskis (1979)
Americans for Constitutional Action (ACA)	Conservative	Chressanthis et al (1991), Granberg (1985),
Committee on Political Education – AFL-CIO (**COPE**)	Liberal	Chressanthis et al, 1991, Granberg, 1985,
Conservative Coalition (CC)	Conservative	Gohmann and Ohsfeldt (1990)
American Security Council (**ASC**)	Conservative	Granberg (1985)

Table 1 – Legislator Ideology Ratings by Special Interest Groups

Group Name	Ideology	Cited By
Committee for a SANE Nuclear Policy	Liberal	Granberg (1985)
National Farmers Union (**NFU**)	Liberal	Vinovskis (1979)
Chamber of Commerce (**CCUS**)	Conservative	Vinovskis (1979)

None of these researchers, however, have directly subjected legislators' voting records to statistical analysis to predict how they might vote for a specific bill. Surprisingly, only one study was found that has attempted to establish such a link.

Merrett's (1999) research, which served as the model for this study, examined the education reform initiative enacted by Congress during the Clinton administration to determine whether there was a link between the opposition to national standards and support for certain other legislation with a right wing agenda. As noted earlier, the *Goals 2000: Educate America Act of 1994* (Library of Congress, 1994) is the only federal legislation enacted to date that has called for the adoption of national education standards.

Merrett proceeds from a paradigm that there is a culture war in this country, with the left and right vying for control over politics, education, and family life (Edsall 1999, Hunter 1992) that has increasingly polarized our society and coarsened the public discourse. As Merrett observes, our public schools are among the most influential institutions in the United States where socialization and social reproduction take place.

Our literature review has revealed how divisive the national education standards issue has become. From Merrett's perspective, the culture wars have been exacerbated by recent educational reforms (Nash, Dunn & Crabtree, 1997). Merrett observes that the opposition to national education standards comes largely from local grassroots organizations and individuals who tend to be intemperate in expressing their concerns (Moore 1997, Patrick 1994), while it is generally non-local businesses and educational and governmental institutions who support the standards (Gandal 1997). Merrett also emphasizes that the dynamics of globalization and the need for a more competitive labor force are driving the discourse over education reform and national education standards.

Merrett argues that the national education standards issue is fundamentally a conflict about the level at which education and social reproduction will take place. He proposes that opponents of national standards invoked a two-pronged strategy with Congress to thwart the *Goals 2000* initiative in order to restore conservative values at the local level. That strategy endeavored to assert expressions of conservative values in public places through prayer in public schools, the display of religious symbols such as the Ten Commandments, mandating English as the official language in public places, including schools, and pursuing legislation for a system of vouchers to support the education of children in private schools at public expense. Merrett hypothesizes that opponents of national education standards are motivated to maintain local control over "value inculcation," (p. 599) and they would tend to support legislation that

guarantees those rights.

To test his hypothesis, Merrett used a multiple regression model to determine which factors influence opposition to National Standards. He established HOUSVOTE as the dependent variable, using the percentage of each state's Congressional delegation that voted for the *Goals 2000* legislation in 1994. The independent variables were four bills that Merrett selected that were put to a vote by the House of Representatives:

1. VOUCHER:
Low-Income School Choice Demonstration Act of 1995 (H.R. 1640) – to allow school choice through the use of vouchers (Library of Congress, 1997) – Merrett observes that conservatives want to control values in the public schools, but they also want to be able to educate their children in private schools at public expense. This act would allow parents to request vouchers or subsidies to help defray the cost of private school tuition. Proponents of the voucher system are motivated to downsize and privatize many of the functions of the U.S. Department of Education, which they perceive to be a bloated, liberal bureaucracy that intrudes too much into local education and family life (Marshall 1995). Proponents of public education, on the other hand, argue that the voucher system simply represents a "money grab" (p. 604) by conservatives to support private schools at the expense of public education (Feldman 1997).

2. PRAYER:
Why can't the voice of the people be heard on prayer in schools? (H.R. 1804) – amendment to the *Goals 2000* legislation, to allow prayer in the schools (Library of Congress, 1994) – Merrett contends that the religious right is pursuing religious power, as opposed to religious rights (Kaminer, 1997). By attaching this amendment, the conservatives attempted to use the *Goals 2000* legislation to achieve their objective of allowing prayer in local public schools. Senator Jesse Helms (R-NC) sponsored this amendment, requiring public schools to allow all students the opportunity to participate in "voluntary prayer" (p. 604). The conservatives consider this to be a "constitutionally protected" (p. 604) right, and schools that would not provide space and time for prayer would be denied all federal education funding.

3. ENGLISH:
National Language Act of 1995 (H.R. 1005) – to designate English as the official language of the United States (Library of Congress, 1996) – Merrett observes that English language laws have traditionally been supported by "nativists" (p. 605) who feel threatened by foreigners, immigrants and other influence that might undermine American values (Tatalovich, 1995). Conservatives are critical of the focus on multiculturalism and bilingual education. Many conservatives are troubled by multiculturalism, especially as expressed in the first drafts of the history and English standards, because of the non-traditional emphasis on the history, literature, music, and art originating in countries other than those of North America and Western Europe. With the influx into the public schools of many

large cities of immigrants speaking only their native languages, many people are convinced that English should be adopted as our country's official language. Therefore, Merrett hypothesizes that this legislation represents a backlash against "foreign influences" (p. 605) in our local public schools and in our local communities.

4. COMMAND:
Concurrent Resolution in Support of Judge Roy Moore (H. Con. Res. 31) – Expressing the sense of Congress regarding the display of the Ten Commandments in public, including government offices and courthouses (Library of Congress, 1996) – in a non-binding concurrent resolution, the House of Representatives endorsed the actions of Judge Roy Moore, whose display of the Ten Commandments in his Alabama courtroom resulted in a legal challenge by the American Civil Liberties Union.

The regression analysis established that there was in fact a significant correlation between the votes cast in opposition to the *Goals 2000* legislation and the votes cast in support of the other bills (see Table 2). PRAYER had the largest correlation coefficient, followed by ENGLISH, VOUCHER, and COMMAND. Given Merrett's hypothesis that the legislation represents efforts by conservatives to control public discourse at the local level, he was not surprised that the four independent variables were all positively correlated with each other. The analysis revealed that multicollinearity exists between ENGLISH and COMMAND, and, because the bivariate correlation coefficient between the variables was so high, one of the variables had to be removed from the regression model. COMMAND was excluded because it had the lowest correlation with HOUSVOTE, the dependent variable.

Table 2 – Merrett's Pearson Correlation Matrix

Variables	HOUSVOTE	PRAYER	VOUCHER	ENGLISH	COMMAND
HOUSVOTE	1.000	-.597 ***	-.476 ***	-.493 ***	-.419 ***
PRAYER	-.597 ***	1.000	.242	.544 ***	.351 **
VOUCHER	-.476 ***	.242 *	1.000	.470 ***	.504 ***
ENGLISH	-.493 ***	.544 ***	.470 ***	1.000	.779 ***
COMMAND	-.419 ***	.351 **	.504 ***	.779 ***	1.000

*** **Significant at p < 0.01 (2-tailed)**
** **Significant at p < 0.05 (2-tailed)**
* **Significant at p < 0.10 (1-tailed)**

When the analysis was conducted with the three remaining independent variables, the regression model explained almost 50% of the variation in HOUSVOTE (see Table 3). Two of the three independent variables were found to be significant as predicted, with PRAYER having the largest standardized regression coefficient. Merrett concluded that support for school prayer is a negative predictor for national education standards. VOUCHER

had the second most significant regression coefficient. As hypothesized, school choice is a negative predictor of support for national education standards. The third variable, ENGLISH, had the predicted beta coefficient sign, but the variable was not significant at the .05 level, so support for English language laws is not a negative predictor of support for national education standards.

Merrett proposed that the failure of ENGLISH to contribute to the regression model might be understood in the context of English language law being a more bipartisan and more secular issue than school choice or school prayer.

Table 3 – Merrett's Regression Model Summary and Coefficients

Variables	Beta	t	Significance	Adjusted $_R2$	F	Significance F
(constant)	-	18.224	.000			
PRAYER	-.450	-3.995	.000			
VOUCHER	-.398	-3.528	.000			
English	-.101	-0.735	.466			
Model Summary	-	-	-	.454	20.986	.000

Merrett expected the predictive significance of school prayer. It is the position of conservative groups that our public education system is not only failing our students academically, but also morally, and they lobby Congress vigorously to allow prayer in the public schools. The significance of school prayer for these groups is that it represents the assertion of local control and Christian values over federal control and secularism.

Merrett observes how school choice has been linked with the education standards initiative. When the *America 2000 Excellence in Education Act* (Library of Congress, 1990) was proposed during the senior Bush administration conservatives insisted on provisions to allocate federal money for increased school choice (Katz, 1996), evidence that they were only willing to accept national education standards if parents have the option to remove their children from the public school system and educate them in religious schools at taxpayer expense. The legislation failed to pass because of Democratic opposition to school choice.

According to Merrett, school choice, as well as home schooling, is also the solution expressed by those who believe that our public education system is dysfunctional, and that it will deteriorate further if the *Goals 2000* legislation is passed (Moore 1997). Parents who perceive that our public schools are morally bankrupt believe that removing their children will allow them to better monitor and control the ideas to which their children are exposed. Many congressional legislators, who favor the current trend towards decentralization, downsizing, and local choice, also support school choice. For them, the *Goals 2000* legislation, on the other hand, represents the big government approach that conservatives have consistently opposed since the 1980s.

Merrett concludes that his study validates his hypothesis that the national education

standards issue is part of the larger culture war over the level at which education and social reproduction will take place. His proposition that conservatives introduced the school prayer and school voucher issues to undermine the national education standards initiative was borne out. Both variables were found to be significant predictors of opposition to the *Goals 2000* legislation that called for voluntary adoption of national education standards.

Many conservatives, according to Merrett, had a visceral response to the *Goals 2000* legislation, because they perceive the federal education bureaucracy to be a threat to their identity. They embrace their Christian values in their struggle against the homogenizing and secularizing effects of national education standards. Barber (1996) suggests that this right wing Christian initiative has the potential to undermine our democratic institutions, as conservatives turn their local communities into citadels of 'exclusion, paternalism and tribalism.'

Merrett contends that the school prayer issue is part of the conservative strategy to impose their values in our public institutions, and that opposition to national education standards is only one aspect of the broader culture war being waged by conservatives. Using the club of federal funding to coerce schools to once again allow prayer in the classroom will encroach on the civil liberties of religious minorities. Kaminer (1997) agrees that allowing organized religion greater expression in public institutions such as schools or the courts can potentially move us towards 'sectarianism' and 'tribalism' in our society.

Choosing private education through a voucher system, conservatives will isolate themselves in the sort of exclusionary, paternalistic, and tribal communities described by Barber (1996). Conservative Paul Weyrich calls on religious conservatives to remove themselves from the culture war's battlefields for the 'quarantine' of their communities, where they can lead righteous, godly and sober lives' (Edsall, 1999). This retreat would also serve to create additional barriers between the religious and secular communities.

Merrett reflects that not all the variables in his regression model are significant, and that his admittedly pessimistic conclusions require closer examination. The model suggests that the conservative initiatives may not be a cohesive strategy after all. If the school prayer and school voucher issues are two parts of the same strategy, as Merrett proposes, then we might expect a relatively high correlation between the PRAYER and VOUCHER variables, yet the correlation matrix reveals only a weak relationship. In fact, he concludes that the opposition to national education standards is significantly diffuse. As Merrett puts it, conservative opposition to the *Goals 2000* legislation is not monolithic. The Christian Coalition is aware that there are various issues of sensitivity in different places, and we might benefit from deeper examination of the origins of conservative values in our society.

The literature supports Merrett's failure to find a unifying theme that could explain opposition to national education standards, and his conclusions that conservative opposition is diffuse. That conclusion is, however, not inconsistent with the possibility that examination of other legislation might demonstrate a unifying theme to the opposition to national education standards. This study will attempt to determine whether there is a link between the voting patterns of the *Goals 2000* legislation and the voting patterns of other federal reform based legislation.

8. Summary:

It is evident from the literature that the adoption of national education standards that mandate minimum curricular requirements in critical content areas, and standardized assessment to hold students and schools accountable, are essential ingredients for successful reform of our public education system.

It is further evident that national education standards alone will not provide the much needed reform. The literature identifies a number of issues that will need to be resolved:

1. Which subject areas should have mandated standards?

2. Who should develop those standards?

3. What should those standards be?

4. What is the optimal balance between learning facts and developing critical thinking and problem solving skills?

5. How will resources be allocated to assure all students an equal opportunity to learn?

6. How will we assure our children a well rounded education?

7. How will national education standards accommodate the diversity of our multicultural society?

8. How will national education standards accommodate the local needs of parents and their communities?

9. How will teachers and administrators in failing schools be supported rather than threatened by national education standards?

These, and other concerns, have driven the opposition to national education standards, and no single theme emerges from the literature as a dominant or underlying issue that impedes the formulation of effective education reform policy that includes national education standards.

It is the purpose of this study to explore whether there is an underlying theme that might explain the opposition to national education standards.

Chapter 3: The Research Question

The research question is:

Can the diverse positions in opposition to education reform that is based on the adoption of national education standards be explained by a single unifying concept?

The hypothesis is:

Legislators who vote in opposition to other progressive or reformist legislation are less likely to support legislation to enact education reform that is based on the adoption of national education standards.

Chapter 4: Methodology

1. Methodological Approach:

This study adapted Merrett's (1999) methodology to determine through regression analysis whether the Representatives' and Senators' votes on the 1994 *Goals 2000* legislation could be predicted from their votes on other reform based legislation during the 103rd Congressional term. Regression analysis is the appropriate method of data analysis for this study, because it identifies which variables are useful predictors of how the legislators voted, and how much predictive value each variable has.

Other variables selected from the literature were included in the regression analysis, where the data was available, to control for their effect on the legislators' voting pattern.

2. Operationalizing the Research Question:

Merrett's (1999) study had a number of shortcomings:

a) Different Legislators:

Merrett focused on the culture wars between the religious right wing and the progressives in Congress and our society, which led to inherent weaknesses in the study. The dependent variable was the *Goals 2000* legislation that was enacted by the 103rd Congress in 1994. When it came to selecting his independent variables, however, Merrett was unable to identify sufficient legislation that concerned the divisive issues that he was studying, and that was also considered by the 103rd Congress that passed the *Goals 2000* bill. Merrett identified three bills and one resolution for his independent variables, one of which was considered by the 103rd Congress, another by the 104th Congress, and two by the 105th Congress. Every Congressional term has a different cohort of legislators, as members retire or are defeated at the polls (Tatalovich & Schier, 1993), which prevented Merrett from following and analyzing the voting patterns of individual legislators. Consequently, for the regression analysis, Merrett used the percentage of the vote for each state's delegation of House Representatives in place of the votes of individual legislators. This in turn excluded the Senate from Merrett's study, as the percentage of the votes of each state's two person Senatorial delegation would not compare well to the percentage of the votes of the states' mostly larger Congressional delegations.

b) Limited Focus:

Merrett's study did not explore the possible effects of intervening variables, such as demographic factors or population factors, which calls into question the predictive value of the study's results. This was, in part, another consequence of Merrett's decision to include

legislation from three different Congresses in the study, but the time frame was sufficiently limited that population statistics could have been included.

The methodology used in this study differed from Merrett's methodology in the following ways:

a) Same Legislators:

The independent variables for this study were selected from legislation that was considered by the same 103rd Congress that enacted the *Goals 2000* legislation that is the focus of this study. This allowed the legislation variables to be operationalized based on the votes cast by individual legislators, rather than a percentage of each state delegation's vote, which further allowed the inclusion of votes from both the House Representatives and the Senators. Given the dichotomous nature of these variables, logistic regression was used, which presented some challenges, as discussed below.

b) Intervening Variables:

A variety of demographic and population variables were included in this study to explore their potential predictive effect on the legislators' votes for the *Goals 2000* legislation. The objective was to capture as much of the environment as possible, to determine what drives the decision process for critical legislation like the *Goals 2000* bill.

3. Sampling:

The legislation that represents the independent variables for this study was selected from the thousand of bills and resolutions that were considered by the 103rd Congress. The selection was facilitated by the comprehensive and easily searchable database of all congressional legislative activity maintained on the congressional web site (www.thomas.gov).

The database contains the complete record of every piece of legislation considered by Congress, organized by the congressional term and session, indexed by a comprehensive list of categories, and searchable by bill number or key words, with a variety of filters such as the current status of the bill.

Every bill is accessible, with an abstract, the complete text of the legislation, the catalog of all actions taken by the House and Senate, the current status of the bill, the complete record of all votes taken, and the individual legislators' votes if they were recorded.

The legislation was selected in the following manner:

- The congressional database was searched by key words such as "civil rights," "gender," "poverty," "social services," "disability," "health" and "voting," which resulted in sixty six bills with stated purposes that are reformist in nature.

- Some of those bills were deleted from the list because they were not put to a vote by both houses of Congress.

- Other bills were deleted from the list because they were enacted by voice vote, a process whereby individual votes are not recorded.

The following seven bills were selected for the independent variables used in this study:

1. *Emergency Unemployment Compensation Amendments of 1993* (H. R. 920, S. 382) – to extend the emergency unemployment compensation program to October 2, 1993

2. *Family and Medical Leave Act of 1993* (H. R. 1, S. 5) – to grant family and temporary medical leave under certain circumstances

3. *Freedom of Access to Clinic Entrances Act of 1994* (H. R. 796, S. 636) – to ensure unfettered access to clinics for persons seeking to obtain or provide reproductive health services

4. *National and Community Service Trust Act of 1993* (H. R. 2010, S. 919) – to enhance opportunities for national service, and provide national service educational awards

5. *National Voter Registration Act of 1993* (H. R. 2, S. 2) – to establish national voter registration procedures for federal elections

6. *School-to-Work Opportunities Act of 1994* (H. R. 2884, S. 1361) – to afford young people opportunities to continue learning through employment

7. *Unemployment Compensation Amendments of 1993* (H.R. 3167) - to extend the emergency unemployment compensation program to February 5, 1994

4. Covariates:

A thorough review of the literature suggested a number of variables to include in the study, to control for their effect on the legislators' voting pattern.

Variables were selected pertaining to legislators and their constituencies, reflecting their demographic, political and ideological characteristics.

Table 4 summarizes the selected variables and their source, where suggested by the literature, organized into the following six domains:

- Legislator Demographics

- Legislator Political Characteristics

- Legislator Ideological Characteristics

- Constituent Demographics
- Constituent Political Characteristics
- Constituent Ideological Characteristics

Table 4 – Intervening Variables Suggested by the Literature

Variable	Literature Source
Legislator Demographics:	
Age	Chressanthis et al (1991), Strickland and Whicker (1986), Vinovskis (1979)
Educational Achievement	Strickland and Whicker (1986), Vinovskis (1979)
Religion	Chressanthis et al (1991), Ghomann and Ohsfeldt (1990), Granberg (1985), Green and Guth (1991), Oldmixon (2005), Strickland and Whicker (1986), Tatalovich and Schier (1993), Vinovskis (1979)
Wealth	
Legislator Political Characteristics:	
State	
Region	Chressanthis et al (1991), Granberg (1985), Green and Guth (1991), Strickland and Whicker (1986), Vinovskis (1979)
Election Margin	Chressanthis et al (1991), Eccles (1978), Strickland and Whicker (1986)

Table 4 – Intervening Variables Suggested by the Literature

Variable	Literature Source
Years in Office	
Years Until End of Term	Chressanthis et al (1991, Granberg (1985)
Interest Group Contributions	Oldmixon (2005), Welch (1982)
Legislator Ideological Characteristics:	
Party	Chressanthis et al (1991), Crichlow (2002), Gohmann and Ohsfeldt (1990), Green and Guth (1991), Oldmixon (2005), Tatalovich and Schier (1993)
Ratings (Americans for Democratic Action, etc.)	Chressanthis et al (1991), Gohmann and Ohsfeldt (1990), Granberg (1985), Green and Guth (1991), Oldmixon (2005), Tatalovich and Schier (1993), Vinovskis (1979)
Constituent Demographics:	
Population Educational Achievement	Chressanthis et al (1991), Granberg (1985), Green and Guth (1991), Oldmixon (2005), Strickland and Whicker (1986)
Population Income	Crichlow (2002), Granberg (1985), Green and Guth (1991), Strickland and Whicker (1986), Tatalovich and Schier (1993), Vinovskis (1979)
Population Race	Gohmann and Ohsfeldt (1990), Granberg (1985), Oldmixon (2005), Strickland and Whicker (1986), Tatalovich and Schier (1993), Vinovskis (1979)
Population Religion	Chressanthis et al (1991), Gohmann and Ohsfeldt (1990), Granberg (1985), Green and Guth (1991), Oldmixon (2005)

Table 4 – Intervening Variables Suggested by the Literature

Variable	Literature Source
Urban Population	Chressanthis et al (1991), Granberg (1985), Green and Guth (1991), Oldmixon (2005), Tatalovich and Schier (1993), Vinovskis (1979)
Constituent Political Characteristics:	
Interest Groups (e.g. evangelical religious groups)	
Constituent Ideological Characteristics:	
Political Commitment (voter registration)	Strickland and Whicker (1986)
Support for Party (voters registered for legislator's party)	
Support for President (most recent election)	Oldmixon (2005), Strickland and Whicker (1986)
Similar State Legislation Passed	Gohmann and Ohsfeldt (1990), Granberg (1985), Medoff (1989)
State Funding for Education Per Student	
Related Population Behavior (private school enrollment)	Chressanthis et al (1986), Gohmann and Ohsfeldt (1990)

5. Data Collection:

Most of the data for this study was readily available through a number of sources, which are summarized in Table 5.

Table 5 – Data Collection Sources

Variable	Data Source
Legislator Demographics:	
Age	The Almanac of American Politics 1994 (age as of January 1, 1994, calculated from date of birth)
Educational Achievement	The Almanac of American Politics 1994
Religion	The Almanac of American Politics 1994
Wealth	(not collected)
Legislator Political Characteristics:	
State	The Almanac of American Politics 1994
Region	As defined by the United States Census Bureau
Election Margin	The Almanac of American Politics 1994
Years in Office	The Almanac of American Politics 1994
Years Until End of Term	(not collected)

Table 5 – Data Collection Sources

Variable	Data Source
Interest Group Contributions	(not collected)
Legislator Ideological Characteristics:	
Party	The Almanac of American Politics 1994
Legislator votes for seven selected legislative bills	Congressional web site (www.thomas.gov)
Ratings (Americans for Democratic Action, etc.)	
Constituent Demographics:	
Population Educational Achievement	United States Census Bureau web site (www.census.gov)
Population Income	United States Census Bureau web site (www.census.gov)
Population Race	United States Census Bureau web site (www.census.gov)
Population Religion	1992 Glenmary Survey on Religious Denominations – Reorganized into Congressional Districts by John Green and provided by Elizabeth Oldmixon
Urban Population	United States Census Bureau web site (www.census.gov)

Table 5 – Data Collection Sources

Variable	Data Source
Constituent Political Characteristics:	
Interest Groups (e.g. teacher and public service unions)	(not collected)
Political Commitment (voter registration)	The Almanac of American Politics 1994
Support for Party (voters registered for legislator's party)	The Almanac of American Politics 1994
Support for President (most recent election)	The Almanac of American Politics 1994
Similar State Legislation Passed	(not collected)
State Funding for Education Per Student	(not collected)
Related Population Behavior (private school enrollment)	United States Census Bureau web site (www.census.gov)

The votes cast for or against the *Goals 2000* legislation that is the focus of this study, and for the other seven bills that were selected, were downloaded from the congressional web site (www.thomas.gov). The data was not available in a format suitable for direct input into a spreadsheet or a program such as SPSS. Consequently, the votes needed to be entered manually, and verified, from the hard copy that was downloaded from the web site.

Vinovskis (1979) used the Almanac of American Politics to collect data for his study. An out of print copy of the 1994 edition was available for purchase online, which provided much of the data used for this study.

The United States Census Bureau provided most of the constituent data. The raw data was downloaded from the Census Bureau web site (www.census.gov), which maintains a

database for the 1990 census with detailed population information. The census information was available in a spreadsheet format that allowed the data to be imported without manual data entry.

The constituent religion data was acquired through the generosity of Elizabeth Oldmixon, with the permission of John Green. Green (1991) reorganized the 1992 Glenmary survey on religious denominations, which was compiled from the reports of participating, mostly Christian congregations around the country. The survey provides data by counties, and Green extrapolated from the survey data to reorganize the database by Congressional Districts. His methodology was of necessity inexact, as counties are sometimes divided among Congressional Districts. The Glenmary survey itself is limited, because in 1992 Muslim congregations and other religious denominations were not included, and not all congregations that were approached responded to the survey. As Oldmixon (2005) observed, the survey reports a much too high number of 'seculars' to be realistic, but the Glenmary data is the best we have.

John Green offered guidance for coding the data that was included in his database of religious denominations (see Table 6).

Table 6 – Religious Denominations in Order of Conservatism

(Per John Green – From Oldmixon's Work)

Denomination	Conservative Rating
Evangelical Denominations	**7**
Non-Traditional Conservatives	**6**
Mainline Protestants and Orthodox	**5**
Black Protestants	**4**
Catholics	**3**
Liberal Protestants	**2**
Jews	**1**
Seculars	**0**

The same coding scheme was also used for Legislator Religious Affiliation, with the help of Oldmixon's (2005) classification of religious denominations (see Table 7).

Table 7 – Classification of Religious Denominations
(Per Oldmixon)

Fundamentalists and Nontraditional Conservatives	
American Baptist Convention	Adventists
Assemblies of God	Christian Scientist
Baptist	Evangelical wings of mainline denominations (such as Missouri Synod Lutherans and Free Methodists)
Baptist Missionary Association	
Brethren in Christ	
Christian Missionary Alliance	
Christian Reformed Church	
Church of God	Church of Jesus Christ of Latter-Day Saints (Mormons)
Church of Christ	
Conservative Baptist Association	
Evangelical	Nazarene
Independent Baptist	
Southern Baptist	
Mainline Protestants	**Black Protestants**
American Lutheran Church	Black Baptists
Christian	Black Pentecostals
Disciples of Christ	African Methodist Episcopal
Lutheran Church in America	
Episcopal Church	
Presbyterian Church U.S.A.	
Protestant	
Reformed Church in America	
United Methodist Church	
Liberal Protestants	
	Roman Catholics
Congregationalist (United Church of Christ)	Jewish
Society of Friends (Quakers)	
Unitarian – Universalist	Other small groups

Black Protestants are in the middle of the continuum suggested by Green, so the data analysis was conducted with Black Protestants coded as theologically conservative, and again with Black Protestants coded as not theologically conservative.

Some of the data could not be acquired, or was not practical to acquire:

a) Legislator Wealth:

The information on the net worth of members of the 103rd Congress was not available at the time this study was conducted. Congress is required by law to destroy congressional financial disclosure forms after seven years, and the 1994 forms were disposed of almost a decade ago. The Center for Responsive Politics compiles the information from congressional financial disclosure forms into an online database, but they started to do so only in 1996. The 1994

midterm elections resulted in such a significant change in the Congressional membership that using the 1996 database would have left a minimum of 25 % missing data.

b) Interest Group Contributions:

The information on contributions from special interest groups that promote conservative causes would have been difficult to obtain, at best. This data was potentially available from the Congressional Quarterly and The Center for Responsive Politics. United States Senators are elected for terms of six years, and the 1994 Senate was comprised of members who had been elected in 1988, 1990 and 1992. The data would have to be compiled from those three election campaigns, if it was still available.

c) Special Interest Groups:

It seemed at first to be a simple task to ascertain which states and districts had conservative special interest groups that were actively opposing national education standards. Numerous contacts with the research departments of the United States Department of Education (ED), the American Federation of Teachers (AFT) and the National Education Association (NEA), and an academic referred by the NEA, were eventually persuasive that this information was in fact not readily available at the time this study was conducted. The same was true for:

d) Similar State Legislation:

The same sources at the ED, the AFT, the NEA, and the academic expert, were also not able to assist in determining which states had enacted state wide K-12 education standards in 1994, a time when states were just beginning to implement the use of standards to improve teaching and learning. The alternative was to make inquiries to the education departments of all fifty states, or researching the legislative databases of all fifty states, an impractical and daunting exercise. The same was true for:

e) State Funding for Education Per Student:

The same sources at the ED, the AFT, the NEA, and the academic expert, were also not able to assist in determining the amount per student allocated by the fifty states for education. The alternative was to make inquiries to the education departments of all fifty states, or to the Departments of Finance of all fifty states, an equally impractical and daunting exercise.

6. Data Analysis:

a) Descriptive Statistics:

Frequency distributions were produced for some of the covariates to provide a picture of the 103rd Congress that considered the *Goals 2000* legislation. Included were legislator age, party affiliation, legislator education, legislator religion, and years in office.

b) Interactions:

A correlation matrix was produced to determine how some of the independent variables are related to each other. The variables included the Votes Index, the 1994 ADA rating (1994 is the year that the *Goals 2000* legislation was passed), legislator geographic region and legislator geographic sub-region, party affiliation, legislator age, legislator education, legislator religion (with Black Protestants coded conservative), election margin, years in office, population education (percentage who have a graduate degree), population income, population race (percent of population that is Caucasian), population religion (percent affiliated with conservative denominations, with Black Protestants coded not conservative), population distribution (percent of population that is urban), voter registration percentages, voter conservative support in presidential election (percent who voted for Bush or Perot), and population schooling (percent of population enrolled in private schools).

c) Data Organization and Coding:

As observed earlier, it was determined that logistic regression was the appropriate method for data analysis, because of the dichotomous nature of the dependent variable. While logistic regression allows independent variables to be categorical, the results are more difficult to interpret, so it was decided to convert and code all the independent variables as dichotomous variables. Table 8 summarizes how the independent variables were organized before being recoded for the data analysis.

Table 8 – Organization of Independent Variables

Covariate	Recoded for Testing
Reform Legislation	Tested individually – 'No' votes
Reform Legislation	Index of 'No' votes
1993 ADA Rating	Conservative rating score (0 – 39)
1994 ADA Rating	Conservative rating score (0 – 39)
Legislator State	Tested individually
Regions	Northeast, Midwest, South, West, Northeast & West, Midwest & South, New England, Mid-Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, Pacific, New England & Pacific, New England & East North Central & Pacific
Party	Democrats, Republicans
Legislator Age	Age 70 and older (Vinovskis, 1996) Age 55 and older (mean = 54)

Table 8 – Organization of Independent Variables

Covariate	Recoded for Testing
Legislator Education	Bachelor's Degree only Bachelor's Degree or Graduate Degree Graduate Degree
Legislator Religion	Conservative Denominations (with Black Protestants) Conservative Denominations (without Black Protestants)
Election Margin	Greater than 55% (Eccles, 1978) Greater than 60% Greater than 65% (mean = 63%)
Years in Office	More than 5 years More than 10 years (mean = 11) More than 15 years More than 20 years
Population Education	% High School education only > national % High School education or more > national % Associate degree only > national % Associate degree or more > national % Bachelors degree only > national % Bachelors degree or more > national % Graduate Degree > national
Population Income	Median Income > national
Population Race	% White population > national
Population Religion	% Conservatives (with Black Protestants) > national % Conservatives (without Black Protestants) > national
Urban Population	% Inside Urban > national % Outside Urban > national % Total Urban > national % Rural > national
Registered Voters	% Population Registered > national % Population Registered > 80% (national=73%) % Population Registered > 60% % Population Registered > 50%
Party Registration	Legislator's party had plurality of registered voters (missing data excluded) Legislator's party had plurality of registered voters (missing data included)
Presidential Vote	Legislator's party had plurality of 1992 presidential votes
School Enrollment	% Private School Enrollment > national % Private School Enrollment > 15 % % Private School Enrollment > 20 %

The data for each variable was coded as zero (0) or one (1), with missing data being coded as minus one (-1) when the missing cases were to be excluded. In addition, for ease of interpretation, it was decided to code the variables to produce odds ratios greater than one. The odds ratio demonstrates the likelihood of a predicted outcome, and this can be difficult to interpret when the number is a decimal fraction smaller than one. To produce the desired odds ratio, the coding was reversed, and the logistic regression was rerun, whenever the odds ratio was a decimal fraction smaller than one. For clarity, the coding is provided with all the regression analysis results.

d) Reform Legislation:

The seven bills that were selected as the primary independent variables were tested in several different ways. Logistic regression analysis was first conducted on each bill separately to determine how strongly the votes for each bill were correlated to the votes on the *Goals 2000* legislation. Forward logistic regression was then conducted on the seven bills together to determine whether they might provide a reliable model as a group.

In addition, a Votes Index of the seven bills was created, tabulating the 'No' votes for each legislator. The index was coded as a dichotomous variable by selecting legislators with four (57%) or more 'No' votes versus those with less than four 'No' votes.

e) Screening the Covariates:

Logistic regression analysis does not provide meaningful results when large numbers of variables are tested together, if many of those variables are not significant predictors. Consequently, the covariates listed in Table 5 for which data could be collected needed to be screened, to determine which were sufficiently predictive of the votes cast for the *Goals 2000* bill to be included for testing to determine the final model. This was accomplished by subjecting each covariate individually to logistic regression analysis against the *Goals 2000* dependent variable.

f) Exploring a Proxy:

Given the hypothesis that the legislator voting records for other reform legislation could predict their votes for the *Goals 2000* bill, it seemed appropriate to examine whether one of the ideological rating scales might serve as a proxy for the selected reform legislation. Looking at researcher preferences in the literature (see Table 1), the scale selected to test this possibility was the American Democrats for Action (ADA) Ratings for 1993 and 1994, the years of the 103rd Congress. The ADA considers legislators to be "moderate" if their rating scores are in the range of 40 to 60, so the ratings were coded conservative when 39 or less (consistent with the 57% cutoff used to code the Votes Index) versus 40 or more.

g) Determining the Final Model:

To test for the final model, conditional logistic regression analysis was first conducted on the covariates listed in Table 11, the 1993 and 1994 ADA Ratings, and the Votes Index. Logistic

regression analysis was then conducted on the variables that remained to determine the final model.

Chapter 5: Results

1) Frequency Distributions:

Frequency distributions were produced for some of the independent variables to provide a picture of the data (Table 9). The distributions show that legislator ages are skewed heavily towards older, with almost eighty percent (80 %) of the Representatives and Senators being middle aged to elderly (46 – 91). Similarly, legislator education is skewed heavily towards educated, with more than ninety percent (90 %) of the Representatives and Senators having a college degree, and more than two thirds (67.1 %) having a graduate degree. More than sixty percent (60 %) of the Representatives and Senators are affiliated with conservative religious denominations, and a surprising one in four (24.1 %) were in office only one or two years when the *Goals 2000* legislation was passed.

Table 9 – Frequency Distributions

Table 9a – Legislator Age

Age	Frequency	Percent
31 - 35	8	1.5
36 - 40	31	5.8
41 - 45	73	13.6
46 - 50	93	17.4
51 - 55	111	20.7
56 - 60	71	13.3
61 - 65	73	13.6
66 - 70	45	8.4
71 - 75	20	3.7
76 - 80	6	1.1
84	3	.6
91	1	.2
Total	535	99.9

Table 9b – Legislator Party Affiliation

Party	Frequency	Percent
Democrats	314	58.7
Republicans	220	41.1
Independent	1	.2
Total	535	100.0

Table 9c – Legislator Education

Degree Attained	Frequency	Percent
Associate Degree	2	.4
Bachelor's Degree	136	25.4
Graduate Degree	359	67.1
No Degree	38	7.1
Total	535	100.0

Table 9d – Legislator Religion (Black Protestants Coded Conservative)

Denomination	Frequency	Percent
Conservative Denomination	329	61.5
Non-Conservative	206	38.5
Total	535	100.0

Table 9e – Legislator Religion (Black Protestants Coded Non-Conservative)

Denomination	Frequency	Percent
Conservative Denomination	325	60.7
Non-Conservative	210	39.3
Total	535	100.0

Table 9f – Legislator Years In Office

Years In Office	Frequency	Percent
1 – 2	129	24.1
3 – 4	53	9.9
5 – 6	50	9.3
7 – 8	43	8.0
9 – 10	28	5.2
11 – 12	51	9.5
13 – 14	35	6.5
15 – 16	35	6.5
17 – 18	28	5.2
19 – 20	21	3.9
21 – 22	18	3.4
23 – 30	26	4.9
31 – 40	15	2.8
41 – 53	3	.6
Total	535	99.8

2) Interactions:

A correlation matrix was produced for some of the covariates to determine whether they are related to each other (Table 10). Some significant correlations were obvious and expected: the Votes Index versus the 1994 ADA Ratings and the Legislator Region versus the Legislator Sub-Region. Other significant correlations were consistent with the results of the logistic regression analysis: Party Affiliation versus the Votes Index, and Party Affiliation versus the 1994 ADA Ratings. The Votes Index and the 1994 ADA Ratings had a weak (0.1 – 0.25) correlation with Legislator Region, Legislator Sub-Region, and Legislator Religion. Legislator Religion was somewhat (0.25 – 0.5) correlated to the Votes Index and the 1994 ADA Ratings, and more weakly correlated to Legislator Region, Legislator Sub-Region and Party Affiliation. Not surprisingly, Years in Office was strongly correlated to Legislator Age.

Election Margin was somewhat correlated to Population Race and Voter Presidential Support, and weakly correlated to Years in Office and Population Income. Population Education had a strong correlation to Population Income and Urban Population, somewhat of a correlation to Population Religion, and a weak correlation to Legislator Region, Legislator Sub-Region, and Legislator Religion. Population Income had a strong correlation to Population Education, somewhat of a correlation to Population Religion and Urban Population, and a weak correlation with Legislator Region, Legislator Sub-Region, Party Affiliation, and Legislator Religion. Population Race was strongly correlated to Urban Population and Voter Presidential Support (Voted for Bush or Perot), somewhat correlated to Population Religion, and weakly correlated to Population Income.

Population Race and Urban Population were somewhat correlated with the Votes Index, the 1994 ADA Ratings, Legislator Region, and Legislator Sub-Region, and Population Religion had an even stronger correlation with those same variables. Voter Registration was weakly correlated to Legislator Sub-Region and Legislator Religion. Voter Presidential Support was strongly correlated to the Votes Index, the 1994 ADA Ratings and Party Affiliation, somewhat correlated to Election Margin, and weakly correlated to Legislator Region and Legislator Religion. Population Religion was strongly correlated to Urban Population, Voter Presidential Support, and Private Schooling, and somewhat correlated to Population Education, Population Income, and Population Race, and weakly correlated to Registered Voters.

Urban Population was strongly correlated to Population Education, Population Income, Population Race, Population Religion, and Private Schooling, and somewhat correlated to Voter Presidential Support. Voter Presidential Support was strongly correlated to Population Race and Population Religion, somewhat correlated to Urban Population and Private Schooling, and weakly correlated to Population Income. Population Private Schooling was strongly correlated to Population Income, Population Education, Population Religion, and Urban Population, somewhat correlated to Legislator Region, Legislator Sub-Region, and Legislator Religion, and weakly correlated to the Votes Index, the 1994 ADA Ratings, and Voter Registration.

Table 10 – Correlations Between Independent Variables

Table 10a – Correlations Between Independent Variables

	Votes Index	1994 ADA Ratings	Legislator Region	Legislator Sub-Region	Party Affiliation	Legislator Age	Legislator Education	Legislator Religion	Election Margin
Votes Index	1	-.868**	.146**	.122**	.803**	.016	-.051	-.276**	-.076
		.000	.001	.005	.000	.708	.242	.000	.080
1994 ADA Rating	-.868**	1	-.131**	-.121**	-.811**	.019	.043	.303**	.091*
	.000		.002	.005	.000	.667	.324	.000	.036
Legislator Region	.146**	-.131**	1	.961**	.000	.076	-.040	-.201**	-.081
	.001	.002		.000	.992	.081	.354	.000	.060
Legislator Sub-Region	.122**	-.121**	.961**	1	-.011	.057	-.054	-.173**	-.066
	.005	.005	.000		.805	.188	.216	.000	.125
Party Affiliation	.803**	-.811**	.000	-.011	1	.010	-.066	-.189**	-.081
	.000	.000	.992	.805		.815	.127	.000	.061
Legislator Age	.016	.019	.076	.057	.010	1	.095*	-.099*	.071
	.708	.667	.081	.188	.815		.029	.022	.102
Legislator Education	-.051	.043	-.040	-.054	-.066	.095*	1	-.012	.002
	.242	.324	.354	.216	.127	.029		.781	.971
Legislator Religion	-.276**	.303**	-.201**	-.173**	-.189**	-.099*	-.012	1	-.048
	.000	.000	.000	.000	.000	.022	.781		.263
Election Margin	-.076	.091*	-.081	-.066	-.081	.071	.002	-.048	1
	.080	.036	.060	.125	.061	.102	.971	.263	
Years In Office	-.086*	.075	-.027	-.023	-.081	.636**	.093*	-.028	.118**
	.047	.082	.538	.599	.061	.000	.032	.517	.006
Population Education	-.034	.084	-.135**	-.119**	.092*	.012	-.072	.204**	-.063
	.427	.053	.002	.006	.033	.786	.095	.000	.148
Population Income	.096*	-.078	-.125**	-.108*	.224**	-.010	-.028	.184**	-.212**
	.026	.072	.004	.012	.000	.820	.516	.000	.000
Population Race	.290**	-.369**	-.202**	-.225**	.327**	-.038	-.038	.065	-.298**
	.000	.000	.000	.000	.000	.376	.378	.134	.000
Population Religion	.357**	-.416**	.296**	.272**	.152**	.059	-.014	-.347**	-.064
	.000	.000	.000	.000	.000	.169	.749	.000	.138
Urban Population	-.151**	.243**	.077	.123**	-.106*	-.041	.046	.192**	.008
	.000	.000	.074	.004	.014	.340	.283	.000	.861
Registered Voters	.071	-.080	.090*	.118**	.030	.052	-.064	-.117**	-.020
	.101	.065	.037	.006	.486	.230	.141	.007	.649
Voted for Bush or Perot	.551**	-.645**	.108*	.084	.478**	.014	-.033	-.141**	-.309**
	.000	.000	.012	.052	.000	.738	.451	.001	.000

Private	-.115**	.174**	-.367**	-.334**	-.025	-.040	.021	.244**	.010
Schooling	.008	.000	.000	.000	.566	.358	.636	.000	.814

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Table 10b – Correlations Between Independent Variables

	Years In Office	Population Education	Population Income	Population Race	Population Religion	Urban Population	Registered Voters	Voted for Bush/Perot	Private Schooling
Votes Index	-.086*	-.034	.096*	.290**	.357**	-.151**	.071	.551**	-.115**
	.047	.427	.026	.000	.000	.000	.101	.000	.008
1994	.075	.084	-.078	-.369**	-.416**	.243**	-.080	-.645**	.174**
ADA Rating	.082	.053	.072	.000	.000	.000	.065	.000	.000
Legislator	-.027	-.135**	-.125**	-.202**	.296**	.077	.090*	.108*	-.367**
Region	.538	.002	.004	.000	.000	.074	.037	.012	.000
Legislator	-.023	-.119**	-.108*	-.225**	.272**	.123**	.118**	.084	-.334**
Sub-Region	.599	.006	.012	.000	.000	.004	.006	.052	.000
Party	-.081	.092*	.224**	.327**	.152**	-.106*	.030	.478**	-.025
Affiliation	.061	.033	.000	.000	.000	.014	.486	.000	.566
Legislator Age	.636**	.012	-.010	-.038	.059	-.041	.052	.014	-.040
	.000	.786	.820	.376	.169	.340	.230	.738	.358
Legislator	.093*	-.072	-.028	-.038	-.014	.046	-.064	-.033	.021
Education	.032	.095	.516	.378	.749	.283	.141	.451	.636
Legislator	-.028	.204**	.184**	.065	-.347**	.192**	-.117**	-.141**	.244**
Religion	.517	.000	.000	.134	.000	.000	.007	.001	.000
Election Margin	.118**	-.063	-.212**	-.298**	-.064	.008	-.020	-.309**	.010
	.006	.148	.000	.000	.138	.861	.649	.000	.814
Years	1	-.025	-.064	.055	.050	-.079	.048	.008	-.007
In Office		.558	.138	.200	.247	.068	.266	.860	.873
Population	-.025	1	.702**	.075	-.327**	.444**	-.019	-.080	.566**
Education	.558		.000	.083	.000	.000	.653	.066	.000
Population	-.064	.702**	1	.168**	-.355**	.460**	-.095*	.181**	.478**
Income	.138	.000		.000	.000	.000	.028	.000	.000
Population	.055	.075	.168**	1	.289**	-.419**	.072	.702**	-.051
Race	.200	.083	.000		.000	.000	.095	.000	.241
Population	.050	-.327**	-.355**	.289**	1	-.450**	.169**	.494**	-.443**
Religion	.247	.000	.000	.000		.000	.000	.000	.000
Urban	-.079	.444**	.460**	-.419**	-.450**	1	-.079	-.334**	.536**
Population	.068	.000	.000	.000	.000		.068	.000	.000

Registered Voters	.048 .266	-.019 .653	-.095* .028	.072 .095	.169** .000	-.079 .068	1	.059 .173	-.152** .000
Voted for Bush or Perot	.008 .860	-.080 .066	.181** .000	.702** .000	.494** .000	-.334** .000	.059 .173	1	-.242** .000
Private Schooling	-.007 .873	.566** .000	.478** .000	-.051 .241	-.443** .000	.536** .000	-.152** .000	-.242** .000	1

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

3) Screening the Covariates:

The covariates listed in Table 5 for which data could be collected were screened by conducting logistic regression analysis on each variable individually. Those with an Odds Ratio of at least 2 to 1 at a Significance Level of 0.05 or less were included for testing to determine the final model. Table 8 summarizes how the covariates were tested, and Table 11 lists those that were included in the final data analysis.

Table 11 – Odds Ratios for the Covariates Tested Against HR 1804 Goals 2000 *

Covariate	Coding	Wald Chi Sq.	Deg. of Freedom	Odds Ratio	Sig.
States					
Colorado	1=Colorado	4.065	1	4.420	0.044
Regions					
Northeast	0=Northeast	10.894	1	2.758	0.001
New England	0=New England	5.956	1	12.112	0.015
Mountain	1=Mountain	5.035	1	2.198	0.025
Party					
Democrats	0=Democrat	116.330	1	82.988	<0.00
Republicans	1=Republican	117.129	1	84.472	1
Legislator Education					
Graduate Degree	1=Grad. Degree	10.660	1	1.950	0.001
Legislator Religion					
Conservative Denominations (with Black Protestants)	1=Conservative	21.226	1	2.837	<0.00 1
Population Education					
% High School education or more > national	1= > national	13.184	1	2.144	<0.00 1
Population Race					
% White population > national	1= > national	13.783	1	2.323	<0.00
Population Religion					
% Conservatives > national (without Black Protestants)	1= > national	33.066	1	3.303	<0.00 1

Table 11 – Odds Ratios for the Covariates Tested Against HR 1804 Goals 2000 *

Covariate	Coding	Wald Chi Sq.	Deg. of Freedom	Odds Ratio	Sig.
Party Registration Legislator's party had plurality of registered voters (missing cases included)	**0=Plurality**	**31.586**	**1**	**6.980**	**<0.001**

*** HR 1804 Goals 2000** **0 = Yes vote**
1 = No vote

4) Independent Variables:

The seven bills that were selected as the primary independent variables were tested in several different ways. Logistic regression analysis was conducted for each bill separately against the *Goals 2000* dependent variable, and each was found to be strongly correlated to the Dependent Variable (see Table 12a).

Table 12 –Legislation Variables Tested Individually Against HR 1804 Goals 2000

Table 12a – Odds Ratios for Legislation Variables Tested Individually Against HR 1804 Goals 2000 *

		Wald	Deg. of	Odds	
HR 920 Extend Emergency Unemployment Compensation	**0=No vote 1=Yes/miss**	**162.037**	**1**	**38.912**	**<0.001**
HR 1 Family and Medical Leave Act	**0=No vote 1=Yes/miss**	**152.291**	**1**	**27.413**	**<0.001**
S 636 Freedom of Access to Clinics	**0=No vote 1=Yes/miss**	**137.312**	**1**	**22.687**	**<0.001**
HR 2010 National and Community Service Act	**0=No vote 1=Yes/miss**	**161.393**	**1**	**74.791**	**<0.001**
HR 2 National Voter Registration Act	**0=No vote 1=Yes/miss**	**155.002**	**1**	**51.501**	**<0.001**
HR 2884 School to Work Opportunities	**0=No vote 1=Yes/miss**	**116.825**	**1**	**93.289**	**<0.001**
HR 3167 Extend Unemployment Amendments of 1993	**0=No vote 1=Yes/miss**	**140.564**	**1**	**24.822**	**<0.001**

*** HR 1804 Goals 2000** **0 = Yes vote**
1 = No vote

A similar procedure was followed for the seven bills, with missed votes coded as missing, and the results were slightly stronger (see Table 12b).

Table 12b – Odds Ratios for Legislation Variables Tested Individually Against HR 1804 Goals 2000 * - Missing Votes Excluded

Legislation	Coding	Wald Chi Sq.	Deg. of Freedom	Odds Ratio	Sig.
HR 920 Extend Emergency Unemployment Compensation	0=No vote 1=Yes vote	136.882	1	68.317	<0.001
HR 1 Family and Medical Leave Act	0=No vote 1=Yes vote	149.957	1	32.756	<0.001
S 636 Freedom of Access to Clinics	0=No vote 1=Yes vote	132.086	1	24.943	<0.001
HR 2010 National and Community Service Act	0=No vote 1=Yes vote	133.994	1	126.620	<0.001
HR 2 National Voter Registration Act	0=No vote 1=Yes vote	123.865	1	100.699	<0.001
HR 2884 School to Work Opportunities	0=No vote 1=Yes vote	115.027	1	90.686	<0.001
HR 3167 Extend Unemployment Amendments of 1993	0=No vote 1=Yes vote	141.336	1	25.760	<0.001
*** HR 1804 Goals 2000**	**0 = Yes vote 1 = No vote**				

Tables 12c through 12i provide cross tabulations for the votes cast for the *Goals 2000* legislation against the votes cast for each of the legislation variables.

Table 12c– Cross Tabulation for HR 1804 Goals 2000 vs. HR 920 Emergency Unemp.

			HR 920 Emerg Unemp		
			No vote	Yes vote	Total
HR 1804 Goals 2000	No vote	Count	133	10	143
		% within Emerg Unemp	63.3%	3.3%	27.9%
	Yes vote	Count	77	292	369
		% within Emerg Unemp	36.7%	96.7%	72.1%
	Total	Count	210	302	512
		% within Emerg Unemp	100.0%	100.0%	100.0%

Table 12d – Cross Tabulation for HR 1804 Goals 2000 vs. HR 1 FMLA

			HR 1 FMLA		
			No vote	Yes vote	Total
HR 1804 Goals 2000	No vote	Count	124	19	143
		% within FMLA	66.3%	5.8%	27.9%
	Yes vote	Count	63	306	369
		% within FMLA	33.7%	94.2%	72.1%
Total		Count	187	325	512
		% within FMLA	100.0%	100.0%	100.0%

Table 12e– Cross Tabulation for HR 1804 Goals 2000 vs. S 636 Clinic Access

			S 636 Clinic Access		
			No vote	Yes vote	Total
HR 1804 Goals 2000	No vote	Count	124	19	143
		% within Clinic Access	58.8%	6.3%	27.9%
	Yes vote	Count	87	282	369
		% within Clinic Access	41.2%	93.7%	72.1%
	Total	Count	211	301	512
		% within Clinic Access	100.0%	100.0%	100.0%

Table 12f – Cross Tabulation for HR 1804 Goals 2000 vs. HR 2010 National Service Act

			HR 2010 National Service		
			No vote	Yes vote	Total
HR 1804 Goals 2000	No vote	Count	136	7	143
		% within National Service	72.7%	2.2%	27.9%
	Yes vote	Count	51	318	369
		% within National Service	27.3%	97.8%	72.1%
	Total	Count	187	325	512
		% within National Service	100.0%	100.0%	100.0%

Table 12g – Cross Tabulation for HR 1804 Goals 2000 vs. HR 2 Voter Registration Act

			HR 2 Voter Registration		
			No vote	Yes vote	Total
HR 1804 Goals 2000	No vote	Count	136	7	143
		% within Voter Registration	68.3%	2.2%	27.9%
	Yes vote	Count	63	306	369
		% within Voter Registration	31.7%	97.8%	72.1%
	Total	Count	199	313	512
		% within Voter Registration	100.0%	100.0%	100.0%

Table 12h – Cross Tabulation for HR 1804 Goals 2000 vs. HR 2884 School to Work Act

			HR 2884 School to Work		
			No vote	Yes vote	Total
HR 1804 Goals 2000	No vote	Count	93	50	143
		% within School to Work	79.5%	12.7%	27.9%
	Yes vote	Count	24	345	369
		% within School to Work	20.5%	87.3%	72.1%
	Total	Count	117	395	512
		% within School to Work	100.0%	100.0%	100.0%

Table 12i – Cross Tabulation for HR 1804 Goals 2000 vs. HR 3167 Unemp Compensation

			HR 3167 Unemployment Compensation		
			No vote	Yes vote	Total
HR 1804 Goals 2000	No vote	Count	95	48	143
		% within Unemp. Comp.	74.2%	12.5%	27.9%
	Yes vote	Count	33	336	369
		% within Unemp. Comp.	25.8%	87.5%	72.1%
	Total	Count	128	384	512
		% within Unemp. Comp.	100.0%	100.0%	100.0%

Conditional logistic regression was also conducted for the seven bills as a group, which led to the elimination of two of the bills (HR 920 Extend Emergency Unemployment Compensation and HR 1 Family and Medical Leave Act). Logistic regression analysis was then conducted on the five remaining bills (see Tables 13a through 13d). Regression results indicate that the model was statistically reliable in predicting the legislators' votes on the *Goals 2000* legislation (-2 Log Likelihood = 192.612, Nagelkerke R^2 = .799, χ^2 = 413.891, $p < 0.0001$). The model correctly classified 92.4 % of the cases. Regression results are presented in Table 13d. Wald statistics indicated that the five bills significantly predict the *Goals 2000* vote. The odds ratios for these bills indicate significant change in the likelihood of legislators voting the same way for the *Goals 2000* bill as they did for the five bills in the model.

Table 13 –Legislation Variables Tested as a Group

Table 13a – Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	413.891	5	<.001
	Block	413.891	5	<.001
	Model	413.891	5	<.001

Table 13b – Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	192.612[a]	.554	.799

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Table 13c – Classification Table[a]

Observed			Predicted		
			HR 1804 Goals 2000		
			Yes Vote	No Vote	Percentage Correct
Step 1	HR 1804 Goals 2000	Yes Vote	124	19	86.7
		No Vote	20	349	94.6
	Overall Percentage				92.4

a. The cut value is .500

Table 13d –Odds Ratios for Legislation Variables Tested as a Group Against HR 1804 Goals 2000 *

		Wald	Deg. of	Odds	
S 636 Freedom of Access to Clinics	0=No vote 1=Yes/miss	20.773	1	6.531	<0.001
HR 2010 National and Community Service Act	0=No vote 1=Yes/miss	11.744	1	5.230	0.001
HR 2 National Voter Registration Act	0=No vote 1=Yes/miss	10.471	1	4.684	0.001
HR 2884 School to Work Opportunities	0=No vote 1=Yes/miss	28.585	1	18.459	<0.001
HR 3167 Extend Unemployment Amendments of 1993	0=No vote 1=Yes/miss	7.332	1	3.075	0.007

*** HR 1804 Goals 2000** 0 = Yes vote
1 = No vote

A similar procedure was followed for the seven bills, with missing votes coded as missing to exclude them from the analysis, and the resulting model was slightly stronger (see Tables 13e through 13h).

Table 13e – Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	379.810	5	<.001
	Block	379.810	5	<.001
	Model	379.810	5	<.001

Table 13f – Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	156.912[a]	.571	.819

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Table 13g – Classification Table[a]

Observed			Predicted		
			HR 1804 Goals 2000		Percentage Correct
			Yes Vote	No Vote	
Step 1	HR 1804 Goals 2000	Yes Vote	114	14	89.1
		No Vote	17	304	94.7
	Overall Percentage				93.1

a. The cut value is .500

Table 13h – Odds Ratios for Legislation Variables Tested as a Group Against HR 1804 Goals 2000 * - Missing Votes Excluded

Legislation	Coding	Wald Chi Sq.	Deg. of Freedom	Odds Ratio	Sig.
S 636 Freedom of Access to Clinics	0=No vote 1=Yes vote	18.506	1	6.873	<0.001
HR 2010 National and Community Service Act	0=No vote 1=Yes vote	9.831	1	5.799	0.002
HR 2 National Voter Registration Act	0=No vote 1=Yes vote	10.831	1	6.611	0.001
HR 2884 School to Work Opportunities	0=No vote 1=Yes vote	19.938	1	12.785	<0.001
HR 3167 Extend Unemployment Amendments of 1993	0=No vote 1=Yes vote	6.270	1	3.072	0.012

*** HR 1804 Goals 2000** 0 = Yes vote 1 = No vote

Logistic regression analysis was conducted to determine whether the Votes Index would be a good predictor for how legislators would vote for the *Goals 2000* legislation (see Table 14). Regression results indicate that the Votes Index was statistically reliable in predicting the

legislators' votes on the *Goals 2000* legislation (-2 Log Likelihood = 268.950, Nagelkerke R^2 = .696, χ^2 = 337.553, p < 0.0001). The model correctly classified 91.4 % of the cases. Regression results are presented in Table 14d. The Wald statistic indicated that the Votes Index very significantly predicted the *Goals 2000* vote. The odds ratio for the Votes Index indicated very significant change in the likelihood of legislators voting the same way for the *Goals 2000* bill as they did for the seven bills represented in the Votes Index.

Table 14 –Votes Index Tested Against HR 1804 Goals 2000

Table 14a – Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	337.553	1	<.001
	Block	337.553	1	<.001
	Model	337.553	1	<.001

Table 14b – Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	268.950[a]	.483	.696

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Table 14c – Classification Table[a]

Observed			Predicted		
			HR 1804 Goals 2000		
			Yes Vote	No Vote	Percentage Correct
Step 1	HR 1804 Goals 2000	Yes Vote	338	31	91.6
		No Vote	13	130	90.9
	Overall Percentage				91.4

Table 14d –Odds Ratios for Votes Index Tested Against HR 1804 Goals 2000 *

	Coding	Wald Chi Sq.	Deg. Of Freedom	Odds Ratio	Sig.
Votes Index	0 = < 4 No votes 1 = 4 + No votes	183.686	1	109.032	<0.001

* HR 1804 Goals 2000 0 = Yes vote 1 = No vote

Table 14e – Cross Tabulation for HR 1804 Goals 2000 vs. Votes Index

			Votes Index		Total
			Less than 4 No votes	4 or more No votes	
HR 1804 Goals 2000	Yes vote	Count	338	31	369
		% within Votes Index	96.3%	19.3%	72.1%
	No vote	Count	13	130	143
		% within Votes Index	3.7%	80.7%	27.9%
	Total	Count	351	161	512
		% within Votes Index	100.0%	100.0%	100.0%

The overall fit of the Votes Index model is approximately the same as those of the models for the individual legislative bills in Table 13, but the Wald statistic and odds ratio are significantly higher. Based on these results, the Votes Index was selected for inclusion as the primary independent variable in the logistic regression analysis to determine the final model.

5) ADA Ratings:

Logistic regression analysis was conducted for the 1993 ADA Rating to determine whether it might be a better predictor than the Votes Index for how legislators would vote for the *Goals 2000* legislation (see Tables 15). Regression results indicate that the 1993 ADA Rating was statistically reliable in predicting the legislators' votes on the *Goals 2000* legislation (-2 Log Likelihood = 320.950, Nagelkerke R^2 = .616, χ^2 = 285.553, $p < 0.0001$). The model correctly classified 85.0 % of the cases. Regression results are presented in Table 15d. The Wald statistic indicated that the 1993 ADA Rating significantly predicted the *Goals 2000* vote. The odds ratio for the 1993 ADA Rating indicated very significant change in the likelihood of legislators voting the same way for the *Goals 2000* bill as they did for the bills represented in the 1993 ADA Rating.

Table 15 –1993 ADA Ratings Tested Against HR 1804 Goals 2000

Table 15a – Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	285.553	1	<.001
	Block	285.553	1	<.001
	Model	285.553	1	<.001

Table 15b – Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	320.950[a]	.427	.616

a. Estimation terminated at iteration number 7
because parameter estimates changed by less than .001.

Table 15c – Classification Table[a]

Observed			Predicted		
			HR 1804 Goals 2000		
			Yes Vote	No Vote	Percentage Correct
Step 1	HR 1804 Goals 2000	Yes Vote	297	72	80.5
		No Vote	5	138	96.5
	Overall Percentage				85.0

a. The cut value is .500

Table 15d – Odds Ratios for 1993 ADA Ratings Tested Against HR 1804 Goals 2000 *

	Coding	Wald Chi Sq.	Deg. Of Freedom	Odds Ratio	Sig.
1993 ADA Ratings	0 = not conservative 1 = conservative	99.861	1	113.850	<0.001

* HR 1804 Goals 2000 0 = Yes vote
1 = No vote

Table 15e – Cross Tabulation for HR 1804 Goals2000 vs. 1993 ADA Ratings

			1993 ADA Ratings		Total
			Not Conservative	Conservative	
HR1804 Goals 2000	Yes vote	Count	297	72	369
		% within 1993 ADA Ratings	98.3%	34.3%	72.1%
	No vote	Count	5	138	143
		% within 1993 ADA Ratings	1.7%	65.7%	27.9%
	Total	Count	302	210	512

Logistic regression analysis was conducted for the 1994 ADA Rating to determine whether it might be a better predictor than the Votes Index for how legislators would vote for the *Goals 2000* legislation (see Table 16). Regression results indicate that the 1994 ADA Rating was statistically reliable in predicting the legislators' votes on the *Goals 2000* legislation (-2 Log Likelihood = 331.780, Nagelkerke R^2 = .598, χ^2 = 274.723, $p < 0.0001$). The model correctly classified 83.4 % of the cases. Regression results are presented in Table 16d. The Wald statistic indicated that the 1994 ADA Rating significantly predicted the *Goals 2000* vote. The odds ratio for the 1994 ADA Rating indicated very significant change in the likelihood of legislators voting the same way for the *Goals 2000* bill as they did for the bills represented in the 1994 ADA Rating.

Table 16 –1994 ADA Ratings Tested Against HR 1804 Goals 2000

Table 16a – Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	274.723	1	<.001
	Block	274.723	1	<.001
	Model	274.723	1	<.001

Table 16b – Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	331.780[a]	.415	.598

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Table 16c – Classification Table[a]

Observed			Predicted		
			HR 1804 Goals 2000		
			Yes Vote	No Vote	Percentage Correct
Step 1	HR 1804 Goals 2000	Yes Vote	288	81	78.0
		No Vote	4	139	97.2
	Overall Percentage				83.4

a. The cut value is .500

Table 16d – Odds Ratios for 1994 ADA Ratings Tested Against HR 1804 Goals 2000 *

Covariate	Coding	Wald Chi Sq.	Deg. Of Freedom	Odds Ratio	Sig.
1994 ADA Ratings	0 = not conservative 1 = conservative	84.980	1	123.556	<0.001

* HR 1804 Goals 2000 — 0 = Yes vote, 1 = No vote

Table 16e – Cross Tabulation for HR 1804 Goals 2000 vs. 1994 ADA Ratings

			1994 ADA Ratings		Total
			Not Conservative	Conservative	
HR1804 Goals 2000	Yes vote	Count	288	81	369
		% within 1994 ADA Ratings	98.6%	36.8%	72.1%
	No vote	Count	4	139	143
		% within 1994 ADA Ratings	1.4%	63.2%	27.9%
	Total	Count	292	220	512
		% within 1994 ADA Ratings	100.0%	100.0%	100.0%

Given the nature of the Votes Index and the ADA rating scales, both of which are based on legislators' voting records, it would not be surprising if there were a degree of multicollinearity between those variables. In fact, the correlation results reported in Table 10a indicate a high degree of multicollinearity between the Votes Index and both the 1993 and the 1994 ADA Ratings. To determine the extent of the multicollinearity between them logistic regression analysis was conducted for the Votes Index against both the 1993 and the 1994 ADA Ratings. As expected, the 1993 ADA Rating was found to be strongly correlated to the Votes Index, as was the 1994 ADA Rating (see Table 17).

Table 17 – Testing for Multicollinearity Between the Votes Index and the ADA Ratings

Table 17a – Odds Ratios for 1993 ADA Ratings vs. Votes Index *

	Coding	Wald Chi Sq.	Deg. Of Freedom	Odds Ratio	Sig.
1993 ADA Ratings	0 = not conservative 1 = conservative	72.164	1	477.545	<0.001

* Votes Index — 0 = less than 4 no votes; 1 = 4 or more no votes

Table 17b – Cross Tabulation for Votes Index vs. 1993 ADA Ratings

			1993 ADA Ratings		Total
			Not Conservative	Conservative	
Votes Index	Less than 4 No Votes	Count	309	55	364
		% within 1993 ADA Ratings	99.4%	24.4%	67.9%
	4 or more No Votes	Count	2	170	172
		% within 1993 ADA Ratings	.6%	75.6%	32.1%
	Total	Count	311	225	536
		% within 1993 ADA Ratings	100.0%	100.0%	100.0%

Table 17c – Odds Ratios for 1994 ADA Ratings vs. Votes Index *

	Coding	Wald Chi Sq.	Deg. Of Freedom	Odds Ratio	Sig.
1994 ADA Ratings	0 = not conservative 1 = conservative	85.749	1	254.354	<0.001

* Votes Index — 0 = less than 4 No votes; 1 = 4 or more No votes

Table 17d – Cross Tabulation for Votes Index vs. 1994 ADA Ratings

			1994 ADA Ratings		Total
			Not Conservative	Conservative	
Votes Index	Less than 4 No Votes	Count	298	66	364
		% within 1994 ADA Ratings	99.0%	28.1%	67.9%
	4 or more No Votes	Count	3	169	172
		% within 1994 ADA Ratings	1.0%	71.9%	32.1%
	Total	Count	301	235	536
		% within 1994 ADA Ratings	100.0%	100.0%	100.0%

The results of these tests were inconclusive. The results reported in Table 17 indicate a high degree of multicollinearity between the Votes Index and the ADA Ratings, but none stood out as the best predictor for how legislators would vote for the *Goals 2000* legislation (see Table 14, Table 15 and Table 16). The model for the Votes Index has a somewhat better fit than those for the ADA Ratings, but the higher Odds Ratio for the ADA Ratings suggested that they might be better predictors than the Votes Index. It was decided to include both the Votes Index and the ADA ratings in the conditional logistic regression analysis to determine the final model.

6) Testing for the Final Model:

Conditional logistic regression analysis was conducted on the Votes Index, the ADA ratings and all the covariates listed in Table 11 that were selected during the data screening to determine which were predictors of how legislators would vote for the *Goals 2000* legislation (see Table 18). All the covariates except for Party Affiliation were eliminated from the model, as was the 1993 ADA Rating. Regression results indicate that the overall model of three predictors (Votes Index, Party Affiliation and 1994 ADA Rating) was statistically reliable in predicting the legislators' votes on the *Goals 2000* legislation (-2 Log Likelihood = 238.356, Nagelkerke R^2 = .739, χ^2 = 368.147, $p < 0.0001$). The model correctly classified 91.2 % of the cases. Regression results are presented in Table 18d. Wald statistics indicated that all variables significantly predicted the *Goals 2000* vote. The odds ratios for these variables indicated significant change in the likelihood of legislators voting for the *Goals 2000* legislation.

Table 18 – Conditional Model

Table 18a – Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	337.553	1	<.001
	Block	337.553	1	<.001
	Model	337.553	1	<.001
Step 2	Step	26.078	1	<.001
	Block	363.630	2	<.001
	Model	363.630	2	<.001
Step 3	Step	4.516	1	.034
	Block	368.147	3	<.001
	Model	368.147	3	<.001

Table 18b – Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	268.950[a]	.483	.696
2	242.873[b]	.508	.733
3	238.356[b]	.513	.739

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

b. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Table 18c – Classification Table[a]

	Observed		Predicted		
			HR 1804 Goals 2000		Percentage
			Yes Vote	No Vote	Correct
Step 1	HR 1804 Goals 2000	Yes Vote	338	31	91.6
		No Vote	13	130	90.9
	Overall Percentage				91.4
Step 2	HR 1804 Goals 2000	Yes Vote	339	30	91.9
		No Vote	15	128	89.5
	Overall Percentage				91.2
Step 3	HR 1804	Yes Vote	339	30	91.9

Goals 2000	No Vote	15	128	89.5
Overall Percentage				91.2

a. The cut value is .500

Table 18d – Odds Ratios for Independent Variables and Covariates Tested Conditionally Against HR 1804 Goals 2000 *

		Wald	Deg. of	Odds	
Votes Index	0 = < 4 No votes 1 = 4 or more No votes	49.577	1	17.792	<0.00
1994 ADA Rating	0 = not conservative 1 = conservative	7.158	1	6.935	0.007
Party Affiliation	0 = not Republican 1 = Republican	4.381	1	3.650	0.036

* HR 1804 Goals 2000 0 = Yes vote
1 = No vote

7) Multi-Collinearity:

It was established earlier that there is significant multicollinearity between the ADA ratings and the Votes Index, which measure essentially the same thing, so one or the other should be eliminated from the final model. The conditional model definitively demonstrates that the Votes Index is substantially the stronger predictor, with a Wald Statistic and odds ratio significantly higher than those of the 1994 ADA Rating. Consequently, it was decided not to include the 1994 ADA Rating in the final model.

8) Determining the Final Model:

Conditional logistic regression analysis was conducted on the Votes Index and the Party Affiliation variable to determine the final model (see Table 19). Regression results indicate that the final model with these two predictors (Votes Index and Party Affiliation) was statistically reliable in predicting the legislators' votes on the *Goals 2000* legislation (-2 Log Likelihood = 245.891, Nagelkerke $R^2 = .728$, $\chi^2 = 360.612$, $p < 0.0001$). The model correctly classified 91.0 % of the cases. Regression results are presented in Table 19d. Wald statistics indicated that both variables significantly predicted the *Goals 2000* vote. The odds ratios for both variables indicated significant change in the likelihood of legislators voting for the *Goals 2000* legislation.

Table 19 – Final Model

Table 19a – Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	337.553	1	<.001
	Block	337.553	1	<.001
	Model	337.553	1	<.001
Step 2	Step	23.059	1	<.001
	Block	360.612	2	<.001
	Model	360.612	2	<.001

Table 19b – Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	268.950[a]	.483	.696
2	245.891[b]	.506	.728

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

b. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Table 19c – Classification Table[a]

Observed			Predicted		
			HR 1804 Goals 2000		Percentage Correct
			Yes Vote	No Vote	
Step 1	HR 1804 Goals 2000	Yes Vote	338	31	91.6
		No Vote	13	130	90.9
	Overall Percentage				91.4
Step 2	HR 1804 Goals 2000	Yes Vote	340	29	92.1
		No Vote	17	126	88.1
	Overall Percentage				91.0

a. The cut value is .500

Table 19d – Final Model – Votes Index & Party Affiliation vs. HR 1804 Goals 2000 *

Covariate	Coding	Wald Chi Sq.	Deg. of Freedom	Odds Ratio	Sig.
Step 1 Votes Index	0 = < 4 No votes 1 = 4 or more No votes	183.686	1	109.032	<0.001
Step 2 Votes Index	0 = < 4 No votes 1 = 4 or more No votes	64.382	1	25.624	<0.001
Party Affiliation	0 = not Republican 1 = Republican	22.912	1	10.701	<0.001

* HR 1804 Goals 2000 0 = Yes vote
1 = No vote

Chapter 6: Discussion

1. Variables Not Included in the Final Model:

Of the many intervening variables considered for this study, only one, Party Affiliation, was included in the final model. There were two reasons for this. First, as discussed earlier, some of the data could not be collected for inclusion in the data analysis. Second, the intervening variables had little predictive value as to how legislators would vote for specific legislation, as is reflected in the studies conducted by other researchers in the past.

a) Data Not Collected:

As discussed earlier, data could not be collected for a number of the intervening variables that were selected for this study.

i) Legislator Wealth:

While there is no empirical evidence from the literature to support this, there is a long standing assumption that wealthy people tend to be more conservative. It would have been interesting to examine whether there was a correlation between the net worth of the legislators of the 103rd Congress and their votes cast for the *Goals 2000* legislation. As discussed earlier, the records from which this information could have been collected were destroyed by legal mandate and were not available.

ii) Interest Group Contributions:

There is also a strongly held belief that legislators are influenced by interest group contributions, even though the literature does not appear to support this belief (Welch, 1982). It would have been interesting to examine whether there was a correlation between campaign contributions from conservative special interest groups to the legislators of the 103rd Congress and their votes cast for the *Goals 2000* legislation. As discussed earlier, this data could not be acquired by any practical means. Had the sources still been available at the time of this study, the data would have to be compiled from three election campaigns (1988, 1990, and 1992), because of the six year terms of office of United States Senators. All the Representatives of the 103rd Congress, who have two year terms of offices, were elected during the 1992 presidential election. The Senators, however, were elected in 1988, 1990 or 1992.

iii) Special Interest Groups:

The motivation for collecting data on special interest groups was simple. Would legislators who were elected from areas where conservative special interest groups were actively opposing national education standards or federal interference in local education be influenced to

vote against the *Goals 2000* legislation? It would be interesting to see if the more activist special interest groups can influence legislation, with or without campaign contributions or direct lobbying efforts. This became an impractical effort, for two reasons. First, the task of identifying such groups, many of which are local phenomena is in itself daunting. Second, the data, if available, would need to be weighted in some way to account for the varying influences of the different groups. On reflection, it was decided that this is a sufficiently major undertaking so as to justify a separate study.

iv) Similar State Legislation:

By 1994, the year the *Goals 2000* legislation was passed, many states had begun to consider and even implement state wide education standards to improve the performance of their public schools. It would be interesting to see whether the legislators from those states that had thus far failed to implement state wide education standards were more likely to oppose the *Goals 2000* legislation, which called for the voluntary implementation of national education standards. While it appeared at first that this data would be readily accessible, it developed that there was no single source from which the information was available. The alternative would have been to collect the data from the individual fifty states, an impractical exercise even if all fifty states had a source from which the data was available.

v) State Funding for Education Per Student:

As the literature revealed, funding for education is often seen as a measure of commitment to improving teaching and learning in our public schools. It would be interesting to see whether the legislators from those states that had lower funding per student for education were more likely to oppose the progressive *Goals 2000* legislation. This data, too, was not available from a single source. Once again, the alternative would have been to collect the data from the individual fifty states, an impractical exercise even if all fifty states had a source from which the data was available.

vi) Years Until End of Term:

It was decided not to include this variable in the analysis, for two reasons. First, the literature does not support that this variable is a significant predictor for how legislators vote on social issues. Second, in 1994 all the House Representatives, who numbered 435 of the 535 members of the 103rd Congress, were up for re-election that year, so there would have been virtually no variance in the data.

It is not certain that additional efforts to collect the data for these intervening variables would have yielded results. Furthermore, given the results of the data analysis, it is not probable that this data would have been found to be correlated to the legislators' votes for the *Goals 2000* legislation. Nevertheless, for the sake of thoroughness, it would have been desirable to have all the data available for analysis,.

b) Variables Not in the Equation:

It might appear surprising that none of the intervening variables except for Party Affiliation were included in the final model, bur the literature suggests that these results are consistent with previous studies. Other researchers have used some of these intervening variables as the primary independent variables to determine why legislators voted as they did for specific legislation. Invariably, they found that these variables have at most a weak association with the legislators' voting pattern.

Cressanthis et al (1991), Strickland and Whicker (1986) and Vinovskis (1979) all found that age had little or no predictive value for how legislators voted on abortion issues. Strickland and Whicker and Vinovskis also found that legislator educational achievement had little or no predictive value for how they voted on abortion issues.

Chressanthis et al and Granberg (1985) found that legislator affiliation to a conservative religious denomination had some predictive value for how they voted on abortion issues. On the other hand, Gohmann and Ohsfeldt (1990) found that state legislators' religious affiliation had no predictive value for how they voted on abortion issues, as did Strickland and Whicker for the U.S. Senate. Green and Guth (1991) found a strong correlation between legislator and district religious affiliation and the legislators' ADA ratings, which, as will be discussed is more of an ideology rating than a voting pattern. They also found that party affiliation was a much stronger predictor than religious affiliation. Oldmixon (2005) found that legislators were more responsive to the religious affiliation of their constituents when voting on social legislation than they were to their own religious convictions. Tatalovich and Schier (1993) found that religion was a strong predictor for how legislators voted on abortion issues from 1973, the year of the Roe v. Wade decision, to 1982, but a weaker predictor thereafter, and Vinovskis found similar results for the Congress of 1976.

Chressanthis et al, Green and Guth, Strickland and Whicker and Vinovskis all found geographic region to be moderately predictive of how legislators voted on abortion issues, while Granberg found region to be strongly predictive of how legislators voted on abortion issues. Chressanthis et al, Eccles (1978) and Strickland and Whicker found that the legislators' election margin of victory had no predictive value for how they voted on abortion issues.

It is interesting to note that the literature reveals that neither constituent demographics nor constituent political characteristics are strong predictors of how legislators vote on social issues, a finding that surprised some of the researchers.

To explain the seemingly contradictory results found in the literature, one needs to examine the variables tested in each study, as the effects of certain variables tend to stand out when others are omitted. This explains much, if not all, of the variance in the results reported by other researchers. In this study, the only one where the legislators' prior voting pattern was the primary independent variable, the relatively minor effects of the covariates, except for party affiliation, were eliminated by the regression analysis process.

2. Party Affiliation:

The final model demonstrates that party affiliation is a strong predictor of how legislators will vote on the issue of national education standards (which is also indicated from the results of the data screening summarized in Table 11), but not as strong a predictor as the legislators' voting records on similar reform legislation. The findings of other researchers can be helpful in explaining this phenomenon.

a) Abortion Legislation:

A number of researchers have examined congressional actions regarding abortion following the 1973 Supreme Court Roe v. Wade decision, with fairly consistent results. Chressanthis et al (1991) postulated that party affiliation would be significantly correlated to legislators' votes on the abortion issue. The results did not bear them out, which, they reported, confirmed the findings of Ladd and Hadley (1978), Roback (1980), Legge (1983) and Medoff (1989). Eccles (1978) found only a moderate association, reporting that many members did not vote with their party. Granberg (1985) also found only a moderate association, reporting that party affiliation was the weakest of the five predictors in his model. Gohmann and Ohsfeldt (1990) found such a weak association between party affiliation and legislators' votes on abortion issues that removing party affiliation did not significantly change the model. Strickland and Whicker (1986) postulated that party affiliation would not be significantly correlated to legislators' votes on the abortion issue, and the results bore them out. Tatalovitch and Schier (1993), on the other hand, as Chressanthis et al before them, postulated that party affiliation would be significantly correlated to legislators' votes on the abortion issue, but the results did not bear them out. Vinovskis (1979) did find party affiliation to be significant by itself, but it was not significantly correlated with legislators' votes on abortion after controlling for other variables.

Oldmixon (2005), who examined congressional actions on gay rights and reproductive issues, also postulated that party affiliation would be significantly correlated to legislators' votes on the abortion issue. As with this study, party affiliation was a strong predictor of how the legislators voted, but the D-NOMINATE ideology measure based on the legislators' voting records proved a stronger predictor in Oldmixon's model.

b) Other Legislation:

This limited review of the literature, with results that are not entirely consistent, suggests that party affiliation is not a significant predictor of legislators' voting behavior when it comes to abortion issues. On the other hand, Crichlow (2002), who examined legislators' voting behavior on the free trade issue, postulated that party affiliation would be a significant predictor. The results bore him out, which, Crichlow reported, confirmed earlier findings in the literature. Welch (1982) examined how interest group contributions affect legislators' voting behavior and found party affiliation to be a strong predictor.

Weisberg (1978) evaluated a variety of models for predicting legislator voting behavior. For Weisberg, the models based on party affiliation are the most simplistic, even though in an overview spanning almost a century, he demonstrates that members of Congress cast their votes

with their party from 80% to 85% of the time. As Turner (1970) observes, examination of past roll-calls has shown that the best predictor of how Congress members will vote is party affiliation.

3. Legislator Voting Records:

a) The Votes Index:

The final model demonstrates that legislators' voting records on other reform based legislation is by far the strongest predictor of how they will vote on the issue of national education standards (see Table 19 and Table 14). This is not surprising. As Granberg (1980) and Mischel (1969) observe, in general, the best way to predict how people will behave in specific circumstances is to extrapolate from how they have behaved in similar circumstances in the past.

Examining this conclusion from the perspective of the construct offered by Strickland and Whicker (1986), and my suggestion that the national education standards debate represents a bimodal social policy issue, it would be expected that legislators, and their constituents, would have passionately held beliefs and positions for or against national education standards, as they would on similar social issues. It would also be expected that they would consistently vote in conformance with those passionately held beliefs and positions, regardless of partisanship or party loyalty.

The regression results demonstrate the robustness of the final model, which accounts for most of the variance in legislators' votes on the *Goals 2000* bill. This suggests that it is neither necessary, nor would it be significantly productive, to further explore how legislative voting on national education standards might be predicted. The final model further demonstrates that Party Affiliation added only approximately three percent (3 %) of predictive value for how the legislators voted (Nagelkerke R^2 = .696 in Step 1, and Nagelkerke R^2 = .728 in Step 2).

b) The ADA Ratings:

The results of the data analysis summarized in Table 18 demonstrate that the Votes Index is a much better predictor than the ADA ratings. Given that the ADA ratings are themselves an index of legislators' voting records of sorts, it is relevant to examine why this is so.

The ADA ratings for 1993 and 1994 were included in this study as a "proxy" for legislator voting records, to determine how well they perform as predictors compared to the Votes Index used as the primary independent variable in this study. The fact is, however, that the ratings compiled by the ADA and the many other interest groups that compile similar ratings are not intended to be an index of the legislators' voting records, nor are they necessarily intended to serve as predictors for how legislators will vote. The literature reveals that there is a complex relationship between these interest groups, the legislators that they are rating, and the legislation that Congress considers.

It is important to note that the interest group ratings are ideological in nature. All the researchers already cited in this study reported that they included interest group ratings in their

analysis as ideological measures. As Fowler (1982) observes, “Interest group ratings have gained growing acceptance in academe as surrogate measures of ideology” (p. 401). The hypothesis is that legislators’ ideology can inform how they will vote on a given issue, but, as noted earlier, researchers have not always found that to be the case.

There appear to be several reasons why the interest group ideology ratings are not very reliable predictors of how legislators will vote on a particular bill. First, it is relevant to examine how the ratings are constructed. Each group is a special interest group with an agenda and a narrow focus on one or several issues. Fowler (1982) describes the process by which the ratings are developed. Starting with a large number of bills that conform to the group’s agenda, “the final selections are made during ‘brainstorming’ sessions in which various considerations are weighed for the best mix of issues reflecting the group's philosophy” (p. 403).

Fowler highlights other shortcomings in the way that ideology ratings are constructed. First, “despite the evaluation of members' voting records in conflictual terms, when groups choose issues they rarely select the same ones. Kritzer's (1978, p. 495) study of nine interest groups indicated an overlap in issue selection of approximately ten percent” (p. 406). Also, the ratings provide asymmetric results. “The ADA, for example, rates only 20 percent of the House as very liberal (ratings of 80 or more), yet the ACA places 29 percent of the membership in the least conservative range (ratings of less than 20). Similarly, the former group assigns more than a third of the House to the ranks of extreme non-liberalism, while only 23 percent are assigned by ACA to the most conservative end of the scale” (p. 406). Finally, “The pragmatic concerns of groups in measuring support for their philosophy by focusing on issues where they have been in close competition with other groups result in ratings that are heavily oriented toward economic interests” (p. 408), while “the diversity of the groups' membership inhibits it from taking positions on many controversial issues” (p. 404).

Another reason that ideology ratings are not always strong predictors of how legislators will vote on a particular bill is that ideology may not always be the major factor in how legislators vote. Kau and Rubin (1979) identify three potential factors that might motivate a legislator’s vote on a particular bill. One factor is economic; that is, the legislation may benefit the legislator’s constituents economically. A second factor is that legislators trade votes, one voting for another’s bill in return for the other’s vote on a bill favored by the first, a practice known as logrolling. The third factor is ideology, which Kau and Rubin define as a patriotic belief that the legislation will benefit the country, regardless of the legislator’s self interest. So, to the extent that ideology is a factor in how legislators vote, it is not the only factor.

A third reason that ideology ratings are not always strong predictors of how legislators will vote on a particular bill is that ideology itself may simply not be a good predictor for how legislators vote. As Kau and Rubin (1979) observe, “a positive theory of the role of ideology in effecting legislation is less well developed” (p. 367). While they conclude that it is apparent that ideology is a significant factor in explaining voting behavior, “it is at least possible that ADA serves in part to monitor membership in a logrolling coalition,” (p. 381). The ADA tends to select legislation for its ratings that is economic in nature, and Kau and Rubin question whether this in fact reflects ideology, or whether it reflects some economic interest which they have not as yet been able to measure. As noted earlier, this last observation is consistent with Fowler’s

(1982) findings.

Fowler (1982) concludes that the interest groups' focus on roll calls that conform to their agenda "tends to weight the indices toward a few issues and to present a polarized view of congressional decision-making that may be misleading" (p. 401). Furthermore, "the ratings could be inconsistent across time, indicating that a member has become more or less liberal from one session to the next when in fact his political principles have remained constant" (p. 402). More significantly, "the scores take on a substantive meaning within the context of a legislator's overall relationship with the group. A known friend is understood if he strays from the appointed positions; an habitual opponent gains little credit for occasional agreement" (p. 406). Members of Congress argue that the interest groups' narrow focus on issues results in an interpretation of roll calls that is highly subjective and ratings that are not only too partisan but also very inconsistent (Congressional Quarterly Weekly Report, 1981).

As Fowler points out, "in small but significant ways, each of these factors contributes to some distortion of members' voting records" (p. 405). She suggests that "the idiosyncrasies of each group's choice of issues suggest that composite measures may provide better rankings of members' voting records than the score of a single group" (p. 403). Kritzer (1978), on the other hand, argues that legislators' ideology can best be measured by scaling techniques.

Finally, Reeher (2001), in examining the relationship between self-reported measures of ideology and interest group ratings, to "help to untangle a set of long-standing contentious issues in political science: whether and in what ways individual legislators' ideologies matter in the legislative process, and what factors limit their influence" (p. 232), concludes that "obviously, neither measure of ideology provides 'the truth.' The Liberalism Index is not an objective indicator of a legislator's true ideology; rather, it is a measure of behavior in ideological terms derived by outside observers" (p. 240). Reeher points out that party affiliation is the most important factor in the difference between the interest group ratings and self-reported measures of ideology. Members of the majority party especially are under pressure to vote with the leadership, regardless of their personal convictions.

In conclusion, Fowler (1982) reports that:

> Curiously, each of the [interest groups'] staff members interviewed expressed considerable surprise and some skepticism at the use to which scholars put their ratings… In general, the ratings were thought to have their greatest impact on the distribution of campaign funds, because they provide a simple test of support or opposition (p. 403).

Close observation reveals another weakness, at least in the ADA rating methods. An extreme example is one member who was "ineligible" to vote for nineteen of the twenty selected bills that were selected by the ADA in 1993, yet that member's favorable vote on that one bill earned him a 100% rating from the ADA. There were others who were also ineligible to vote for at least some of the bills, with similar results. Even a few such examples can have a distorting affect on the aggregate ratings for any given year.

4. A Policy Context:

The stated purpose of this study was to explore the nature of the resistance to national education standards, to determine whether there is an underlying theme to the disparate opposition from various stakeholders. One clear conclusion that can be drawn from the data is that legislators vote consistently on progressive or reformist legislation. The question remains, what causes the many positions on policy issues such as national education standards to be distilled to 'yes' or 'no' votes in the legislature?

a) A Theoretical Framework:

The idea that there might be a common theme underlying the varied opposition to national education standards is not as strange as it might first appear. It is, actually, consistent with a major scientific theory that has not only gained acceptance since it was introduced in the mid twentieth century, but that has found practical applications in diverse areas, from mathematics to biology to the social sciences and to the policy arena.

Chaos theory is aptly named, in that it postulates that there is an underlying order and rhythm to even the most random and chaotic systems (Chou, 2004, Hung & Tu, 2009, Kayuni, 2010, Keaten et al, 1994, Snell et al, 1999, Snyder et al, 1995). The application of chaos theory to the social sciences in general, and the policy making area in particular, is compelling. As Snell et al (1999) observe, chaos theory deals with the apparently disorderly behavior of people that actually has an order that is not being directly observed.

Another characteristic of chaos theory is what has become known as the "butterfly effect" or "sensitive dependence," meaning that a minor change in any condition can cause rapid changes to the system or dramatic changes to the long-term behavior of the system (Hung & Tu, 2009, Keaten et al, 1994, Kayuni, 2010, Snell, 2009, Warren et al, 1998).

According to Waldrop (1992), chaos theory is an attempt on the part of scientists to better understand complexity and to progress beyond reductionism. Hunt (1987) asserts that the underlying structure of systems that are apparently random, because their behavior is without a discernible pattern, is actually deterministic, which means that their current state is always a function of their immediately preceding state.

Warren et al (1998) describe family dynamics as an example of a complex or chaotic system, where feedback between family members acts recursively in a way that is constantly acting on the family system in unpredictable ways, and that can cause rapid change. Kayuni (2010) describes the policy process in similar terms. He observes that policy makers are always trying to achieve and maintain a state of stability and equilibrium. Chaos theory argues that policy is rarely stable or in a state of equilibrium, which presents a seemingly chaotic situation. Therefore, chaos theory suggests that stability and equilibrium should not necessarily be goals of the policy process.

The following discussion will attempt to apply chaos theory to the national education standards issue, using a model suggested by the literature.

b) A Construct for Social Policy Issues:

The findings by the various researchers who have studied legislator voting behavior provoke an interesting question. Why, for example, is party affiliation largely unrelated to legislator voting behavior on certain issues, such as abortion, yet strongly related on other issues, such as free trade, and generally considered to be the best single predictor of legislator voting behavior? Strickland and Whicker (1986) describe a paradigm that could explain this apparent contradiction. In their examination of the abortion issue, Strickland and Whicker describe a useful construct for policy issues, which can be unimodal or bimodal in nature.

Bimodal issues, according to Strickland and Whicker, find people entrenched in positions on the extremes, with little chance of movement regardless of reasoned arguments, or even evidence, that more moderate positions might be more productive. The factors that motivate people to take positions on bimodal issues, such as civil rights or abortion, tend to be emotional, ideological or religious, and they trump other considerations such as party affiliation. In general, social issues tend to be bimodal and controversial. Bimodal issues are characterized as dichotomous issues, allowing only for support or opposition, and nothing in between, due to deeply held notions of right and wrong.

Unimodal issues, on the other hand, allow for a continuum of positions on the part of policy makers and their constituents, thus offering flexibility and the potential for compromise. Budgetary and trade issues, for example, are generally unimodal in nature, as they does not inflame people's passions in the way that issues such as affirmative action do. These issues are, therefore, more subject to negotiation and eventual resolution than are bimodal issues.

According to Strickland and Whicker, the extreme positions generated by bimodal policy issues motivate proponents to seek constitutional amendments, so that future policy change would require far more than a simple legislative majority. Also, the difficulty, or the impossibility, of achieving widespread consensus on bimodal issues, tends to drive those issues to the state or local level for resolution. Unimodal issues, on the other hand, can often be addressed on the federal level, and through statutory, rather than constitutional, measures.

Strickland and Whicker summarized the characteristics of policy issues as follows (Table 20):

Table 20 – Characteristics of Public Policy Issues

Unimodal Policy Issues	Bimodal Policy Issues
Continuous Issue Position	Dichotomous Issue Positions
Range of Policy Options	Extreme Mutually Exclusive Policy Options
Consensual	Conflictual

Moderate Salience for Constituents	High Salience for Constituents
Public Opinion Moderately Intense	Public Opinion Very Intense
Use of Impact Analyses and Evaluation Studies	Frequent Use of Emotion Laden Symbols
Multi-Issue Interest Groups	Single Issue Interest Groups
Compromise Likely	Compromise Unlikely
Often Includes Economic and Financial Proposals	Often Includes Civil Liberties and Social Issues
Proponents Usually Seek Statutory Changes	Proponents Usually Seek Constitutional Changes
Issue Resolved at Federal Level	Attempts to Lower Issue Resolution to State Level

The literature suggests that the national education standards debate is a bimodal issue. The various constituencies have adopted strongly defended positions for or against national education standards, even while they offer a wide variety of reasons in defense of their positions. Those reasons, as described in the literature, are a combination of emotional, ideological and religious in nature, and there is scant evidence that compromise can be achieved to allow for productive and effective policy reform in this area. That being the case, it would explain why party affiliation is a much weaker predictor of how legislators will vote on this issue than is their voting record on other reform legislation. The legislators, and their constituents, have taken a position on the issue of national education standards, and their adherence to those positions appears to trump partisanship and party loyalty.

Chaos theory supports the Strickland and Whicker paradigm and how the apparent disorder in the national education standards policy process is explained by the issue being bimodal in nature. The sensitive dependence effect of chaos theory might also explain how positions on the right became so entrenched through the policy process. In the course of the culture wars described by Merrett (1999), conservatives lost a number of causes that they considered to be crucial: school prayer, school choice, English language. These losses reverberated through the policy process, causing conservatives to harden their positions, and making it ever more difficult to achieve compromise, let alone consensus.

Chapter 7: Policy Implications

The foregoing discussion clarifies how bimodal social issues such as national education standards tend to be intractable and impervious to compromise. Moreover, as Strickland and Whicker (1986) found, the problem lies less with the legislators than with their constituents. As their data analysis demonstrated, the constituent social characteristics were stronger predictors for how the legislators voted than the legislators' demographics and political characteristics. Consequently, Strickland and Whicker conclude that turnover in the legislature may be less critical when it comes to altering policy for bimodal social issues than effecting changes in the deeply held convictions of our society.

Strickland and Whicker observe that the public will cling to extreme positions when offered only the dichotomous, extreme, and mutually exclusive choices that characterize bimodal issues. When offered a range of options that include one or more moderate positions, however, many will choose a moderate option, and the policy issue takes on the characteristics of a unimodal issue. Hence, policy makers can often change, even shape, public opinion simply by reframing the way an issue is presented.

This process requires policy makers to become marketers, first determining how various segments of the public feel about the issue, then formulating a range of options that include one or more options that a majority of the public could comfortably adopt, and then presenting those options in a way that feels inclusive rather than exclusive.

Taking into consideration the various issues revealed in the literature, policy makers hoping to effect education reform through national education standards might need to consider the following options:

a) State and Local Input:

The literature revealed that much of the resistance to national education standards derives from a more general concern about states' rights and what Merrett (1999) referred to as federal control over value inculcation. Allowing state, and perhaps even local, input into the development of the standards could alleviate much of this concern. It might also shift what has until now been an adversarial process to a more collaborative process, which is generally more productive.

b) Content and Assessment:

The literature also reveals that even progressive policy makers have concerns about national education standards, because of the implications of standardized testing. Until the issues of cultural bias, uniform grading of open ended questions, teaching to the test, fair allocation of resources, and the like, are addressed, there is a concern that disadvantaged students will be held

back and stigmatized for their poor performance. One way to address these concerns is to first develop curriculum standards that can be implemented on a national scale, with adequate support from the federal government. It will be much easier to achieve that objective if the issue of assessment is detached from the process. A separate initiative could be convened to determine whether national or state assessments are needed or desirable, and how to develop such assessment instruments that are fair and effective.

c) State or Local Compliance Monitoring:

The sensitivity to federal control of the education process suggests that it might be more palatable to allow the various states, or even local school districts, to monitor compliance with any federally mandated education standards. This might alleviate much of the resistance to national education standards, and it could be effective, provided there were no rewards or consequences associated with compliance. As the No Child Left Behind debacle has clearly demonstrated, at least some of the states will go to great lengths, even to the detriment of their students, when federal funding is involved.

d) "Opt Out" Options:

The literature reveals that there are populations, such as fundamentalist Christians, that are opposed to their children being exposed to certain subject matter. The debates over those issues will continue, and are not likely to be resolved in the near future. To facilitate the adoption of national education standards, it might be necessary to allow local school districts, and even individual parents, to "opt out" of sensitive curriculum areas, such as sex education. If there is general agreement that young people need to be taught certain material that parents find objectionable, then parents might be offered the option of home schooling their children in those areas or arranging for alternate schooling for their children to learn that material.

With these options, and perhaps others, a start might be made in education reform through the adoption of national education standards. This process might succeed where intense lobbying, compromise, and consensus building have failed.

There are broader policy implications as well. Our society is currently engaged in a self defeating political paralysis, because policy makers are framing issues in extreme ways where even traditionally unimodal financial policy issues are now bimodal in nature. The conclusions of this study suggest that we have the option to reframe these issues in such a way so as to allow public opinion to settle on more moderate options. Congress has earned its share of the criticism for the current impasse, but, as this study suggests, a change in the players will not necessarily allow for a resolution of the issues. Only a softening of the polarized public opinion will allow Congress to act, and public opinion will soften when the public is offered more moderate options for consideration.

Chapter 8: Future Research

1. America 2000:

This study examined the legislative resistance to national education standards in the specific context of legislation that was passed during the Democratic Clinton administration and the Democratic Congress that preceded the Contract with America upheaval. The results, as discussed earlier, were robust, but this study alone does not assure that the findings can be generalized to another presidential administration or another Congress. To examine whether the findings of this study might be generalized, future researchers could replicate this study with the *America 2000 Excellence in Education Act* (Library of Congress, 1990) that was proposed by President George H. W. Bush in 1991 and that failed to pass the 102nd Congress. This legislation called for National Education Goals that were to be attained by the year 2000 and an expanded National Assessment of Educational Progress to determine whether those goals were being met. This legislation, proposed by a conservative Republican president, was defeated by his Republican Congress. It would be interesting to replicate this study with the *America 2000* legislation to determine whether the model found in this study can be generalized to other contexts.

2. Path Analysis:

As discussed earlier, the final model in this study is robust, accounting for most of the variance in the legislators' votes on the *Goals 2000* bill. This suggests that there is no great need to account for the variance that the final model does not explain. This study does, however, raise another interesting question. What is it about legislators and their environment that motivates them to vote so consistently on social reform issues? As the model demonstrates, party affiliation explains only a small portion of the variance of the legislative voting patterns.

The data analysis in this study suggests that it would be interesting to examine the effects of the covariates, even though none had enough predictive value to be included in the final model. When the Block Enter method was used, and the covariates were entered in the first block, followed by the ADA Ratings in the second block, and followed by the Votes Index in the third block, a number of the covariates were included in the final model, while the Votes Index was not. This suggests that some or all of the predictive value of the Votes Index can be explained by the cumulative predictive value of the covariates. Future researchers might examine this by conducting path analysis, to determine the effects of the covariates on legislative voting patterns.

It should be noted that it is easier to predict how legislators will vote by examining their prior voting patterns. The value of understanding the legislator and constituent characteristics that have a causal effect on the voting patterns is to facilitate the reframing of policy issues as suggested by Strickland and Whicker (1986), to allow for moderate positions that legislators can adopt and implement.

3. Reframing the Issue:

Strickland and Whicker (1986) described the method whereby policy makers can reframe bimodal policy issues in such a way that they become unimodal issues, thus moderating public opinion and allowing for greater flexibility and compromise. Using the divisive, even polarizing, issue of abortion during the 1970s and 1980s as an example, Strickland and Whicker offer anecdotal evidence that this process works. Future researchers might provide empirical evidence that this process does in fact work, by studying legislator voting patterns on a variety of policy issues where public opinion polls are available. An examination of the correlation between public opinion and legislator voting patterns could help to determine whether it would be productive to reframe policy issues in order to moderate public opinion and in turn foster compromise on the issues.

Chapter 9: Conclusions

Building on Merrett's (1999) research, this study confirmed the hypothesis that the legislators' opposition to the *Goals 2000* legislation that called for the voluntary adoption by the states of national education standards could be predicted from their opposition to other reformist legislation. Using the theoretical framework provided by chaos theory, and the policy construct described by Strickland and Whicker (1986), conclusions were offered regarding the apparently chaotic nature of the national education standards reform initiative. Concluding that national education standards represent a bimodal social policy issue allows not only a different perspective on the matter, but a possible solution to resolve the impasse and initiate progress in this crucial reform area.

It should be noted that the *Goals 2000* legislation called for the *voluntary* adoption by the states of national education standards, and, while the bill passed into law seventeen years ago, we are no closer to the adoption of national standards today than we were then. So, even though the bill was passed, it can hardly be considered a success. There remains vigorous opposition to the adoption of national standards, and a great deal of work to do in this area, as there is in many other policy areas.

Strickland and Whicker (1986) described how the divisive, even polarizing, issue of abortion during the 1970s and 1980s was reframed to provide moderate options for legislators and their constituents to consider. The transformation of this highly controversial bimodal issue to a unimodal issue allowed for compromise and a resolution of some of the issues. A similar approach with the National Education Standards issue might offer hope for progress in the critical arena of education reform.

It will be left to policy makers to provide the ultimate test, by reframing the National Education Standards issue and offering the public, and their legislators, an opportunity to adopt more moderate positions on which consensus can be achieved. It remains to be seen whether this process can produce more effective education reform policy than we have seen to date.

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