WHO KNOWS WHAT?: A STUDY OF THE ROLE OF EPISTEMIC COMMUNITIES
IN THE MAKING OF THE NO CHILD LEFT BEHIND ACT

A dissertation submitted
To Kent State University in partial
Fulfillment of the requirements for the
Degree of Doctor of Philosophy

By
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May, 2009
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ACKNOWLEDGEMENTS

No dissertation is written without the kindness and support of many individuals. First of all, I want to thank my advisor, Dr. Trudy Steuernagel, who was so generous with her time. Her prompt feedback and advice have helped me write a much better dissertation than I thought I could write. My heart is heavy with sadness due to her tragic passing. She touched many lives and will not soon be forgotten.

I am grateful to many other faculty members in the Department of Political Science for providing me with a quality education, advice, and the tools I need to succeed in my chosen career. I would like to especially thank Dr. Tom Hensley who agreed to serve as my dissertation advisor after Dr. Steuernagel passed away.

I would also like to thank my good friend, Ramona McNeal. Her encouragement and support have aided me greatly in the dissertation writing process. Thank you Ramona, for taking my late night phone calls and responding to the many emails I sent you during my tenure in graduate school. I am also in debt to my parents, Linda and Ronald Dotterweich, who supported me in many ways throughout my time in graduate school. Tiffany Rich, Sarah Crisp-Fogel, and Kelley Distel, I owe you “big-time” for putting up with me talk endlessly about my dissertation during the last few years. My husband, Ted Bryan, has provided me with a great deal of emotional support and advice during the past year. He assumed a great deal of my work around the house so I could finish my dissertation during the summer. I’d also like to thank my stepson, Michael, for giving me time and peace to work on my dissertation over the summer. Yes, Michael, I’m FINALLY done and we’ll have a lot more time to play now.

Last, but not least, I’d like to thank Kent State University. The school has supported me financially and in many other ways. I am grateful for the opportunities the school provided me with to further my education and advance my career.
INTRODUCTION

Teach your children well  
Their father’s hell did slowly go by,  
And feed them on your dreams  
the ones they pick, the more you’ll know by
--Graham Nash

In 2002, President George W. Bush secured passage of the *No Child Left Behind Act*, (P. L. 107-110), the self-professed “cornerstone” of his administration. According to the U. S. Department of Education, the Act’s goals were to produce stronger accountability for results, to secure more freedom for states and communities, to encourage proven education methods, and to offer more choices to parents (U. S. Department of Education 2002a). The No Child Left Behind (NCLB) Act was a revised version of the 1965 Elementary and Secondary Education Act (P. L. 89-10). It was the central federal law in pre-collegiate education and mandated requirements in almost every public school in the United States (Education Week on the Web 2002).

This is a study of the role of epistemic communities in the development of the No Child Left Behind Act. Some of the literature on epistemic communities suggests their role is limited in terms of policy outcomes (Haas 1992a). However, this literature focused mainly on the epistemic communities involved in the policies dealing with the natural sciences. In respect to political science, the epistemic communities’ framework has been utilized more frequently in international relations. This research examines the role of epistemic communities in federal education policy, a domain in which the study of the
role of epistemic communities is limited. Epistemic community theory is discussed in more detail later in this chapter.

This chapter provides an overview of federal education policy in the United States and discusses the research goals and hypotheses of this project. First, it focuses on the history of federal education reform in the United States. Next, it presents an overview of the NCLB Act and discusses its provisions. Then, it briefly discusses the theoretical lens, the hypotheses, research design, and methodology used for this research.

**History of Education Reform in the United States**

This section examines the federal education reforms that have taken place since the late 1950s and before the NCLB Act was signed into law. The reforms discussed in this section include the National Defense of Education Act of 1958 Act (P.L. 85-864); the Elementary and Secondary Act of 1965; vocational education; the report titled *A Nation at Risk*, published by the National Commission on Excellence in Education in 1983; the Goals 2000: Educate America Act (P.L. 103-227); and the School-to-Work Act of 1994 (P.L. 103-239).

**National Defense Education Act of 1958**

Many politicians and scientists were concerned with the competitive standing of America in relation to the Soviet Union after the successful 1957 Soviet launch of the space shuttle Sputnik (Fraser 2001). A two-year study conducted by the United States Office of Education indicated the Soviet Union had made significant gains in every level of education since 1927. Another finding of the report is the fact that the average Soviet
high school graduate, at the end of ten years of education, was generally better educated in academic subjects than the American graduate is after twelve years of education (Fine 1957).

These concerns led to the proposal by President Dwight D. Eisenhower of the National Defense Education. The NDEA was passed by Congress and signed into law in 1958 (Fraser 2001). It is one of the most significant pieces of federal legislation impacting schools and colleges in the United States. Many projects at the national, state, and local levels were developed to implement the NDEA. These included funds for the improvement of instruction in science, mathematics, and foreign languages. Funds were also allocated for the improvement of guidance and counseling services, special programs for the disadvantaged, and the upgrading of libraries and media centers. In addition, the National Science Foundation increased its support for projects to improve the curriculum and education materials in mathematics and science.

A study by the Ford Foundation (1972) found few lasting changes in American public schools as a result of the 1958 legislation. Subsequent reports and studies described American schools as unchanging and immutable institutions (Louis 1986; Lieberman and Rosenholtz 1987), which may have contributed, in part, to the limited success of the National Defense Education Act.
Elementary and Secondary Education Act of 1965

The next major reform in American public education was the Elementary and Secondary Education Act (ESEA), which has its roots in the civil rights movement. This educational reform was used to address the social inequalities that pervaded the public schools at the time. Before the ESEA was signed into law, Chief Supreme Court Justice Earl Warren wrote in the *Brown vs. Topeka Board of Education* (1954) decision that desegregated schools were critical to the success of African Americans both individually and as a group (Kantor & Lowe 1995). Consequently, the schools were used as a vehicle for desegregation. The ESEA funds were allocated on the stipulation of desegregation in the public schools.

The ESEA was signed into law in 1965 as a part of President Johnson’s “War on Poverty” campaign. Title I funding was and still is used to help improve teaching and learning in schools with concentrations of low-achieving and financially disadvantaged children to help them meet state academic standards (Rury, 2002 191). Under Title I, aid is directly given to school districts with “教育ally deprived children of low-income families.” Consequently, 94% of all school districts received aid. Through other titles the ESEA also provided states with money to purchase educational materials for both public and private schools, established special supplementary education centers and services, made money available for research and innovation, and provided assistance to state departments of education in order to make them more effective (Lagemann, 2005).
The ESEA has survived four decades and several administrations, which is a testament to its success. During its first four years, the ESEA provided an unprecedented $4 billion in aid to disadvantaged students. During the 1970s and most of the 1980s, Title I funds were mainly used to close the achievement gap between students in urban disadvantaged communities and their peers in low-poverty areas and between minority and non-minority students (U. S. Department of Education 1993).

Before the reauthorization of this act in 1994, an evaluation by the U.S. Department of Education (1993), titled “National Assessment of Title I Program”\(^1\) indicated fundamental change was needed in Title I programs to help at-risk students attain the same standards expected of other children. Consequently, Congress and the Clinton Administration restructured Title I in 1994 in order to focus on helping low-performing students learn challenging curricula and to meet high academic standards (No Author 2001).

Program evaluations of the 1994 reauthorization of Title I indicated high-poverty schools were beginning to show gains in student performance. Reading and math performance among nine-year-olds in high-poverty public schools and among the lowest-achieving fourth-graders were found to have improved significantly on the National Assessment of Educational Progress. Three-year

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\(^1\) For example, this assessment found that the math performance of twelfth-graders in disadvantaged urban school districts was lower than that of eighth-graders in advantaged districts. It discovered first-graders in high-poverty districts scored 27-32 percentile points lower than their counterparts in low-poverty districts. The study also found by the fourth grade, approximately twenty-three percent of all students in high-poverty districts had been held back one or more times, whereas only seven percent of students in low-poverty districts had been held back.
trends reported by states indicated progress in the percentage of students in the highest-poverty schools who met state standards for proficiency in mathematics and reading as well. Despite this progress, a significant gap still existed between students in the highest-poverty schools and their peers in more affluent schools. Also, teachers were still found to lack the preparedness and skills needed to effectively implement the curricula in the classrooms. This also hindered the effectiveness of this reauthorization (2001).

**Vocational Education**

During the 1970s, career preparation was at the forefront of education policy discussion. As a result, the development of disciplined skills joined the development of disciplined intelligence to become educational goals. The partnering of the aforementioned skills and intelligence was commonly referred to as career education, which was strongly encouraged during that decade (Rury 1991).

Sidney P. Marland Jr., commissioner of education during the administration of President Richard Nixon, believed vocational education was a cure for the unemployment of young adults who did not attend college. He helped secure the passage of the first official federal dollars to be spent on vocational education as part of an ESEA reauthorization. He was instrumental in obtaining the allocation of $40 million for career demonstration projects at 425 different sites (Hoye 1999). Marland also helped establish a two-track system in secondary education. One track consisted of a conventional general education curriculum for the
college-bound. The other track consisted of skills education for students who would enter the work force soon after graduation. Students in this track attended vocational schools. Regular offerings in vocational schools included training in secretarial skills, automobile mechanics, cosmetology, and many other trades (Rury 1991). The allocation of money for career education marked the first government sanctioned linkage between education and business.

Prior to the late 1980s, the literature examining the state of American vocational schools painted a rather positive portrait of these schools. Walker (1988) found vocational schools in New York City in the 1980s enjoyed a lower dropout rate than other schools. The National Center for Education Statistics also found the overall academic achievement of vocational students increased between 1982 and 1994. However, by the late 1980s, traditional vocational programs nationwide had experienced significant declines in their enrollments in addition to drops in their prestige as educational choices. The National Center for Education Statistics (NCES) reported that occupationally specific course taking and vocational specialization dropped during this time and that only a small declining minority of students considered themselves to be vocational students in its 2000 study *Vocational Education in the United States: Toward the Year 2000*. The NCES study also noted some disturbing trends that began in the 1980s and continued throughout the early 1990s. Examples of these trends include the fact that vocational students took a disproportionately high number of remedial courses and had lower grade point averages than non-vocational students. It was also
discovered that vocational students earned lower math scores on the NAEP than other students. The Clinton Administration responded to these findings and other factors affecting vocational education by signing into law the School-to-Work Opportunities Act of 1994 (P.L. 103-239), which is discussed later in this chapter.

*A Nation at Risk*

Despite the implementation of the aforementioned reforms, sufficient progress in American public schools did not occur. The 1983 report issued by the National Commission on Excellence in Education, titled *A Nation at Risk*, stated if an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might have viewed it as an act of war. As it stands we have allowed this to happen to ourselves (National Commission on Excellence in Education 1983).

This report was critical of the state of the education system in the United States and was concerned about the implications for the future of the country. In the words of the commission, the ability of America to maintain a dominant standing in “commerce, industry, science, and technology” is “at risk.” The Commission discovered problems in education quality included the functional illiteracy of over 20 million Americans, American students’ lower performance than students from other First World nations on over fifteen academic tests, the perpetual decline in achievement test scores, and the proliferation of remedial courses at the college level. In addition, for the first time ever in
the history of the United States, the educational skills of the present student generation were estimated to be lower than those of their parents (National Commission on Excellence in Education 1983).

In the 1980s, a back to basics reform effort took place. The reform efforts focused on the establishment of minimum competency standards for both students and teachers. These competency tests were the states’ responses to *A Nation at Risk*. During this decade, schools in various states began to mandate more academic courses and upgraded teaching by making changes in teacher certification and compensation. By 1985, 47 states raised or proposed raising graduation requirements, 44 had implemented minimum competency testing, 49 had raised teacher preparation standards, and 34 states had increased the amount of instructional time in the classroom (Educational Testing Service Policy Information Center 1990).

**Goals 2000: Educate America Act**

The Goals 2000: Educate America Act was signed into law by President Bill Clinton on March 31, 1994. Congress passed it as a result of the perceived failure of school choice and school-based management reforms. This act was intended to advance a number of national educational goals developed in a series of “educational summits” the governors of the nation attended. These goals included 1) every child must start school ready to learn; 2) the high school graduation rate will be increased to 90 percent; 3) U. S. students will become first in the world in mathematics and science
achievement; 4) every adult will become literate; 5) every school in the United States will be free of drugs and violence and will offer a disciplined environment conducive to learning (United States Department of Education 2001).

According to Hoff (1999), these goals were largely unmet in 2000. Student scores rose in mathematics, but remained the same in reading. Also, the results from international assessments administered in 1996 indicated the United States was not dominating the world in science and mathematics. However, the Act was successful in regards to the fact that more children were starting school ready to learn. Hoff wrote that Patricia Albjer Graham, a professor of education history at Harvard University’s graduate school of education, stated: “It’s a mistake to take the goals literally. But symbolically, they are part of other efforts to say American kids need a stronger preparation in academics” (1999).

School-to-Work Opportunities Act of 1994

Due to the perceived ineffectiveness of vocational schools, the issuance of the 1983 report A Nation at Risk, and heightened business interest in educational issues (Mossberger 2000), federal policymakers considered new vocational education programs. These programs promoted innovative practices such as apprenticeships and career academies. One example of federal legislation that attempted to enhance vocational education was the School-to-Work Opportunities Act (STWOA) (P.L. 103-239). It was signed into law in 1994 by President Bill Clinton.
The term “school-to-work” provided a term used to include a number of existing programs. Examples of these programs included technical preparation and vocational education. However, school-to-work programs also aimed to extend career exploration, planning, and preparation throughout the curriculum from primary to secondary school for all pupils regardless of whether they were college-bound or not after high school graduation. The federal STWOA provided five-year grants for states and school districts to create extensive school-to-work systems (2000).

Studies on the STWOA have mixed results. Many of these studies raise concerns about how STW has affected student achievement. One study of 100 students who participated in the Cornell Youth Apprenticeship Demonstration Project found that although the pupils did develop job-related skills, there were no significant effects on their academic achievements (Hamilton and Hamilton 1997). Another study found that while student outcomes may be positive, they are in all likelihood attributable to other education reforms and not to STW (Hughes and Moore 1999). A study of the New York STW program indicated that participants were as inclined to attend college or trade school as were those who did not participate in these programs, but only half as likely to be employed (Kelsh 1998). Congress did not reauthorize the STW program and it is now defunct.

The next federal reform that was signed into law is the NCLB Act. The following section focuses on its key provisions.
Synopsis of the No Child Left Behind Act

The NCLB Act includes components intended to promote gains in student achievement and to hold schools and states more accountable for student progress. One of these measures is annual testing. States must develop their own standards for what a student must know and learn for every grade. Standards in mathematics and reading must be developed immediately. Beginning with the 2002-03 school year, schools were required to administer tests in each of three grade spans, grades 3-5, grades 6-9, and grades 10-12. By the 2005-06 academic year, states were required to test pupils yearly in mathematics and reading. Beginning with the 2007-08 school year, science achievement must also be tested. A sample of 4th and 8th graders in every state must also take part in the yearly National Assessment of Educational Progress testing program in reading and mathematics to provide comparison points for state test results (Education Week on the Web 2002; U. S. Department of Education 2002a).

States must bring all pupils up to the proficient level on state tests within twelve years. Each state, district, and school is expected to make progress toward meeting state standards as well. Individual schools must meet yearly targets toward this goal for both their student populations and for certain demographic subgroups. Examples of these subgroups include the financially disadvantaged, racial and ethnic minorities, and students with disabilities or limited English proficiency (Education Week on the Web 2002; U. S. Department of Education 2002a).

Another component of the NCLB Act is teacher quality. By the beginning of the 2002-03 academic year, all states were expected to create a definition for “highly
qualified teachers” that met the requirements of the NCLB Act. The states’ definitions of highly qualified elementary, middle, and secondary school teachers included provisions for license or certification by the state. New elementary teachers were required to have a bachelor’s degree and to pass a state test demonstrating subject knowledge and teaching skills in the basic elementary school curriculum. New middle/secondary teachers were required to have a bachelor’s degree and to demonstrate competency in each of the academic subjects taught or complete an academic major or coursework equivalent to a major, graduate degree, or advanced certification. Existing elementary teachers were required to demonstrate competency in all subjects taught and have a bachelor’s degree. Existing middle/secondary schoolteachers were required to have a bachelor’s degree and meet the requirements for new middle/secondary schoolteachers or demonstrate competency in all subjects taught. State evaluation standards must be in place to judge teacher competency for existing elementary, middle, and secondary teachers (Education Commission of the States 2003).

The NCLB Act also provides parents with choices in regards to their children’s education. An important element of this legislation is the provision that parents with children in a school identified as “in need of improvement” are able to use federal education dollars in the form of vouchers to obtain “supplemental educational services” (U. S. Department of Education 2002a). These services included tutoring, after school services, and summer school programs; and can be obtained at religious, secular, public, or private schools. Another option available to parents under this legislation was the provision that parents can send their children to a better performing public school or a
public charter school if their child was attending a school in need of improvement. Under
the NCLB Act, almost $200 million in federal funds were allocated to state and local
communities to create and fund charter schools (U. S. Department of Education 2002a).

An additional element of this legislation was the issuance of state report cards. Beginning with the 2002-03 academic year, states were required to create annual report cards indicating student-achievement data categorized by subgroup as well as information on the performance of individual school districts. Districts were also required to provide similar report cards with individual school data.

An additional category of compliance under NCLB was safe schools. By the beginning of the 2003-04 academic school year, states were required to develop criteria for identification of “persistently dangerous” schools. Under this category, states establish and implement a policy to permit students to transfer out of a school that has been identified as persistently dangerous into another public school within the district. States must also create and execute a policy of permitting pupils who are victims of violent criminal offenses to transfer to another public school within the district (Education Commission of the States 2003).

Theoretical Grounding

Antoniades’s (2003) framework of epistemic communities serves as the theoretical lens for this project. It builds on Peter Haas’s (1992a) earlier model of epistemic communities.² Antoniades’s model retains the same constitutive traits as

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² See pages 34-35 for an explanation of Peter Haas’s model of epistemic communities.
Haas’s, but assigns a prioritization to the social recognition of knowledge authority, giving it the ability to integrate epistemic communities into their social context. This permits the concepts of knowledge, knowledge authority, and science to be contextualized and historicized, and various historical and cultural “knowledge structures” can be taken into consideration and analyzed (26). Moreover, Antoniades’s notion of “thought community” allows the normative and scientific beliefs that bind “a knowledge-based network” to be brought to the forefront. Additionally, Antoniades’s theory does not appear to imply either the existence of a “unitary science,” from which members draw their expertise, or the existence of a unique methodology in which knowledge is based and tested. Furthermore, as noted in chapter two, some past research has identified weaknesses in Haas’s theory of epistemic communities (Baark and Strahl 1995; Dunlop 2000; Toke 1999). For these reasons, Antoniades’s model of epistemic communities is being used instead of Haas’s.

Antoniades believes that epistemic communities are “conceptualized and defined as thought communities made up of socially recognized knowledge-based networks, the members of which share a common understanding of a particular problem/issue or a common worldview and seek to translate their beliefs into dominant social discourse and social practice. These thought communities might be local, national, or transnational” (2003, 26).

There are two types of epistemic communities in Antoniades’s approach. The first type is an ad hoc coalition. This kind of epistemic community is based on the understanding that policy problems are what define the thought communities and their
life is confined to the time and space defined by the problem and its solutions (Antoniades 2003; Adler and Haas). The second type of epistemic community “has a more constant and holistic character aiming at the establishment and perpetuation of beliefs and visions as dominant social discourses” (Antoniades 2003, 28). These communities are based on the logic that social reality defines them and that their life spans are dependent on the social interactions and outcome of social struggles, which “produce” that reality (28).

Antoniades (2003) argues epistemic communities take two different levels of action. The first type of action is cognitive. This action concentrates on the role of epistemic communities in the (re)production of (world) social reality, defined as a “game” of social interactions. In this game, epistemic communities control knowledge and knowledge is power to the players. “The logic of the argument is as follows: social reality consists of social facts, social structures and identities” (29). The last three concepts make up intersubjective knowledge, permitting epistemic communities to exercise a “cognitive authority” in regards to this knowledge (29). Consequently, these communities have the power to impose particular discourses and worldviews on societies.

The second type of action these thought communities take is practical. This type of action is related to the policy process. According to Antoniades, epistemic communities shape the conceptual framework in which the policy process in question is embedded through influencing social reality. Epistemic communities have the ability to describe and depict this reality through “language power” (31). This power permits them to further constrain and build the conceptual framework in which policymaking takes
place. Epistemic communities play an important role in the manner in which states interpret their environments and define their interests. They do this through engaging either directly or indirectly in the policy process.

Antoniades (2003) contends no single “knowledge elite” exists. Building on Antoniades’s model, it can be argued that the education policy elite does not exist within a single, coherent knowledge-based community. Instead, the education policy elite consists of a variety of epistemic communities, which hold differing normative beliefs and visions. They struggle with one another in their effort to establish their discourses and visions of societies.

This model provides a good map to investigate the role of epistemic groups in policymaking. It permits the examination of the worldviews of members of epistemic communities, the formation and perpetuation of epistemic communities, and the methods they use to advance their policy goals. Furthermore, the literature using Antoniades’s model as a theoretical lens is limited. This study can shed light on the applicability of his framework to federal education policymaking. Antoniades’s model of epistemic communities is discussed in more detail in the next chapter.

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3 Antoniades does not specifically mention “policy goals,” but from his framework, it can be concluded that policy goals are the “common worldview(s)” that members of epistemic communities “seek to translate into dominant social discourse and social practice” (26).
Research Goals and Hypotheses

This section discusses the research goals and hypotheses of this project. One research goal is to determine if Antoniades’s (2003) model of epistemic communities is applicable to the policymaking of the NCLB Act. Specifically, the typology of the epistemic communities, as *ad hoc* coalitions or as more *constant and holistic* coalitions, is investigated. This study also determines if the actions taken by the epistemic communities in the case of the NCLB Act were cognitive or practical. The social reality these groups have created and the identification of their discourses and worldviews are also explored. This research examines if the epistemic communities involved in the policymaking of the NCLB Act used their power to impose their discourses and worldviews on policymakers and “language power” to constrain and build the conceptual framework in which policymaking takes place. Additionally, this study establishes if members of these groups served as “advisors” or as “sources of information” to policymakers. It also determines if these groups altered the manner in which then-current issues were dealt with or conceptualized and if they drafted any of the NCLB Act legislation. Revisions to Antoniades’s framework are offered in chapter seven.

Another research goal is the determination of whether or not the epistemic communities involved in the policy development of this act competed with each other. The effects of any competition are identified in the seventh chapter. The varying levels of input of the epistemic communities that participated in the policy process are also discussed in that chapter. This study also investigates whether the goals of corporate epistemic
communities are more evident in the legislation of the NCLB Act than the goals of educators.

The final goal of this study is to contribute to the understanding of federal education policymaking. Again, the federal government generally leaves education policymaking to state and local governments. The study of the NCLB Act provides a unique opportunity to examine how federal education policymaking is conducted.

Three hypotheses guide this study.

H1: Epistemic communities with similar policy visions were better able to work together than groups with dissimilar policy visions.

H2: Epistemic communities with similar policy visions continued to work together after the NCLB Act was signed into law.

H3: More epistemic communities with a constant and holistic character were involved in the policymaking of the NCLB Act than ad hoc groups.

Research Design

This study utilizes the case study method. The case study is “a research strategy which focuses on understanding the dynamics present within single settings” (Eisenhardt 2002, 8). Purposive sampling is used in this study. The purposive sample includes names from three elite newspapers in the United States from January 20th, 2001, the day President George W. Bush was sworn into office, until January 2nd, 2002, the day the NCLB Act was signed into law. The newspapers are The Washington Post, The Washington Times, and The New York Times. These newspapers were chosen since they are widely read by members of the policy community. Those who consented to
interviews from this sampling method were asked to name additional potential interviewees.

The interview schedule was created to test Antoniades’s (2003) theoretical propositions. (See Appendix B for a list of the interview questions). The interview schedule features mostly open-ended questions, with some close-ended items to facilitate recall. Open-ended questions are utilized to test the theoretical model of epistemic communities and their actions as fully as possible. Interview questions are modified based on the profession of the individuals interviewed.

Purposive sampling is also used in respect to Congressional testimony. The transcripts of every (non-office holder) individual who testified during 2001 before Congress on behalf of the NCLB Act are triangulated with the aforementioned interviews. Three Congressional testimonies were also used for data analysis purposes. See Appendix C for a list of these individuals and their positions at the time they testified on the NCLB Act.

**Data Analysis**

Content analysis is used to examine the Congressional testimony on the NCLB Act and transcripts of the aforementioned interviews. Content analysis is a research technique for systematically examining and making inferences from text (Weber 1985, 9). It is appropriate for theory verification and development.

The transcription of the interviews resulted in 85 pages of single-spaced text. Thirteen pages of single-spaced Congressional testimony on the NCLB Act are also analyzed. NUDIST-QSR (N6) is used to code the data from the interview transcripts and
Congressional testimonies. It allows for the management, storage, and manipulation of large amounts of unstructured data. Coded units ranged from a couple of words to several paragraphs. The research design, methodology, and data analysis procedures are discussed in more detail in chapter five.

**Overview of Dissertation**

The next chapter discusses the evolution of epistemic community theory. It traces the roots of the conceptual framework of epistemic communities from Michel Foucault, who coined the term “episteme,” to Andreas Antoniades. It also discusses the usage of the term “epistemic communities” by Burkhart Holzner. Then it describes the framework developed by Peter Haas. Haas (1992a) defines epistemic communities as “a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy relevant knowledge within that domain or issue-area” (3). Haas’s framework remains the most widely applied by scholars today. Subsequently, the chapter explains Antoniades’s framework of epistemic communities, which builds on Haas’s model.

Chapter three provides an overview of the literature on epistemic communities. As noted, most of the literature uses Haas’s framework as a theoretical lens to explain the role of networks in transnational and international policymaking. Some research finds this model to be useful⁴ whereas other research⁵ reveals weaknesses in this approach. Currently, most of the literature on epistemic communities focuses on policies associated

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⁵ For example, see Baark and Strahl 1995; Finnemore 1994; Evangelista 1995; Mendelson 1993; & Peterson 1992.
with the physical sciences. Very little research has been conducted on policies relating to
the social sciences. However, this study uses Antoniades’s model to examine the role of
epistemic communities in the No Child Left Behind Act. This study makes a contribution
to the literature on epistemic communities since it analyzes a policy related to the social
sciences.

Chapter four reviews the literature on the NCLB Act. The themes encompassed
in the review involve literature pertaining to the origins and politics surrounding the
legislation, the implementation of the Act, testing, its impact on special education, the
teacher quality provisions, research and testing practices, accountability, and impacts of
the NCLB Act on administration, learning, and student outcomes in addition to other
topics.

Chapter five describes the research design, methodology, and data analysis
techniques. As noted, this study uses the case study research design. Again, noted
previously, purposive sampling is used to identify individuals for interview purposes and
NUDIST-QSR (N6) is used to analyze transcripts of sixteen interviews and
Congressional testimony on the NCLB Act.

Chapter six analyzes the interview responses in light of Antoniades’s framework.
Specifically, it examines the collaboration and partnership, information sharing, actions
and activities undertaken to advance goals, consensus, and influence of those
interviewed. Some findings support Antoniades’s model, while others suggest
modifications are needed to his framework.
Finally, the conclusion analyzes the findings of this project and discusses the theoretical implications of this research. It addresses the policy community framework developed by Kingdon (1995) as a rival explanation to Antoniades’s model of epistemic communities. Finally, the conclusion explains the limitations of this study and provides suggestions for future research.
CHAPTER TWO

EVOLUTION OF EPISTEMIC COMMUNITY THEORY

This chapter traces the origins and evolution of epistemic community theory. The concept “epistemic community” was used by John Ruggie in 1972 in “Collective Goods and Future International Collaboration.”6 The theoretical roots of his framework can be traced to Foucault’s use of the term episteme in The Order of Things (1970). Foucault describes how discourses change over time due to changes in the relationships among the theories of representation and language, natural orders, wealth, and value (xxiii). After the publication of The Order of Things, the epistemic community approach remained obscure until the publication by Peter Haas of “Do regimes matter?: Epistemic communities and Mediterranean pollution control” (Haas 1989). As the title of his article suggests, Haas uses epistemic communities as theoretical lenses for analyzing the case of pollution policies in countries bordering the Mediterranean Sea. Ernst B. Haas offered a definition of epistemic communities in the 1990 publication titled When Knowledge is Power: Three Models of Change. However, the epistemic community model did not experience a true resurrection in popularity until the publication in 1992 of a special edition of International Organization. In this special edition, Peter Haas discusses epistemic communities and their roles in international and transnational policy. Other

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6 This article appears in American Political Science Review, Vol. 66 (September), pp. 874-893.
contributors to the volume use epistemic communities to analyze international and transnational policies. To date, Peter Haas’s model is widely accepted and applied in the field of international relations. Antoniades (2003) recently offered a model that describes the role of epistemic communities in policymaking. This study uses his model to analyze the role of domestic epistemic communities in the policymaking of the No Child Left Behind Act. To date, there is one study that uses Antoniades’s model as a theoretical lens. Dias and López’s (2006) use this model to analyze international and national education policymaking in Brazil. This research sheds light on its applicability to policymaking that takes place in domestic epistemic communities in the United States. In turn, possible revisions to Antoniades’s model are considered.

This chapter includes examples of organizations where members of epistemic communities are likely to be found. Examples include think tanks, academia, bureaucracies, and international organizations. Finally, it will explain the differences between epistemic communities and other groups. These groups are bureaucracies, interest groups, and professional groups.

**Historical Overview**

In *Reality Construction in Society* (1972), Holzner refers to epistemic communities as “unified by a common epistemology and frame of reference, such as the scientific community, religious communities, work communities, some ideological movements and the like” (69). He argues that epistemic communities “agree on ‘the’

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7 Dias and López’s application of Antoniades’s model of epistemic communities is discussed in the next chapter.
proper perspective for the construction of reality” (69). In other words, members of epistemic communities have common values and a shared frame of reference. He asserts there are characteristics that hold true across epistemic communities. These traits include “the importance of interplay between the structure and frame of reference, the symbolic system used within, and the power arrangements of the epistemic community” (70). Holzner states that there is a need for power arrangements in the interactions of the epistemic community. The power arrangements facilitate the maintenance of the shared views after they are established. They also regulate “the allocation of situations to the members” (70). For example, responsibilities within the epistemic community may be assigned on the basis of “certified expertise” (70). Epistemic communities also make decisions regarding how much information to disclose to the outside world. The distribution of this information can be understood in terms of power arrangements and attempts to control the situations that members may face. Holzner uses professional groups and ideological movements as examples of epistemic communities where power is integral in the groups’ interactions.

Holzner argues after epistemic communities are established as power structures, they tend to “concern themselves with the regulation of the allocation of situations to the members” (70). For instance, group responsibilities are allocated on the basis of expertise. He states relationships with outsiders are important to epistemic communities so they monitor the information that flows from the epistemic community to outsiders. Holzner asserts this flow of information “can be understood in the context of power structures and attempts at controlling the situations which members must face” (70).
Epistemic communities use standardized symbols to communicate with each other and keep that information “separate and distinct” (70). Barriers that keep this information from outsiders are intentionally created. The results of these actions usually prevent the common person from being connected to epistemic communities.

According to Holzner, the significant differences among epistemic communities are embedded in the “nature of the experiential base on which their reality constructs rest and in the principles of equivalence or nonequivalence of observers within the relevant domain” (70). The experiential base of reality constructs can be described as “the pragmatic tests of experienced workability, the logical test of deductive establishment of ‘truth,’ the mystical test of personal insight, and the test by authority or alienation” (70).

There are two types of reality test observers in epistemic communities. One type is observer equivalence. For inclusion in epistemic communities, members must possess the necessary credentials and have the same frame of reference and use the same symbolic system. These qualifications are deemed to be learnable so that all members have the ability to become qualified if given the proper education. The other type of reality test observer is “built up on the principle of nonequivalence” (71). For example, a religious prophet is believed to have superior powers of insight and to have access to sources of information and understanding that are not available to other community members. The superior powers believed to be possessed in some epistemic communities become a facet of their reality construction.

Michel Foucault first considered the term *episteme* in *The Order of Things: An Archaeology of the Human Sciences* (1970). In this book, he states all periods in history
had assumptions about the truth and what was acceptable. He adds different periods in
time have different assumptions about the truth. Foucault uses the example of the
differences in the assumptions about the truth during the Classical and Modern age to
illustrate his point. He states the “system of positivities was transformed in a wholesale
fashion at the end of the eighteenth and beginning of the nineteenth century” (xxii) when
the modern age began. During the Classical age, the theories of representation, language,
and of the natural orders of wealth and value were the underlying assumptions of
knowledge. During the nineteenth century and thereafter, the theory of representation
disappears as the foundation of orders as well as language as the spontaneous tabula, “as
an indispensable link between representation and things” (xxiii). Also, historicity isolated
and defined things, “imposed on them the forms of order implied by the continuity of
time,” (xxiii) the study of exchange and money was replaced by the study of production,
and that of the organism is valued more than the hunt for taxonomic traits. Foucault adds
“language loses its privileged position and becomes, in its turn, a historical form coherent
with the density of its own past” (xxiii). In other words, the conditions of discourse
changed over time from one era’s episteme to another and “things become increasingly
reflexive, seeking the principle of their intelligibility only in their own development”
(xxiii).

Ruggie (1975) borrowed the episteme concept from Foucault “to refer to a
dominant way of looking at social reality, a set of shared symbols and references, mutual
expectations and a mutual predictability of intention” (Ruggie 1975, 569-570). He
combined Foucault’s idea with the concept of “epistemic communities” as previously
described by Holzner. Ruggie defined an epistemic community as “interrelated roles which grow up around an *episteme*; they delimit, for their members, the proper construction of social reality (Ruggie 1975, 570). In other words, epistemic communities create a discourse that creates and carries out standards of “normal” behavior (Ruggie 1975). For example, the epistemic community that represents national public authority internationally recommends rules of behavior for the determination of collective responses to new situations. No state initiates international collective arrangements. If feasible, unilateral or bilateral arrangements are ideal. Collective arrangements are only preferable when goals cannot be pursued otherwise. The purpose of collective arrangements is to make up for the flaws of the state system. Furthermore, collective arrangements should not impose higher costs on states than the situation they must contend with does. If the costs are greater, the prolongation of the problem the situation creates or bypassing a prospect it contains, is preferable to collective arrangements. Finally, future welfare is to be discounted in favor of current welfare, and the “viability of the collectivity of states is simply an instrument for the viability of individual states” (Ruggie 1975, 570).

After the publication of “International Responses to Technology: Concepts and Trends” (Ruggie 1975), the epistemic community theoretical model lapsed into obscurity. It remained obscure during the latter portion of the 1970s and through most of the 1980s. As previously noted, it was not until the publication of a special edition of *International Organization* (1992), edited by Peter Haas, that it regained notice by scholars.
Constructivism

In the introduction to this issue of *International Organization* (1992a), Haas asserts policymakers are likely to consult epistemic communities during times of uncertainty. They consult epistemic communities with the goal of acquiring knowledge that will lessen the uncertainty. However, the specialists who are consulted have their own “interpretations of knowledge” (21) that are “based on their causally informed vision of reality and their notions of validity” (21).

Many social and cultural theorists claim that reality is socially constructed (Berger and Luckmann 1966; Gergen 1988; Hacking 1999; Pinker 2002). They argue that the social construction of reality is an arrangement of intersubjective assumptions and definitions, propagated via social interactions. Holzner and Marx (1979) argue that knowledge does not mean the understanding of reality itself. They add “we are compelled to define ‘knowledge’ as the communicable mapping of some aspect of experienced reality by an observer in symbolic terms” (93). For Haas, reality is shaped by assumptions, expectations and understanding (Haas 1992a 21).

According to Haas (1992a), theorists and scientific sociologists have identified the epistemological problems of “verifying our collective visions of the world” (21). He uses the examples of radical and materialist constructivists to illustrate this point. Radical constructivists argue that since the words we choose to characterize the world are socially constructed, there is no “objective” means for identifying reality and as a result all claims

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9 Ibid.
for objectivity are questionable. Material constructivists assert the world is “a real and separate object of inquiry that exists independently of the analyst and that although the categories in which it is identified are socially constructed, consensus about the nature of the world is possible in the long run” (23).

Constructivism, in more general terms, “is about human consciousness and its role in international life” (Ruggie 1998, 856). As epistemic communities share their knowledge, they often distribute new norms and understandings as well as technical expertise. As a result, they serve as important sources of social construction (Finnemore and Sikkink 2001). Adherents to constructivism focus on the role of ideas, knowledge, culture, and debate in politics. They emphasize the role of communally held or ‘intersubjective’ thoughts and understandings on social life (Finnemore and Sikkink 2001). Constructivism holds human interaction is shaped by conceptual factors as well as material ones. It also contends the most significant conceptual factors are broadly shared or ‘intersubjective’ beliefs that are not reducible to individuals (Finnemore and Sikkink 2001). Lastly, it holds that these widely shared beliefs construct the interests and identities of purposive actors (Finnemore and Sikkink 2001).

The constructivist model is useful in analyzing the role of epistemic communities in policy formation. For instance, Adler (1992) noted that an epistemic community created an intellectual atmosphere supportive of arms control in the United States and later to the Soviet Union during the Cold War. The members of this epistemic community fashioned the knowledge needed to bring about nuclear arms control. They used it to attain political legitimacy and authority. The arms controllers also provided the
United States and the Soviet Union with reasons as to why it was necessary to cooperate with one another. This epistemic community facilitated the formation of “vested interests” (141) in arms control. These interests included government agencies such as Arms Control and Disarmament Agency and many nongovernment interest groups. It was able to create public awareness and support for arms control, as well. This community of arms controllers was able to convince Congress about the value of arms control agreements. During the antiballistic missile (ABM) debate, the arms controllers served as a balance to scientists in government who supported the “deployment of defenses” (142). The epistemic community was able to propose a logical arms control negotiation agenda and aided in the subsequent ABM negotiations. It helped devise rules and norms, researched and proposed verification means, and recommended post-treaty reviews and conditions for removal from agreements. It also became “full partners with politicians, administration, and military officers in the formulation of policy” (Gilpin 299). 11 Lastly, the arms controllers were influential in transmitting the idea of arms control to the Soviet Union.

Ruggie’s epistemic community framework was accepted, but not widely applied in the international relations literature. It was not challenged until the late 1980s and early 1990s. In 1989, Peter Haas resurrected this approach in an analysis of the epistemic community involved in the creation and implementation of the Mediterranean Action Plan (Med Plan) and some state environmental policies. In 1990, Ernst B. Haas stated

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an epistemic community is composed of professionals (usually recruited from several disciplines) who share a commitment to a common causal model and a common set of political values. They are united by a belief in the truth of their model and by a commitment to translate this truth into public policy, and in the conviction that human welfare will be enhanced as a result (41).

According to Ernst Haas, epistemic communities support their claims based on “the procedures of science, scientific methodology, and the sociological canons for judging its generality” (41-42). He adds epistemic communities are theoretically open to the reevaluation of their beliefs about ends and means and causes and effects. However, being human, they resist tests that challenge their claims to “novelty and relevance” (41). Epistemic communities sometimes take the form of “networks of the like-minded not employed in the same university, laboratory, or think tank” (42). Haas states sometimes epistemic communities also form organizations of their own such as the Club of Rome. These organizations can pressure international organizations if their members serve on “expert advisory bodies or consistently serve as executors of programmatic decisions” (42). Epistemic communities may also infiltrate organizations “by acquiring a monopoly on staffing secretariat positions in their issue area” (42). For example, development economists, political scientists, and engineers initially organized by Raul Prebisch in the U.N. Economic Commission for Latin America comprised an epistemic community. This epistemic community took over the U.N. Conference on Trade and Development (UNCTAD) secretariat. He adds this type of takeover is only possible when an epistemic community is able to form an alliance with the “dominant political coalition in an
organization” (42). It is also possible that in the absence of a “dominant political coalition” that a “given organization unit is staffed by members of several epistemic communities” (42).

Two conditions determine the success of an epistemic community according to Ernst Haas. One condition is that claim to the truth must be more persuasive to decision makers than other claims. The other condition is that “a successful alliance must be made within the dominant political coalition” (42). He adds that epistemic communities aim to control access to key decision-making positions. However, it is seldom that any of them hold these positions for long periods of time.

**Peter Haas’s Epistemic Community Approach**

The epistemic community approach rebounded from obscurity after the 1992 winter publication of *International Organization*. In this issue, Haas and other contributors argued that epistemic communities should be treated as an alternative approach to the study of international policy co-ordination and change. In other words, epistemic communities were “treated as an independent variable for the explanation of patterns of co-operation and policy change in world politics” (O’Brien 2003, 24). Much of Haas’s framework is drawn from the aforementioned research on water pollution policy.

As previously stated, Haas (1992a) defines epistemic communities as “a network of professionals with recognized expertise and competence in a particular domain and an

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12 Contributors to this volume are P. Haas, W. J. Drake and K. Nicolaïdis, E. Adler, M. J. Peterson, R. F. Hopkins, E. B. Kapstein, G. J. Ikenberry, and J. K. Sebenius.
He argues that four features characterize epistemic communities. One trait is shared normative and principled beliefs. Such beliefs provide a value-based rationale for the social action of its members. Another feature is shared causal beliefs. These beliefs are derived from their examination of practices that lead to a set of problems in their domain. They then serve as the basis for elucidating the linkages between possible policy actions and desired outcomes. The third attribute of these communities is shared notions of validity, “that is, intersubjective, internally defined criteria for weighing and validating knowledge in the domain of expertise” (3). The final feature is that groups also have a common policy expertise. They share a common set of practices connected to a set of problems to which their professional skills are directed, perhaps out of the belief that human welfare will be increased (3).

**How Do Epistemic Communities Impact Policy Evolution?**

The expertise of epistemic community members gives them access to the political system and influence in policy debates through agenda setting and the development of policies (Adler and Haas 1992; Haas 1992a). According to Adler and Haas (1992), epistemic communities use four methods to exert influence in the formation of a policy. The first mechanism is *policy innovation*. Epistemic communities frame the issue, characterize the state’s policy interests, and set standards (375). They also use policy innovation to determine which forum is most appropriate for the issue to be addressed. The second method epistemic communities use to wield influence is *policy diffusion*. Members of epistemic communities actively engage in efforts at the national level. They
spread their ideas via communication with their colleagues in other organizations, during conferences, publications, and other venues for exchanging information. The acceptance of the ideas of epistemic communities by colleagues in other states can be used to apply pressure on governments elsewhere. The third means epistemic communities employ to gain influence is *policy selection*. If there are no existing policies and lawmakers are not familiar with an issue, an epistemic community can frame the issue and define the lawmakers’ interests. However, if policymakers are familiar with the issue, they may call upon an epistemic community whose ideas align with their own for the purposes of legitimizing their policy selection. Lastly, epistemic communities may engage in *policy persistence* in order to exert influence in policymaking. Policy persistence refers to the longevity of consensus on ideas and goals among epistemic community members. When consensus on ideas and goals diminish, the authority of the epistemic community wanes and lawmakers are less apt to heed its advice (Adler & Haas, 375-382).

**When and Why do Epistemic Communities Get Involved in Policymaking?**

As previously stated, epistemic communities are likely to be consulted by policymakers where there is a great deal of uncertainty (Haas 1992a; Raedelli 1999). In uncertain times, an epistemic community can create a definition of interests by exposing certain facets of an issue, from which a policymaker can deduce his/her interests. Adler and Haas argue that the role of epistemic communities is limited. They “create reality, but not as they wish” (Adler and Haas 1992, 381). Haas (1992a) asserts epistemic community ideas only have influence on policies when experts reach positions of bureaucratic power. For example, this could happen through the creation of advisory committees that must be
consulted before a policy decision is made (Radaelli 1999, 762). Richardson notes the power of epistemic communities is limited by the presence of other actors, including interest groups (Richardson 1996). Frequently, epistemic communities are not the sole actors in policy debates or the most influential actors (Radaelli 1999). Radaelli (1997) speculates it is possible that when there are two competing coalitions in a policy domain, one may be aided by an epistemic community.

Radaelli (1999) argues when problems are evident and ideas and information are available at a low cost, negotiations between political actors can occur without too many problems (763). However, there are times when information and ideas are not available at a cheap price. Supranational policy entrepreneurs and epistemic communities can gain leverage through the manipulation of knowledge in these cases (763).

According to Adler and Haas (1992), epistemic communities should not be misinterpreted to be on quests to control societies. Instead, they (1992b) argue that they are in the business of controlling international problems. Adler and Haas add their longevity is confined to the “time and space defined by the problem and its solutions” (Adler and Haas 1992, 371). The political impact of epistemic communities is relevant only as long as they are able to give advice in a consistent and convincing manner and also as long their claims to expertise are not challenged (Haas 1992a; Ringius 1997).

**How Do Epistemic Communities Differ From Other Organizations?**

Epistemic communities are different from other groups and organizations such as interest groups, social movements, members of disciplines and professions, think tanks...
and bureaucratic agencies. Unlike members of lobbies and social movements, epistemic community members have shared causal beliefs and cause-and-effect understandings. Additionally, members of interest groups do not necessarily have a shared knowledge base or the same causal beliefs. If members of an epistemic community were “confronted with anomalies that undermined their causal beliefs, they would withdraw from the policy debate, unlike interest groups” (Haas 1992a, 18).

Epistemic communities should also be differentiated from members of professions and disciplines. Members of any discipline can “share a set of causal approaches or orientations and have a consensual knowledge base, but they lack the shared normative commitments of members of an epistemic community” (Haas 1992a, 19). The ethics of an epistemic community stem from its principles instead of a professional code. Members of a profession or discipline rarely limit themselves to work that is in line with their values. However, epistemic community members are more likely to pursue endeavors that mirror their values and are likely to associate with groups that also mirror or aim to promote these values than members of professional groups are. Haas adds that short-lived alliances are often forged between members of professions and epistemic communities on the basis of common research (Haas 1992a, 19).

Bureaucratic bodies should also be distinguished from epistemic communities, according to Haas (1992a). He adds the approaches to examining epistemic communities and bureaucratic politics “share a focus on administrative empowerment of specialized knowledge groups” (19). However, bureaucracies operate to preserve their budgets and

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13 It is important to note that epistemic communities can draw their membership from these organizations, however. (Haas 1992a).
agency mission. Epistemic communities apply their causal knowledge to a policy
deadline subject to their normative goals. However, epistemic communities may use the
bureaucratic advantage they may obtain through securing key positions within
bureaucratic agencies. Nevertheless, the behavior of members of epistemic communities
is different from that of bureaucrats in terms of their bureaucratic constraints. Since the
actions by members of an epistemic community are guided by normative and causal
beliefs in addition to circumstances, the behavior of these communities will be different
from the behavior forecasted by rational choice and principle-agent theorists. The shared
causal and principled beliefs of epistemic communities shape the advice they give and
offset the pressures for them to give recommendations that is consistent with the interests
of policymakers that may further their careers (Hechter 1987; Olson 1965).\textsuperscript{14}

According to Haas (1992a), the unity of members of epistemic communities
comes not only from their shared interests, but also from their shared dislikes. Both the
shared interests and aversions are based on their hesitancy to pursue policy goals beyond
their own policy ‘enterprise’ or based on explanations that they do not believe to be true.
The ties, informal networks, and collective political activities add to the unity and
perseverance of the community in a number of ways. For instance, they give members a
forum to compare and contrast information and to find support for marginal viewpoints.
They also reinforce the commitment of community members and help prevent them from
later “recanting the beliefs shared with and reinforced by their fellow community
members” (20).

\textsuperscript{14} Cited from Haas 1992a.
In summary, the idea of epistemic communities is rooted in ideas advanced by Foucault and Holzner. The concept of epistemic communities remained relatively obscure from the early 1970s until Haas’s (1989) publication of “Do regimes matter? Epistemic communities and Mediterranean pollution control.” This school of thought experienced a true revitalization after the publication of a 1992 special edition of *International Organization*. In this special edition, Haas and the other authors characterize epistemic communities and define their roles in international and transnational policy. Currently, Haas’s model is the most widely accepted and applied in the study of international relations.

**Antoniades’s Framework**

As demonstrated, the Haas framework has been used as theoretical lenses in much of the literature on epistemic communities. However, a substantial bit of research has found this model is lacking in certain respects. Baark and Strahal argue Haas’s framework is created in part on “counterfactuals to a success” (446). In other words, in the absence of a group of experts with the knowledge to analyze technical and scientific data, states or international organizations would not be able to enact policy. Other scholars do not question the epistemic communities’ authoritative claim to knowledge, but add they have a “common enterprise” as well. Toke (1999) argues Haas assigns too much influence to experts in these communities in the shaping of policymakers’ interests and conceptions, at the expense of interest groups and social movements. Dunlop asserts Haas has failed to produce a framework capable of taking into account the multiplicity of actors, epistemic and non-epistemic, which at various points in time shape the norms of
decision-makers and each other. The next chapter will review more literature that suggests that Haas’s model is not applicable to all policies. As noted, this study analyzes the role of epistemic communities in the policymaking of the No Child Left Behind Act using Antoniades’s (2003) model as a guide.

According to Antoniades, epistemic communities are “conceptualized and defined as thought communities made up of socially recognized knowledge-based networks, the members of which share a common understanding of a particular problem/issue or a common worldview and seek to translate their beliefs into dominant social discourse and social practice. These thought communities might be local, national, or transnational” (2003, 26). There are two types of epistemic communities in this approach. The first type is an ad hoc coalition. This kind of epistemic community is based on the understanding that policy problems are what define the thought communities and its life is confined to the time and space defined by the problem and its solutions (Antoniades 2003; Adler and Haas 1992). The second type of epistemic community “has a more constant and holistic character aiming at the establishment and perpetuation of beliefs and visions as dominant social discourses” (Antoniades 2003, 28). These communities are based on the logic that social reality defines them and their life spans are dependent on the social interactions and outcome of social struggles, which “produce” that reality (28). An example of the former is a network established as an international “lender of the last resort.” An example of the latter is a network of (neo) Keynesian economists (2003, 28).

Antoniades (2003) argues epistemic communities take two different levels of action. The first type of action is cognitive. This action concentrates on the role of
epistemic communities in the (re)production of (world) social reality, defined as a
“game” of social interactions. In this game, epistemic communities control knowledge
and knowledge is power to the players. “The logic of the argument is as follows: social
reality consists of social facts, social structures and identities” (29). The last three
concepts make up intersubjective knowledge, permitting epistemic communities to
exercise a “cognitive authority” in regards to this knowledge (29). Consequently, these
communities have the power to impose particular discourses and worldviews on societies.
This ability permits these groups to have the power to shape individual and group self-
understanding in addition to their understanding of their wants and interests.
Furthermore, it influences the knowledge and ideas formed within social structures.
Antoniades contends epistemic communities are not exogenous to social interactions.
Instead, they have the power to develop new understandings and impact the evolution of
current intersubjective understandings through which reality and world politics consist
(2003, 29-30).

The second type of action these thought communities take is a practical one. This
type of action is related to the policy process. According to Antoniades, epistemic
communities shape the conceptual framework in which the policy process in question is
embedded through influencing social reality. Epistemic communities have the ability to
describe and depict this reality through “language power” (31). This power permits them
to further constrain and build the conceptual framework in which policymaking takes
place. Epistemic communities play an important role in the manner in which states
interpret their environments and define their interests. They do this through engaging
either directly or indirectly in the policy process. Members of epistemic communities who participate as decision makers in policymaking have a greater ability to integrate their ideas and create their “vision” in the policy process. In fact, this involvement blurs the limits between decision makers and experts/policy advisors (2003, 31).

There are many ways that epistemic communities are involved in policymaking. Most importantly, they act as “advisors” or “sources of information” (32). Through this role, they can strongly influence an agent’s policy and interests. Antoniades adds that these groups can also affect agenda setting in both domestic and world politics. They do this by either adding new issues to the agenda or by changing the manner in which current issues are dealt with and conceptualized. These communities often inform and mobilize as many people and groups as possible in order to increase support for their ideas and put pressure on the government in question to accept their ideas. The methods employed to attain these goals usually include the organization of conferences, seminars, press conferences, public discussions, lectures, and publications. Access to the media and the existence of an institutional structure are needed in order for epistemic communities to operate at this stage of the policy process (2003).

The last dimension of involvement for epistemic communities in the policy process is less direct. Members of epistemic communities are frequently asked to work out the details of a policy. For example, a government could ask a group of experts to expound on and formulate its position in terms of negotiation strategy, article proposals, and public presentations (2003). Antoniades states there can be direct involvement of
epistemic community members in the policy process. This occurs when “experts” are political leaders.

Antoniades (2003) contends no single “knowledge elite” exists. Building on Antoniades’s theory, it can be argued that the education policy elite do not exist within a single, coherent knowledge-based community. Instead, the education policy elite consist of a variety of epistemic communities, each holding differing normative beliefs and visions. They struggle with one another in their effort to establish their discourses and visions of societies. Discourse theory is useful in “understanding the interactions and processes that form ‘reality’ as conflicts and struggles between antagonistic/competitive forces over the structuring of social meaning” occur (36). These struggles take place at both the macro and micro levels. At the macro level, epistemic communities and *epistemes* struggle with each other to define the ideas of which social structures exist. This structure is related to two other elements of social structures; material capabilities and institutions. “The result of these struggles is the establishment of specific social discourses, of specific cognitive orders” (36). The micro level of struggle takes place in the reality of the macro level. At this level epistemic communities emerge and struggle and cease to exist in relation to specific policy issues and problems (2003, 36). Antoniades contends these two fields/levels of struggle should be viewed in “concentric terms,” in the sense that the values and visions that struggle at the macro level inform the struggles within the micro level. His assertion of the “overlapping nature of the two levels becomes apparent if one takes into consideration the overlapping memberships between the holistic and the *ad hoc* communities” (2003, 36).
Antoniades’s framework retains many of Haas’s traits, but assigns a prioritization to the social recognition of knowledge authority, giving it the ability to integrate epistemic communities into their social context. This permits the concepts of knowledge, knowledge authority, and science to be contextualized and historicized. Various historical and cultural “knowledge structures” can also be taken into consideration and analyzed (26). Furthermore, Antoniades’s notion of “thought community” allows the normative and scientific beliefs that bind “a knowledge-based network” to be brought to the forefront. Also, his theory does not appear to imply either the existence of a “unitary science” from which members draw their expertise, or the existence of a unique methodology in which knowledge is based and tested. In light of this, he argues that the concept of “thought community” is a more appropriate term than “network of professionals.”

Conclusion

In conclusion, this chapter has traced the genesis of the epistemic community approach from its conceptual origins in Holzner’s Reality Construction and Society and theoretical origins in Foucault’s The Order of Things and subsequent changes to the most recently offered model offered by Antoniades (2003). It also described where to find epistemic communities, when they are likely to be consulted and how they are different from other types of organizations. To date, Haas’s model of epistemic communities is the most widely accepted and applied. However, past research has exposed flaws in the applicability of his framework to some policy areas (Betsill and Pielke 1996; Evangelista 1995; Farquharson 2003). These flaws will be discussed in more depth in the next
chapter. Antoniades’s model is fairly recent and its application is limited. This study will shed light on the applicability of Antoniades’s approach concerning domestic epistemic communities involved in the policymaking of the No Child Left Behind Act.
CHAPTER THREE

REVIEW OF LITERATURE ON EPISTEMIC COMMUNITIES

As noted, this study uses Antoniades’ model as a theoretical lens. Antoniades’ model builds on Haas’s framework of epistemic communities. Haas’s model of epistemic communities is the most common approach used to explain the role of epistemic communities in transnational and international policymaking. The present chapter reviews literature on epistemic communities with a focus on studies utilizing Peter Haas’s (1992a) model of epistemic communities as a theoretical lens since little research uses Antoniades’s framework to analyze epistemic communities. This chapter discusses the literature that finds Haas’s model useful as well as the literature that finds shortcomings in his approach and also discusses gaps in the literature in regards to research on epistemic communities.

Antoniades’s model of epistemic communities is used in this study due to the fact so many shortcomings of Haas’s model are identified in the epistemic communities’ literature. Although Antoniades’s model retains many of the traits of Haas’s, it prioritizes the social recognition of knowledge authority, which permits the concepts of knowledge, knowledge authority, and science to be contextualized and historicized. Moreover, Antoniades’s definition of a “thought community” permits the normative and scientific beliefs that bind a “knowledge-based network” to be brought to the forefront.
The epistemic community framework experienced a renaissance with the publication of “Do Regimes Matter? Epistemic Communities and Mediterranean Pollution” by Haas in 1989. In this article, Haas examines the role of an epistemic community, the Med Plan, in cleaning up the Mediterranean Sea. The Med Plan is composed of ecologists and marine scientists from the United Nations Environment Programme, secretariat members from agencies such as the Food and Agriculture Organization and the World Health Organization, and government officials from various countries with similar views. The Med Plan was “often granted formal decision-making authority in national administrations” (380). It was also “given responsibility for enforcing and supervising pollution control measures” (380). Members of the epistemic community “became partisans for adopting the regime, complying with it, and strengthening it to deal with more pollutants from other sources” (380).

The Med Plan epistemic community defines pollution similarly and has a common ecological outlook. They hold the same views on the causes and severity of pollutants and the policies needed to control pollution, too. Furthermore, this epistemic community agrees on the investigation necessary to find the connection between causes of pollution and the health of the Mediterranean Sea through the assessment of “all economic activities and possible uses of the sea within a broader ecosystemic framework” (Haas 1989, 384). The political values of this group include a conviction that all governments should work together and take domestic measures to protect the environment. This epistemic community agrees these measures should include the adoption of all-inclusive economic planning to consider the health of the environment in
almost all types of policymaking. Epistemic community members worked with some state governments to create further water pollution regulations. Haas states epistemic communities can offer new policy options to their governments and they can persuade their governments to pursue them. Based on this study, he concludes “both power and knowledge can be viewed as explanatory behaviors for state behavior” (1989, 402), demonstrating the influence of an epistemic community in states involved with water pollution control in the Mediterranean Sea.

Haas also analyzes the role of the epistemic community involved with concerns regarding the depletion of the ozone layer. This epistemic community served as a key player in the adoption of strong controls on chlorofluorocarbons (CFCs) internationally (Haas 1992b). This epistemic community is transnational and includes officials of the United Nations Environment Programme, the Environmental Protection Agency, and the U. S. State Department’s Bureau of Oceans and International Environmental and Scientific Affairs. Atmospheric scientists in the international scientific community are also members of this epistemic community. The members of this epistemic community reached a consensus on the importance of protecting the ozone layer. It was able to convince the United States government as well as DuPont, a major CFC producer, to limit CFC production. The efforts of this epistemic community led the United States to put pressure on other countries to adopt in September of 1987 an effective treaty titled the “Montreal Protocol on Substances That Deplete the Ozone Layer.” Thirty-one countries including the Soviet Union, Nigeria, Egypt, and Japan ratified this protocol.
Support for Haas’s Model

This section focuses on the literature that applies Haas’s model of epistemic communities and finds support for it. For example, Hopkins (1992) finds support for Haas’s model through the examination of the role of an international epistemic community in four instances of food aid reform. This epistemic community consists of economic development specialists, food aid administrators, and agricultural economists. Members of this epistemic community share the goal of food security and also have a common scientific outlook based on social science. From an analysis of the influence of this epistemic community in four cases of food aid reform, Hopkins concludes epistemic communities “play an independent and occasionally powerful role in changing international regimes and international politics” (264). He adds “incremental change can occur when the consensual views of an epistemic community diverge from the politically modal position of the supporters of a policy” (264). Hopkins further comments “synoptic change, however, is not plausible” (264). Another lesson Hopkins draws from his research is that the food aid regime changed from an American one in the 1950s to a more international one.

Adler (1992) examines the role of an American epistemic community in the conception and practice of nuclear arms control. This community shares epistemic criteria regarding the “causes of war, the effects of technological change on the arms race, and the need for nuclear adversaries to cooperate” (102). Entrance to this epistemic community is based on “the sharing of epistemic criteria…an active dedication

to ‘the cause,’ collectively recognized expertise, and ‘the ability to come up with new proposals and arguments’” (112). This epistemic community consists of personnel in “government bureaus, research organizations, and laboratories, profit and nonprofit organizations, university research centers, and think tanks” (112) who know each other well. Some members of this epistemic community did not agree on all matters, however. Conflicts that were personal, career-related, and institutional arose. However, their disagreements, discussions, and mutual criticisms aided them in creating a consensus on ideas, overcoming interdisciplinary obstacles, and forming a common vocabulary. Adler finds that the ideas of a domestic epistemic community were chosen by the U. S. government as the basis for negotiations with the Soviets and “became the seed of the antiballistic missile partial security regime” (102).

Sauvé and Watts analyze the role of an epistemic community in the development of the International Treaty on Plant Genetic Resources for Food and Agriculture (2003). They use the EAR instrument\textsuperscript{17} to gauge the impact of this epistemic community. The authors find the International Plant Genetic Resources Institute (IPGRI) and the FAO Commission on Genetic Resources for Food and Agriculture were indeed influential in the passage of this treaty. They also discover several of the members of each international organization’s staff had at one time served as members of the other organization. As an epistemic community, the members:

\textsuperscript{16} Adler cited this from Herzog, The War-Peace Establishment, pg. 4

\textsuperscript{17} The EAR instrument uses data, methodological, theory, and investigator triangulation. See Patton “Qualitative Evaluation and Research Methods” (1990) for more information.
shared normative beliefs, causal beliefs regarding the effects of adoption of bilateral or multilateral approaches to germplasm exchange, common validating criteria stemming from their common scientific background, and lastly, a common policy objective consisting of ensuring poverty alleviation and food security via efficient public research and development of genetic plant resources (Sauvé and Watts 2003).

In short, Sauvé and Watts find support for Haas’s model.

Van Daele (2005) uses Haas’s framework to study the role of an epistemic community in the founding of the International Labour Organization (ILO) through the content analysis of materials in the International Labour Office and Belgian Ministry of Foreign Affairs archives. The content of other published documents from this period are also analyzed and used in Van Daele’s research. The ILO was formed after World War I to create peace via social policy. Members of this organization are drawn from a variety of prewar epistemic communities, including the International Association for Labour Legislation and political networks such as the Second International. These scholars form a network called the International Association for Labour Legislation (IALL), which was itself an epistemic community. The IALL uses information politics to influence public opinion. This epistemic community attempted to secure passage of policies including unemployment insurance, working hours, housing, national insurance, and female labor (446). However, these ideals are not realized due to political compromises brokered at the Paris Peace Conference in 1919.
Barth (2006) states the scientists from the U.S. and former Soviet Union comprised an epistemic community during the 1980s. The scientists from the U.S. were from the Natural Resources Defense Council, and those from the former Soviet Union worked for the Soviet Academy of Sciences. The scientists from both sides of the Cold War divide shared four core beliefs. One is they believed scientists are able to move the international arms control agenda outside of representative government-to-government contacts. Another belief they shared is that a comprehensive nuclear ban treaty was a crucial step towards substantial arms control agreement and peace in general. Furthermore, they believed “such a treaty could be adequately verified by seismic means” (184). Finally, they believed their colleagues abroad shared the preceding beliefs. According to Barth, the collaboration of these scientists influenced Soviet arms control and changed the nuclear test ban debate in the U.S.

Sharif (2006) uses the epistemic community approach to explain the development of the National Innovation Systems (NIS) concept. NIS is the “set of institutions that (jointly and individually) contribute to the development and diffusion of new technologies. These institutions provide the framework within which governments form and implement policies to influence the innovation process. As such, it is a system of interconnected institutions to create, store, and transfer the knowledge, skills, and artifacts which define new technologies” (Metcalf, 1995 in OECD, 1999: 24).18 This epistemic community formed through the associations of practitioners involved in the “innovation studies field who developed it in an interdisciplinary manner, so as to study relationships among

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18 Cited from Sharif 2006.
technological, economic, organizational, and institutional changes” (755). Sharif’s findings indicate that by holding key roles in notable policymaking bodies such as the Organization for Economic Cooperation and Development (OECD) and academia, many of the early supporters of the NIS idea gathered to operate as an epistemic community, forming the power base in both sectors that the NIS concept enjoys today (755). These findings support Peter Haas’s theory of epistemic communities.

He also points out the NIS epistemic community had many contacts via major book projects in the NIS field. For instance, to write the book *National Innovation Systems: A Comparative Analysis* (1993), the epistemic community met five times in Europe and the United States so that all members could discuss drafts of book chapters. Sharif argues that these book projects demonstrate how the NIS epistemic community was formed through relationships connecting policymakers and academics in order to create change in legislative chambers and academia. These forums facilitate the discussion and exchange of differing views on the NIS approach, “thereby, in Ernst Haas’s (1990) terms, counter-balancing the conservatism of the old paradigm (of the treatment of technological change in neoclassical economics)” (756).

Sharif notes the NIS epistemic community broke up into several smaller epistemic communities. The cause of the break-up is “frustration with the treatment of technical change in neoclassical economics” (762) depending on how the members have interpreted the NIS concept. He adds with these “distinct but closely related social groups applying the NIS concept differently, stabilization and closure of the NIS approach remains to be achieved” (762).
The aforementioned literature shows support for Peter Haas’s (1992a) model of epistemic communities across a variety of policy areas including food aid reform, nuclear arms control, the International Treaty on Plant Genetic Resources for Food and Agriculture, and social policies advocated by the International Association for Labour Legislation. The members of these epistemic communities share the same normative beliefs and thinking about causes and effects. They also serve as linkages between possible policy actions and desired outcomes. Lastly, with the exception of the IALL, all of the previously mentioned epistemic communities share a common policy expertise. Sharif’s research shows that when an epistemic community no longer holds common normative and causal beliefs, the epistemic community disbands.

Even though the aforementioned literature finds support for Haas’s model of epistemic communities, a substantial portion of the literature that uses his model as a theoretical lens finds shortcomings in his approach. The next section focuses on the limitations of Haas’s model in regards to policymaking.

**Weaknesses of Haas’s Model**

As previously noted, Haas’s contribution to this theoretical approach is not without controversy. Some research questions Haas’s apolitical claim of epistemic communities (Sebenius 1992; Stone 1996). Other literature finds that the criteria Haas establishes for epistemic communities are not always present in policymaking (Peterson 1992; Mendelson 1993; Finnemore 1994; Betskill and Pielke 1996). Some of the literature on epistemic communities suggests that some policy networks do not fully constitute epistemic communities (Ikenberry 1992; Kapstein 1992). Other scholars (Toke
1999; Dunlop 2000; Farquharson 2003; Jacobs and Page 2005) argue that Haas assigns too much influence to experts in these communities at the expense of other actors. Baark and Strahl (1995) and Houlihan (1999) find epistemic communities are not very effective in shaping public policy. Evans and Martin (2006) find epistemic communities created problems in the policymaking surrounding the creation of sustainable communities in the United Kingdom. Other research questions the applicability of Haas’s framework, too. Lidskog and Sundquivst (2002) assert that Haas’s model does not explain why scientific knowledge makes its powerful role possible. Simon (2002) suggests epistemic communities may not be as independent of government pressures as Haas’s framework states they are. Trommer and Chari (2006) assert Haas’s model does not explain why members of epistemic communities give institutions their advice. This section discusses the aforementioned literature and shortcomings of Haas’s model in more depth.

Some scholars do not question the epistemic communities’ authoritative claim to knowledge, but believe that they have a “common enterprise” as well. Sebenius (1992) asserts “an epistemic community can be understood as a special kind of de facto natural coalition of ‘believers’ whose main interest lies not in the material sphere but instead in fostering the adoption of the community’s policy project” (325). Stone (1996) believes an “epistemic community is made up of a network of specialists from a variety of positions who share a common world view and seek to translate their beliefs into public policies and programmes” (3, 86-87).
Both Sebenius and Stone believe epistemic communities have common worldviews, but also common enterprises and wish to transform their beliefs into public policy.

As noted, some literature reveals that the criteria Haas establishes for epistemic communities are not always present in policymaking. For example, Peterson (1992) examines the role of cetologists in international whaling policy through the 1980s. Cetologists were the only epistemic community involved in the policy debate of this issue. Contrary to what epistemic community theory predicts, cetologists were not very influential in international whaling policy from the 1950s through the 1980s. This conservation-minded epistemic community enjoyed success in this policy domain from the mid-1960s until the mid 1970s. Before the mid-1960s, industry managers had more impact in this policy area and after the mid-1970s, environmentalists enjoyed more success in this policy arena. Some reasons for the limited role of the cetologists before the mid-1960s and after the mid-1970s include the presence of institutions and the political process “that grew up and around them” (182). However, changes within the cetologist epistemic community also explain their limited success in this policy domain. The cetologists became divided on significant scientific questions at the same time environmentalists were pushing for a total halt on whaling. This epistemic community maintained its long held principles and policy preferences. However, it was divided about which mathematical models to use and how to manage uncertainty in data about whale populations. This division and uncertainty calls into question the shared notions of
validity and policy expertise that Peter Haas argues is necessary for epistemic communities.

Mendelson (1993) studies the changes in Soviet foreign policy during the late 1980s that led to the end of the Cold War and Soviet withdrawal from Afghanistan. However, Mendelson’s usage of epistemic communities is different from Haas and Adler (1992) whose model stresses the transnational side of learning from these communities. In contrast, Mendelson’s application creates conditions under which epistemic communities are apt to influence policy in their own country. She adds that Haas and Adler do not differentiate between the power of an idea and “the people it legitimates” (337). Mendelson’s model posits that there is a hierarchy in epistemic communities and a specialist’s rank is a determinant of access to top leadership. Mendelson also argues that leadership is a feature that is crucial for analyzing how and when proposals are put on the political agenda. She adds the influences of an epistemic community’s ideas are related to the degree of saliency to the leadership and “the ability of the leadership to control political resources in order to place controversial ideas on the policy agenda and to empower the community” (360).

Martha Finnemore (1994) uses Haas’s model to analyze the role of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in teaching countries the value and usefulness of science policy organizations. Finnemore notes many of the UNESCO officials involved in this endeavor possess scientific expertise, but their reasons for their role in teaching states these values is more closely associated with their positions as bureaucrats than with their “professional socialization or principled beliefs
about science” (566). Finnemore suggests the “epistemic” facet of communities may not be their most significant trait. She adds carefulness is needed in assigning specialized knowledge as a determinant of political behavior as a causal mechanism.

Evangelista (1995) asserts Haas’s approach is not useful as a theoretical guide for studying transnational relations in the case of the disarmament of the Soviet Union before 1989. She argues that even though many of the transnational actors were scientists, their knowledge was not always acknowledged and that their claim “to policy-relevant knowledge was often disputed rather than authoritative” (36). In fact, the thoughts and policy proposals often were attacked by the militaries in the East and West. Furthermore, the members of this epistemic community never reached a consensus to advance their ideas as they had differing causal beliefs, understandings, and values underlying their support for a common policy goal.

Betsill and Pielke (1996) analyze the policy process in the United States and its relation to the international policy course of action in regards to ozone politics. They note one of the lessons that can be gleaned from the earlier literature on ozone depletion is the notion that a scientific consensus on the nature of the problem, and its causes and effects are mandatory for policy action. Betskill and Pielke challenge this lesson. They argue scientific consensus is not the missing link needed to create international cooperation on the problem of climate change (Betsill and Pielke 1996, 165). Epistemic communities cannot necessarily create solutions to political questions. In regards to climate change, the Intergovernmental Panel on Climate Change (IPCC), according to the authors, is “charged with science for policy” (Betsill and Pielke 1996, 165). They contend a “policy
for science” is needed to inform epistemic communities about the kinds of questions lawmakers want to be addressed by science. Furthermore, they assert that criteria for identifying when scientific understanding is satisfactory are needed for policy action.

Betsill and Pielke (1996) also argue scientific uncertainty, instead of consensus, may actually speed up the policy process. They note the 1977 Clean Air Act Amendments provided for the regulation of substances that may be harmful to the ozone layer if their “effect in the stratosphere may reasonably be anticipated to endanger public health or welfare.” Policymakers supported preventive measures to protect the ozone layer as long as there was uncertainty regarding the harmful effects of CFCs.

Moreover, some of the literature on epistemic communities suggests that some policy networks do not fully constitute epistemic communities. For example, Ikenberry argues that the group of experts assembled to determine the post-World War II economic order did not “fully constitute an epistemic community” (1992, 293). These experts do not “conform to the strict logic of epistemic community influence that is proposed elsewhere in [the] volume” (293). First of all, the epistemic community was not an independently existing scientific community in this case. This community did not exist before World War II started. Instead, it was a community formed through the course of Anglo-American talks shortly before World War II ended. The policy specialists and economists that participated in this transnational and transgovernmental community of experts were recruited by American and British governments.

Ikenberry further adds the experts involved in the Bretton-Woods talks shared ideas regarding “monetary arrangements and the larger international economic order”
(293). However, these ideas were embedded in common professional backgrounds, but were not a set of “causal scientific tenets or a common economic doctrine” (293). Ikenberry also states that policymakers defer to experts in certain instances since the experts are viewed to have indisputable scientific and technical knowledge. However, in this case, Ikenberry argues “the ideas of experts resonated with the political needs of the moment and provided opportunities to bridge old political divisions and build new coalitions” (293).

Kapstein (1992) asserts that the central bankers in the United States and Britain that worked together to attempt to rebuild public confidence in their international banks and the international banking system after the debt crisis in the 1980s should not be classified as an epistemic community. Instead, they were “a group of bureaucrats who were attempting to serve several conflicting public and private interests in an effort to maintain if not enhance their positional power in their domestic political structures” (266-67). Kapstein states that for these bankers to become an epistemic community, three conditions would have to be met. First, “a substantial body of consensual theoretical and empirical knowledge on international banking would have to emerge” (268). He adds “regulatory policies and practices would have to be based on consensual knowledge, rather than on national political ideologies” (268). Lastly, “a supranational regulatory agency would probably be needed to insulate bank supervisors from domestic political pressures” (268). Kapstein further states that during the debt crisis, no epistemic community formed or shaped the policy reaction. Rather, the authority of central banks
increased and the international reaction largely included the “distribution of power capabilities” (268).

Furthermore, Haas’s framework may not account for all of the players involved in policymaking. Toke (1999) argues Haas assigns too much influence to experts in these communities in the shaping of policymakers’ interests and conceptions, at the expense of interest groups and social movements. Dunlop (2000) adds Haas fails to produce a framework capable of taking into account the multiplicity of actors, epistemic and non-epistemic, which at various points in time, shape the norms of decision-makers and each other. Farquharson (2003) examines the influence of pro- and anti-tobacco advocacy networks in transnational policy. The author uses the case study approach to compare the Advocacy Coalition Framework (Sabatier and Jenkins-Smith 1993), the transnational epistemic communities approach (Haas 1992a), and the transnational advocacy network model (Keck and Sikkink 1998). Farquharson argues the epistemic community framework is not as explanatory as the other models. She believes this model “excludes many of the key players in tobacco advocacy and neglects the interactions between experts (members of the epistemic community) and non-experts in advocacy networks” (81).

Moreover, even if epistemic communities are players in policy development, they may not be the most influential group involved. Jacobs and Page (2005) find epistemic communities are not as influential in American foreign policymaking as other organizations are. Their study indicates American foreign policy is the most impacted by

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19 Cited from Farquharson 2003.
internationally oriented business leaders, followed by epistemic communities. Labor has less influence than business leaders and epistemic communities. Jacobs and Page find the public has even less of an effect on foreign policy than the aforementioned organizations.

Some literature suggests epistemic communities are not very effective in shaping public policy. For example, Baark and Strahl (1995) analyze the role of epistemic communities in the case of the United Nations Industrial Development Organization (UNIDO). The authors investigate the role of epistemic communities in the formation of UNIDO in the Ecologically Sustainable Industrial Development (ESID) plan. They argue UNIDO’s efforts have not been very effective. UNIDO intentionally hired staff with backgrounds in engineering or industrial economics. However, the professional backgrounds and values of the epistemic community involved in the policymaking of ESID undermined the goal of long-term sustainability. Furthermore, a lack of organizational flexibility and responsiveness in addition to external factors such as financial problems and inter-agency conflicts hindered long-term sustainability for the developing world. Baark and Strahal argue that Haas’s framework is created in part on “counterfactuals to a success” (446). In other words, in the absence of a group of experts with the knowledge to analyze technical and scientific data, states or international organizations would not be able to enact policy.

Houlihan (1999) finds epistemic communities are not very influential in the development of anti-doping policy in Europe. The actors participating in the relevant epistemic community include doctors and scientists. These actors analyze new drugs and

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20 UNIDO addresses environmental degradation and aids developing nations in creating sustainable development strategies.
decide whether or not they are performance enhancing, create tests, and offer opinions in regards to violation of doping rules (316). Houlihan asserts these actors are marginalized in the policy process of anti-doping policies advanced by the Council of Europe and the International Olympic Committee for several reasons. Members of this community lack organizational capacity, lack a forum to discuss doping issues, and lack consensus on doping issues.

Evans and Martin (2006) find some problems can occur when epistemic communities are involved in policy planning. The authors examine the roles of the interdisciplinary research councils created to address the problem of sustainable cities in the United Kingdom during the 1990s. They state combining technological knowledge and expertise from the natural and social sciences is a great challenge since the common ground between the disciplines is far greater than was initially thought. Evans and Martin draw several conclusions from their study. One is that the epistemic superiority usually granted to scientific framing of problems is questionable. It is not clear that the scientific framing is the right one or if it exhausts possible questions in this case. They also contend the participants in the debate should not be restricted to scientists alone since their expertise does not exhaust all relevant knowledge. Local citizens, social movement organizations, planners and others may have useful knowledge that should be shared. Furthermore, expanding participation can exacerbate problems of translating between viewpoints and approaches. Evans and Martin believe some organization should take responsibility for guaranteeing that different views are included even if they begin with differing assumptions. They also recommend that research councils include a “learning
phase” in which the participants do nothing but talk to each other and learn to translate between different points of view. Fifth, a new class of experts whose expertise is translating between different paradigms and frameworks may emerge. Lastly, it may be necessary to acknowledge the uncertainty of expert knowledge and use a more “political or democratically accountable process for choosing between competing claims and voices” (1027).

Lidskog and Sundqvist (2002) believe Haas puts too much emphasis on the power of epistemic communities and that he does not suitably examine the connection between science and policy. They use Haas’s (1992) framework among others to examine the role of science in international policymaking. They contend this model has an uncritical view of science. It has not put “any effort into critically discussing the contingency and plurality of scientific knowledge (Jasanoff 1996, 186). They argue Haas’s model does not explain what it is about scientific knowledge that makes its powerful role possible. Lidskog and Sundqvist note this framework postulates that science is a powerful force in influencing environmental policy, but believe it puts too much stress on its power. They assert Haas puts too much emphasis on this power “by claiming that science is the main source of institutional learning and that this learning is a main producer of convergent state policies” (Lidskog and Sundqvist 2002, 83).

Simon (2002) finds epistemic communities are not as removed from government pressures as Haas’s model claims. He evaluates Track II approaches to security diplomacy in the Asia-Pacific. Based on his evaluation of Track II approaches, he

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21 Cited from Lidskog and Sundqvist 2002.
suggests Haas’s epistemic community framework should be modified. Track I approaches are usually identified as solutions by government personnel to security problems. Track II groups are theoretically independent of government. They are “composed of non-governmental experts who are beholden to no particular political group, who speak out independently on issues” (172). However, some Track II groups are “extensions of governments, particularly in communist states where the idea of independent specialists on security issues does not prevail, such as China, Vietnam, and Laos” (172). The presence of governmental pressures calls into question the independence of the epistemic communities in question. In the National Councils for Security Cooperation in the Asia-Pacific’s (CSCAP) relationship with the ASEAN Regional Forum, almost all CSCAP working groups in addition to national memberships include government officials. Furthermore, even nongovernmental experts may dismiss certain approaches to problem solving since they think that governments will not seriously consider them.

Other research finds Haas’s model cannot explain why epistemic communities participate in policymaking. For example, Trommer and Chari (2006) examine the lobbying of the Council of Europe by private interests. The Council of Europe is an intergovernmental organization with weak policymaking powers. Trommer and Chari state Haas’s framework is helpful in evaluating the role of the NGO community in policy-making. However, they believe that his framework is very descriptive. This framework “cannot help to explain why such experts, who are representatives of interests,
perceive it as beneficial to provide a given institution with their advice” (Trommer and Chari 2006, 678).

As demonstrated, a considerable amount of research reveals shortcomings in Haas’s model of epistemic communities. Some research suggests epistemic communities are more political than Haas’s framework takes into consideration. Other research finds the criteria that Haas establishes for epistemic communities are not always present in policymaking and that some policy networks do not fully constitute epistemic communities. Also, some research finds that Haas’s gives too much credit to the role of epistemic communities in policymaking at the expense of other actors such as interest groups and government bureaucracies. Furthermore, epistemic communities are not always effective in addressing policy problems and can actually create further problems. Haas’s model cannot account for why scientific knowledge makes epistemic communities so powerful. Finally, Haas’s model does not explain why epistemic communities feel it is beneficial to give institutions their advice.

For the aforementioned reasons, this study uses Antoniades’s model of epistemic communities as a theoretical lens rather than Haas’s framework. As stated in chapter two, Antoniades’s framework retains many of the same traits as Haas’s model.\(^{22}\) However, the purpose of Antoniades’s framework is to examine the construction and change of social reality. In contrast to Haas’s model, Antoniades’s model assigns a prioritization to the social recognition of knowledge authority, giving it the ability to examine epistemic

\(^{22}\) See pages 34-35 for an explanation of Peter Haas’s model of epistemic communities.
communities in their social context. This permits the concepts of knowledge, knowledge authority, and science to be contextualized and historicized, and various historical and cultural “knowledge structures” can be taken into consideration and analyzed (26). Furthermore, Antoniades’s notion of “thought community” allows the normative and scientific beliefs that bind “a knowledge-based network” to be brought to the forefront. Also, his theory does not appear to imply either the existence of a “unitary science,” from which members draw their expertise, or the existence of a unique methodology in which knowledge is based and tested. In light of this, he argues that the concept of “thought community” is a more appropriate term than “network of professionals.”

As indicated in this section, the majority of the epistemic communities’ literature centers on policies related to the physical and natural sciences. The next section reviews the social sciences literature that uses epistemic community theory to analyze policymaking.

Social Sciences

This section discusses the role of epistemic communities in policies related to the social sciences. For example, O’Brien (2003) analyzes the role of epistemic communities in rehabilitation policy. She adheres to Ruggie’s notion of an epistemic community. She notes that as their conception of disabled persons changed over time, policy outcomes changed as well. In the 1940s, members of these groups were proponents of the “whole man theory” of rehabilitation that advocated the notion that “the prognosis of rehabilitation does not depend as much on the severity of the handicap as it depends on
the patient’s psychological adjustment to his disability” (331). Members of this epistemic community included bureaucrats who worked in vocational rehabilitation programs and rehabilitation doctors. However, by the late 1960s and early 1970s, members of these communities began to view this theory as degrading. They felt that a person should be accepted for who he/she is rather than for how they could compensate for their disability. However, the Supreme Court has largely adhered to the “whole man theory” notion in its rulings. By 1973, the Vocational Rehabilitation Act was amended to prohibit discrimination against those with disabilities. In 1990, the Americans with Disabilities Act was signed into law. It put the burden on the employers to accommodate disabled individuals whereas before it was on those with disabilities. According to O’Brien, members of the disability rights epistemic community found themselves at odds with the federal courts. For example, federal court judges have ruled that “if persons with disabilities can mitigate their physical or mental impairments, essentially making themselves ‘whole,’ they cannot receive accommodations from their employers” (329). During the 70s and 80s, the justices on the Supreme Court ruled people with disabilities could work if they could prove they were as qualified as people without disabilities. The Supreme Court further ruled that they had to show that they could work before any demands could be put on employers. Justice Bryon White ruled against the disability community’s attempt to secure constitutional rights. Marshall stated that people with disabilities were “different,” suggesting their conditions give society reason for prejudice.

23 Quote from Dr. Howard Rusk, “S. 1066, S. 2273, S. 3465, Bills Relating to the Vocational Rehabilitation of the Physically Handicapped,” 519.
24 O’Brien cited the following federal court cases: Sutton vs. United Air Lines (97-1943), Murphy vs. United Parcel Service (97-1992), and Albertsons vs. Kinkingburg (98-591).
O’Brien adds that more than 94% of all ADA litigation has been ruled in the employers’ favor.

Zhang (2003) uses the epistemic community framework to explain the “English School” (ES) of thought in the study of international relations in China. Currently, US-based scholarship in this field is predominant. However, in recent years, British scholarship has reemerged in China as a popular approach to international relations, which is odd since British scholars seldom study, attend conferences, or teach special courses in China. The author’s research offers an explanation for this reemergence.

Zhang finds that the ES, although still marginal in international relations, has gained popularity in recent years. However, the ES brand name and most of its scholarship traveled to China, not from Britain, but from America. Since the ES approach is still marginal in American scholarship, its transmittal to China has been marginal as well. Since 1979, American foundations and IR academies, whose members comprise epistemic communities, have made great efforts to promote the study of IR in China. However, their British counterparts have not made these efforts yet.

Dias and López (2006) examine the role of epistemic communities in international education policymaking and, to a lesser extent, in domestic education policymaking in Brazil using Antoniades’s model of epistemic communities as theoretical lens. The authors note the World Conference on Education for All took place in 1990 and the Organization of Nations United for Education, Science, and Culture

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(UNESCO) held a General Conference in 1991. An organization called the International
Commission on Education for the Twenty-first Century was formed after these
conferences adjourned. The Delors Report, titled *Education: A Treasure to be*
*Discovered*, resulted from the work of three and a half years of the Commission. Jacques
Delors presided over a meeting of fourteen members of the Commission, fourteen
representatives of various prestigious organizations, and many consultants. The
aforementioned report was published in Brazil with the support of the nation’s Ministry

Dias and López find the architects of the Delors Report were able to diffuse their
discourse outside of their circle to professors, students, and researchers in Brazil. This
discourse includes an emphasis on the teacher and the learning programs in which they
teach. The report notes teachers’ programs can be responsible for the success or failure of
the process of teaching and learning due to the factors that are at play in their programs.
These factors include models of organization of work, education, career, attitudes,
representations, and values. The report also stresses the responsibilities of the teacher to
awaken intellectual curiosity in students, help them develop autonomy, create an
intellectually stimulating atmosphere in the classroom, and emphasize the social
problems that afflict them. The Delors Report ties teacher evaluation to the performance
of students. It also supports ongoing learning for teachers, creating competency standards
for teachers, helping teachers learn their own strengths and weaknesses in the classroom,
using student evaluations, and the public promulgation of student evaluations in an

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26 One of the objectives of this conference was the discussion and presentation of proposals of policies to
make basic education universal for the development of the most poor and populated countries of the world.
objective manner. The authors state several important texts have been published in Brazil as a result of the promulgation of the Delors Report. Some of these texts are “The Profile of Brazilian Teachers: What They Do, What They Think and What They Want” and “A Profile of the Teaching Profession,” suggesting the discourse of the Delors Report was powerful at the national level in Brazil.

It is important to note Dias and López identify an international epistemic community that published the Delors Report. They reveal its impact on both international and domestic education policymaking in Brazil. The authors also infer the presence of a national education epistemic community in Brazil. However, they do not apply other components of Antoniades’s framework of epistemic communities. The components of Antoniades’s model that are omitted from their analysis includes the classification of the identified epistemic communities as ad hoc or holistic epistemic communities, the determination of the type of activities they engage in (cognitive or practical), and whether the struggles they participate in take place at the micro or macro levels. The present research applies the entire framework to the case of the policymaking surrounding the No Child Left Behind Act.

As demonstrated, the epistemic communities approach has been used in the social sciences. However, its usage is limited to education, disability studies and the study of international relations in China. This research aims to shed light on the applicability of Antoniades’ approach to education policymaking, a field related to the social sciences, within the United States.
Conclusion

Most of the literature on epistemic communities has an international or transnational focus and uses Peter Haas’s model as a theoretical lenses. In particular, this framework is helpful in explaining European Union policies and policies in post-communist countries. However, as demonstrated in this chapter, past research finds there are shortcomings to Haas’s framework. Furthermore, there is little research on the role of domestic epistemic communities in any nation. This research sheds light on the power and influence of epistemic communities in national federal policymaking.

Moreover, there is little research on the role of domestic epistemic communities in the United States. Additionally, there is scant research on the role of epistemic communities in the education policy domain. This study can shed light on the formation, structure, and communication of epistemic communities involved in domestic education policy in the United States. Furthermore, this study provides a test of Antoniades’s framework. As demonstrated in this chapter, only one other study uses this model as a theoretical lens. However, Dias and López do not examine the applicability of all of the components of Antoniades’s model. Again, they do not identify epistemic communities as *ad hoc* or holistic epistemic communities, determine the type of activities they engage in (cognitive or practical), and whether the struggles they participate in take place at the micro or macro levels. This study tests the applicability of the aforementioned components of Antoniades’s framework to the policymaking surrounding the NCLB Act and offers modifications.
CHAPTER FOUR

REVIEW OF LITERATURE REGARDING THE NCLB ACT

This chapter reviews the literature surrounding the NCLB Act. The themes encompassed in the review involve literature pertaining to the origins and politics surrounding the legislation, the implementation of the Act, testing concerns, its impact on special education, the teacher quality provisions, research and testing practices, and accountability as well as other topics. Although there is a literature that addresses the NCLB Act tangentially,\(^\text{27}\) this chapter will focus on literature that addresses the Act itself and its effects.

The Origins and Politics Surrounding the NCLB Act

There is a literature focused on the legislative beginnings and politics surrounding the NCLB Act. For example, Rudalevige (2003) provides an overview of the legislative background of the NCLB Act. He describes its roots in the 1965 Elementary and Secondary Education Act and subsequent reauthorizations that provided resources for economically disadvantaged students. Rudalevige adds the emphasis on education standards dates back to reforms from the 1980s including standardized testing and teacher

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accountability measures. Many of the reforms during that decade stemmed from the publication in 1983 of *A Nation at Risk*. The Goals 2000: Educate America Act (P.L. 103-227), a federal law passed in 1994, also mentions “strategies or standards.” Some of the key components of NCLB were borrowed from President George W. Bush’s days as governor of Texas. As governor, President Bush signed legislation mandating annual testing in math and reading in grades three through eight as governor of Texas. He linked high school graduation to passing the Texas Assessment of Academic Skills (TAAS) exams. Bush also coupled teachers and school administrators’ careers to student performance while a governor and later as president.

Hochschild (2003) examines why the NCLB Act was signed into law despite opposition from powerful teacher unions. Parents were not particularly dismayed with their local schools at that time. According to Hochschild, outcomes of learning in most districts had not denigrated significantly with the exception of urban districts. Despite the lack of a public push for accountability reform, politicians from both sides of the aisle, at all levels of government, have mandated accountability standards. She believes Baumgartner and Jones’ (1993)\(^{28}\) notion of issue expansion explains the push for this reform. The first stage of issue expansion is where political leaders react by providing support to specialists who convince them they have the ability to solve a national problem. In the case of the NCLB Act, the specialists were state supreme courts that demanded satisfactory schooling, business leaders who wanted a well-trained workforce, college professors and professional groups who created the standards, and commercial

test companies that developed and sold the exams. Some political leaders were Democratic governors and mayors who had concerns about the effect of demographic changes that first manifested in cities. Other political leaders were compassionate Republicans and a few civil rights advocacy groups who viewed accountability standards as serving the interests of minority pupils in urban districts. According to Baumgartner and Jones, the next phase of issue expansion is developing new institutions to sustain their programs. Based on Hochschild’s analysis, leaders and specialists have been able to create new institutions as Baumgartner and Jones’s theory predicts. All states and most school districts have new offices to institutionalize high-stakes tests, curricular reforms, charter schools, and alternative certification programs. The requirements of the NCLB Act have expanded the state and district offices focused on the testing and measurement of outcomes. It is not known whether the last phase of Baumgartner and Jones’ theory of issue expansion will apply to the NCLB Act. Nevertheless, Hochschild’s research makes an important contribution to the applicability of issue expansion to federal education policy.

Manna (2006a) develops a theory to explain the relationship between the national government and the states in regards to the education agenda since the mid-1960s. This theory is called “borrowing strength.” This theory contributes to the understanding of the impact of federalism on agenda setting in the United States. The process takes place when policy entrepreneurs at one level of government try to push their agendas by

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29 The last phase is where the enthusiasm for the policy fades replaced by fickleness, concern for another problem, or frustration with the lack of management with the current problem. After the enthusiasm wanes, an institutional legacy remains “so that a powerful subsystem can remain relatively independent of popular control for decades” (Baumgartner and Jones 1993, 83-84).
“leveraging the justifications and capabilities other governments elsewhere in the system possess” (5). If policy entrepreneurs lack license or capacity at their level of government, they can attain them by “borrowing strength from other governments in the American federal system” (14). License refers to “the strength of the arguments available to justify government action” (14). Capacity is the “ability to act once policymakers have decided how to act” (14-15). Capacity refers to financial resources, bureaucratic structures, and the “knowledge, experience, and expertise of government personnel” (15).

McGuinn (2005) discusses the evolution of federal education policy since the 1950s as well as the politics that accompanied these federal reform efforts. He provides an overview of some of the past scholarship and interpretations of the NCLB Act. Past scholarship suggests two of the factors that facilitated the passage of the NCLB Act were pressure on Republicans to support President George W. Bush and the wish of Democrats to allocate more money to schools. Others contend that NCLB was a “continuation of earlier state and federal reform efforts (44) such as Goals 2000: Educate America Act and the Improving America’s Schools Act. McGuinn states NCLB imposes “tough federal timetables and mandatory outcome-based accountability” (45) which differ from past federal education policy. He contends these interpretations underestimate the impacts the requirements of this law have on schools across the country in addition to the enormity of the changes occurring in federal education politics between 1994 and 2002. McGuinn also discusses opposition to NCLB from 2003-2005 including potential difficulties of
implementing the law. Many states, for example, had difficulty complying with the provisions of the NCLB Act in a timely matter and meeting the Adequate Yearly Progress provisions. Many state legislators across the nation felt the NCLB was a “violation of states’ rights, was inadequately funded” and/or was being administered in an inflexible and unworkable manner” (59).

Hess and Petrilli (2006) provide background on the origins of the NCLB Act, explain the provisions of the Act, its implementation, and critics’ concerns. The authors also discuss prospects for the policy in light of public opinion. They analyze recent public opinion polls and find Americans support the goals of NCLB, but question the details of the policy. Polls suggest, for example, teachers are very critical of the policy. Despite the negative publicity surrounding NCLB, they note public opinion concerning the law is still changing, and predict, given the ambitious goals of NCLB, “winning and sustaining the support of critical constituencies will require moral authority that rewards cooperation and makes resistance politically unpalatable” (133). Hess and Petrilli speculate the fate of the law will be determined by “how future Democratic administrations, Congressional leaders, and state officials view the law” (133-134).

DeBray (2006) examines the politics surrounding the No Child Left Behind Act using Kingdon’s policy streams model as a theoretical lens and finds support for it. Through a series of interviews, conducted from 1999-2002, with Congressional aides and members of interest groups, DeBray finds partisanship plagued efforts for comprehensive education reform prior to the passage of the NCLB Act. By 2001, however, public

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opinion put pressure on Congress to act in a bipartisan manner. She identifies President George W. Bush, the Progressive Policy Institute, the Fordham Foundation, and the Education Trust as key players in Kingdon’s “primordial policy soup.” The “policy windows” were the election of Bush, who took credit for the well-known accountability system in Texas and 9/11. After 9/11, President Bush demanded compromise between the Republicans and the Democrats. He stated the passage of the bill would show that Congress had not been immobilized by terrorists. Hence, 9/11 served as the “national mood” Kingdon argues is necessary for the passage of policy.

**Implementation**

A substantial amount of literature on NCLB concentrates on the implementation of the policy. For example, Sunderman et al. (2005) add to the literature on federal, state, and district implementation of federal education policy. They examine the implementation of the NCLB Act in six states - Arizona, California, Georgia, Illinois, New York, and Virginia- across the federal, state, and district levels of government and in schools. Sunderman et al. find the lack of flexibility by federal officials on some of the law’s requirements yielded a difficult implementation process and resulted in diminished support for the law. They also demonstrate how the NCLB accountability and annual yearly progress provisions put minority and multiracial schools at greater risk of failing annual yearly progress than mostly middle-class and Caucasian schools. In regards to the school choice options available through NCLB, Sunderman et al. find very few students took advantage of the school transfer option available to them if their school failed to make annual yearly progress for two or more consecutive years. In regards to
supplemental services, the authors discover the demand for supplemental services increased during the second year of the program. Sunderman et al. also find there are significant administrative burdens in carrying out the supplemental education services component of the NCLB Act and assessing its effect on student achievement in Title I schools. Finally, they find teachers accept the need for accountability, but “question the efficacy of many of the NCLB reforms” (xv).

Superfine (2005), using comparative case studies, contributes to the understanding of the implementation of federal education policy. He compares the implementation of the accountability provisions of the Goals 2000: Educate America Act along with the Title I of the ESEA (P.L. 89-10) (both passed in 1994) to the NCLB Act. Even though these policies were passed with bipartisan support, problems with their implementation ensued. For example, many educators publicly criticized the laws, which did not facilitate intended implementation. Another problem that plagued these policies was a lack of funding to properly carry out the laws. In both cases, some of the states viewed the federal laws as intrusion into a policy area that state and local governments traditionally dominated. In the case of Goals 2000, various states refused to comply with the accountability provisions. A number of states received federal money and failed to describe the actions they intended to take with the money they were allocated. In regards to the NCLB Act, 21 states attempted to pass legislation to opt out of the accountability provisions.

Manna (2006b) analyzes early implementation of the NCLB Act. He develops a theoretical framework of control and persuasion to facilitate the understanding of federal
influence in the implementation of federal policy. “Control” refers to federal efforts to maintain control over state-level implementers while persuading them to adopt federal priorities as their own. Federal officials’ have used two techniques in attempts to control state implementers. One technique consists of using the bully pulpit to “warn, scold, and threaten state leaders with punishment should they not faithfully implement the law” (479). There are many accounts of Rod Paige, the former Secretary of Education, and other officials such as Eugene Hickok, Bush’s Undersecretary of Education, making such comments. The second technique is “the policy choices of administration officials have frequently backed up that rhetoric” (479). Manna finds the President and his allies have blocked all attempts to change the law.31

Federal attempts at “persuasion” include “rhetoric and policy choices parallel to those from previous administrations” (Manna 2006b, 484). In regards to rhetoric, Manna uses the example of Secretary Paige prefacing threatening marks with extending an olive branch to help convince state officials to make the NCLB Act their own education reform. As for policy concessions, from 2002-2004, federal policy did provide accommodation for policy adjustments requested by states.

Daly et al. (2006) address the impact of the NCLB Act on the mental health of pupils and educators alike. The authors identify the challenges educators, mental health professionals and others are likely to face as a result of the implementation of this policy. These challenges are the heavy focus on student academic achievement, fiscal confusion

31 Almost 20 bills as well as amendments were introduced during the 108th Congress that would have changed NCLB. Other evidence of federal control includes the fact states had to start implementing the NCLB Act before the Department of Education finished the writing the regulations. The Department of Education also denied waiver requests from the states.
stemming from the fact the NCLB Act does not mandate funding for specific programs, lack of community awareness about the mental health provision in the Act, lack of training that teachers have to identify child/adolescent mental health problems and deal with the stress of teaching, and the lack of collaboration between teachers and mental health staff. To overcome these obstacles, the authors recommend more community, family, school, and teacher outreach and partnership take place to enhance mental health awareness.

There are different challenges associated with implementing the NCLB Act in different types of school programs and districts. For example, Voltz and Fore III (2006) identify the challenges of implementing the NCLB Act in urban special education programs and discuss the implications for urban special education teachers. One challenge is the cultural and linguistic diversity in urban settings. Many special education students need services for English language learners. At times, the training educators in these schools receive is inadequate; and undesirable student learning outcomes often ensue. Additional obstacles include the lack of resources in the forms of credentialed, experienced teachers, funding in terms of per-pupil expenditures for students with disabilities, and overcrowded classrooms in urban schools. The impact of poverty also poses a unique problem in the implementation of the NCLB Act. Children living in poverty are more likely to be exposed to prenatal toxins such as tobacco and alcohol.

32 The authors state that ten percent of new teachers leave their profession after the first year of teaching. By the end of the second year of teaching, 35% of new teachers have resigned. After the third year of teaching, almost 50% of teachers have left their profession. The authors cite this information from Burke, R.W. and B. K. Myers. 2002. “Our crisis in children’s mental health: Frameworks for understanding and action.” Special Theme Issue of Childhood Education 78: 258-260.
lead, and poor nutrition; and these factors negatively impact child development and are associated with higher disability rates.

Provisions for school choice options and supplementary education services are also included in the NCLB Act. Fusarelli (2007) examines the implementation and consequences of these provisions. He notes roughly only one percent of students eligible to transfer out of failing schools have exercised the school choice option. There are several likely reasons that parents do not take advantage of this option. One is parents may have no sources of information or assistance in regards to their school choice options. On a related note, some critics believe districts “hide the existence of options required” by NCLB. Another reason is annual yearly progress determinations are usually made shortly before the school year starts. Consequently, parents may be hesitant to switch schools so soon before the academic year starts. Fusarelli adds other commonly cited reasons for the lack of available school choice options are having receiving schools available at the right grade level, space, and identifying enough successful schools to which students could transfer.

In regards to supplementary education services, eleven states indicate at least 20% of eligible pupils received tutoring in 2005. Teachers and school administrators in districts and in states view supplemental services as aides and in keeping with making annual yearly progress and preferable to student transfers. Supplementary services (primarily tutoring) can be provided before or after school or at a non-school location. These services also do not require school administrators to change bus routes or find more space in schools to accommodate student transfers. Barriers to the provision of supplementary education include finding quality service providers and money to fund administrative costs, communicating with parents, arranging tutors for students, and the fact that some families, especially poor ones, are not able to find transportation to and from tutoring providers, even when the tutoring is available at the school (Fusarelli 2007). Like school choice options, supplementary services are not being utilized as much as possible.

Testing

Much of the literature on NCLB focuses on the controversial testing provisions mandated by the Act. Hursh (2005) examines the implementation of high-stakes testing in Texas and New York, and finds these reforms have not met their goals. Standardized

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testing in these states has not resulted in objective examinations or changed the difference between advantaged and disadvantaged students in terms of educational achievement. In New York, for example, the June 2003 Regents Math A examination was so poorly constructed that it had to be discarded. Only 37% of the students passed it statewide.\textsuperscript{41} In Texas, teachers are narrowing the curriculum. Since science is not tested in the early grades, it is no longer taught during those grades in the Lone Star state. Also, schools that stress test preparation are more inclined to commit most of their curriculum budget to test-prep materials than to other needed resources. In both states, the pressure to increase test scores encourages schools to force weak pupils out of school prior to the required test. In Texas, urban students are likely to be held back in ninth grade, the year before the required Texas Assessment of Academic Skills (TAAS) test is first administered. Texan students who are repeatedly held back are inclined to give up and drop out of school. In New York, students are being pushed out of schools to increase test scores; and, instead of being counted as drop-outs, they are listed as having transferred to an alternative school or working on a Graduate Equivalency Diploma (GED), a diploma earned by not attending school, but by passing a test.\textsuperscript{42} There is evidence these tests are detrimental to the graduation rates of minorities in New York. The state now has the lowest graduation rate of any state for African-Americans (35%) and Latinos (31%).\textsuperscript{43} In Texas, marginal students have been placed in special education classes so their test scores are not included

\textsuperscript{43} Hursh cites Orfield, G., D. Losen, J. Wald, and C. Swanson. 2004. \textit{Losing our future: How minority youth are being left behind by the graduate rate crisis}. (Cambridge, MA, The Civil Rights Project at Harvard University).
in aggregated school test scores. A disproportionate number of minority students have been held back in ninth grade, the year before the state-mandated tests are administered, artificially inflating student test scores.

Pringle and Martin (2005) study the impact of forthcoming standardized testing on science instruction in suburban, elementary schools in Florida. They find teachers’ apprehension surrounding the testing in science includes concerns about the effects of substandard reading skills on student performance, time limitations to include science instruction during the school day, too much stress on the test, teacher readiness, and the unknowns about the test expectations such as the format and student readiness. The teachers also express concern about the impact on the science curriculum. They indicate misgivings about how they will need to restructure their teaching methods to increase student achievement on standardized tests, teaching to the test and consequently narrowing the curriculum, and finding test-prep materials to prepare their students for these tests. Some of the survey respondents also indicate they would incorporate teaching science with other subjects since finding time to teach science is a challenge during the school day. Pringle and Martin conclude the introduction of standardized testing in science is likely to create additional problems in public education.

Yeh (2006) studies teachers’ instructional decision-making processes through surveys administered to teachers in the McKinney, Texas, school district. He finds 77.6% of the teachers believe the impact of the tests was positive and 16.3% of the teachers have “concerns about teaching to the test, time away from instruction, delayed tests results, and time spent on test-taking tricks” (100). Three themes emerge from
teachers with positive views. One is that state-mandated testing improved accountability for teachers and benefited students by requiring more students to learn the curriculum. Another theme is they perceive the test “to be appropriate, focused on skills that students need to know, and aligned with the intended school curriculum” (100-101). The third theme is administrators and teachers believe test results provided objective data that compelled them to be more thoughtful about their performance in the classroom.

Implications of the NCLB Act for Special Education

There is literature focusing on the impact of the NCLB Act on special education. McLaughlin and Thurlow (2003) discuss the technical, legal, and practical obstacles to carrying out the NCLB Act in regards to special education. Barriers to implementing the NCLB Act in special education include defining participation, using valid measures of performance, creating uniform standards, reporting performance results, and determining annual yearly progress (440). McLaughlin and Thurlow add it is important for students with disabilities to have aggregate performance targets to meet. The authors argue despite the unknown effects of the NCLB guidelines, evidence suggests the changes will result in improved educational outcomes for students with disabilities.

Steffan (2004) examines the impact of NCLB on deaf education. The framework of NCLB gives little consideration to the needs of deaf children. The author identifies some important questions the NCLB Act leaves unanswered. One involves how NCLB fits into the legal framework established by the Individuals with Disabilities Education
The author questions the implications of NCLB for students with individualized education programs if they transfer to other schools. Steffan also identifies other unanswered questions for traditional students. How, for example, will public schools meet the requirements of the law? What will happen if all children are not proficient by 2014? Will all failing schools be ordered to close? Will a small number of schools stay open once parents remove their children from a school that does not meet annual yearly progress?

Cawthon (2004) studies student assessment results from schools of the deaf to determine if these schools were implementing the NCLB Act. She finds there are challenges to tracking the impact of the NCLB Act on schools for the deaf. One is that almost 40% of states with a school for the deaf do not have a NCLB reporting policy that includes the aggregation of student data for deaf students at the school level. Oftentimes, these data are aggregated at the district or state level. School report cards are often not available for schools for the deaf, and when they are available, fewer than half of these report cards include annual yearly progress data. Other report cards do not include data for student participation in assessments and others disaggregate achievement results for each grade tested. Consequently, data cells are too small to be included in Cawthon’s analyses. She finds three schools of the deaf made annual yearly progress under NCLB meaning they had at least a 95% participation rate in testing and at least the same

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44 The 1997 amendments to the IDEA (P.L. 89-10) and Title I of the NCLB Act mandate the participation of students with disabilities in large-scale assessments and the public reporting of test scores.
45 Cawthorn uses the Consolidated State Application Accountability Workbooks submitted in January 2003 by each state to the U.S. Department of Education, individual school report cards for these schools posted on state department of education web sites, and the rosters of schools of the deaf published in American Annals of the Deaf to make this determination.
percentage of their students attained or exceeded state proficiency requirements in reading and mathematics.\textsuperscript{46} As Cawthon demonstrates, many schools of the deaf do not collect and post student achievement data. This makes it difficult for the public to determine whether or not schools of the deaf are attaining annual yearly progress.

Thurlow et al. (2005) examine states’ participation and accommodations policies\textsuperscript{47} for students with disabilities before and after the passage of the NCLB Act. Their findings reveal policies for participation and accommodations are more specific after the NCLB Act was passed in comparison to earlier years. Additionally, more accommodation options have become available to students with disabilities through state policies; and some states permit accommodations to all students whether or not they received special education services. The most controversial accommodations that states provide to students are reading aloud, scribes, and calculators. This research suggests the NCLB Act is changing the ways that mandated tests are administered to students with disabilities.

Cawthon (2006) finds the NCLB Act is changing how mandated tests are administered to hearing impaired students. Her study centers on the use of accommodations and alternate assessments in the statewide assessments of 258 participants who responded to the \textit{National Survey of Accommodations and Alternate Assessments for Students who are Deaf or Hard of Hearing in the United States}. The participants include schools for the deaf from districtwide/school programs and also from

\textsuperscript{46} The author notes that only four schools for the deaf with comprehensive NCLB report cards.

\textsuperscript{47} Examples of these policies are student participation in assessments without accommodations, participation with accommodations, and alternate assessment.
mainstreamed settings. Cawthorn finds the most common types of accommodations are “oral (speech), total communication (oral and sign together by instructor), oral (speech) plus interpreter, and other (including sign language only)” (347). Her study reveals there are similar patterns in regards to reading and mathematics accommodations. From most common to least common, the typical accommodations are extended time, an interpreter, separate rooms, signed question-responses, individual administration, frequent breaks, read to aloud, scribes, marked answers, computers, and large print exams. Cawthorn also finds fewer hearing impaired students participated in alternate assessments than in standardized assessments with accommodations. Alternate assessments are from most common to least common, out of level, work sample, curriculum-based, check lists, structured observations, unstructured observations, and other alternate assessments.

Shippen et al. (2006) examine the effects of two comprehensive school reform models,48 Success for All and Direct Instruction. Each program was administered to urban middle school students who were two or more years below grade level in reading. Students who participated in each program were administered both a pretest and a posttest. The results of the two models indicate students with reading disabilities showed little or no reading skill gain from either model. In fact, they remained significantly behind. This research suggests that comprehensive school reform models may not be the best method to enhance reading competency. Some of the literature on special education overlaps with the teacher quality literature considered in the next section.

48 Comprehensive school reform is one method that some schools have used to address the need to demonstrate annual yearly progress as required by the NCLB Act.
Teacher Quality

As noted, other literature focuses on the teacher quality provisions of the NCLB Act. Cohen-Vogel (2005) traces the policy evolution of the teacher quality provisions of the NCLB Act and suggests it is a result of incremental policy change rather than a redefinition of the role of the federal government in education policy. The author finds state involvement in teacher preparation began more than 150 years ago with the requirement of teacher education in Massachusetts. However, the federal government did not pay attention to teacher development until the passage of the National Defense Education Act (NDEA) in 1958. At that point, and for most of the following twenty years, federal involvement was largely limited to financial aid for in-service training and college assistance for teachers. In the 1980s, these funds were cut dramatically during the Regan Administration. By the 1990s, however, the federal role in teacher quality grew considerably. Federal policy connected teacher knowledge and skills to primary and secondary school curriculum standards. It also focused content and practice in preparatory and development programs. In 1994, the Goals 2000: Educate America Act upgraded teaching practices to prepare pupils for the 21st century economy. According to Cohen-Vogel, the federal government has not redefined its role in teacher quality through the passage of the NCLB Act. The NCLB Act has not led to significant changes in how states and districts spend federal money to enhance teacher quality. The author speculates the NCLB Act may be a case of policy incrementalism since it is not a drastic adjustment
from preceding federal education policies. A supplemental explanation for the policy adjustment that characterizes federal involvement in teacher education is a desire for “tighter policy alignment” (39).

The NCLB Act requires states to use alternate assessments for students with disabilities who are unable to participate in traditional assessments. Browder et al. (2005) use data from large, urban, public school systems in North Carolina to determine the effects of a teacher training program focused on tailoring state standards to individualized education programs on alternate assessment scores. The authors compare the results between an experimental group of students who had teachers who received the training with results from a control group that includes teachers without the training. Almost all of the students in the experimental group scored “proficient” or higher on the alternate assessments at the end of the intervention year compared to the preceding year. These gains are significantly higher than the ones from the control group. This research provides the first support that alternate assessment scores can be improved through training teachers.

Tuerk (2005) uses data from 1,450 Virginia schools to analyze the dispersion of qualified teachers in various school districts. He finds qualified teachers are disproportionately absent from schools serving high-poverty students, and notes pupils in large urban areas and rural areas have irregular access to qualified educators. Tuerk’s findings indicate the share of unqualified teachers in a school can be connected to pupil

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49 Incrementalism takes place when policymakers pass incremental policy changes since the risks and costs of radical policy changes are unknown. See Lindblom, C. 1959. The science of muddling through. *Public Administration Review*, 19: 79-88 and.
failure on state-mandated tests even after taking into consideration the effects of poverty. They also imply states may not be able to satisfy the teacher quality provision of the NCLB Act and that students in urban and rural districts are being left behind their affluent counterparts.

Billingsley et al (2006) use data assembled by the Study of Personnel Needs in Special Education (SPeNSE) to analyze the traits and qualifications of K-12 teachers of pupils with emotional and behavior disorders (EBD) and compares them to educators who teach traditional students. They find teachers of students with EBD were disproportionately male, more diverse, and had far fewer years of teaching experience than other special education instructors (252). They note a smaller percentage of teachers in the EBD group were certified. Furthermore, a greater number of EBD teachers entered through alternative programs than the other teachers did. A small percentage of respondents teaching in grades 6-12 have the certification mandated by the NCLB Act. Teachers in the survey felt the least prepared of those surveyed to serve the needs of pupils from linguistically and culturally different backgrounds and to incorporate instruction in the classroom. These findings suggest EBD teachers need further instruction and training to meet not only the teacher quality requirements of the NCLB Act, but to serve also the needs of their students.
Research and Testing Practices

The NCLB Act requires scientifically based research to provide indicators of teacher performance and student learning. Some literature focused on the NCLB Act examines the testing and research practices as well as the methodological issues/techniques used to evaluate the NCLB Act. Weinstein (2004) draws on the experiences of a human subject participating in a medical randomized experiment to determine whether or not the research designs promoted by the NCLB Act advance the goals of validity, rigor, and replicability. The author concludes “narrative, anthropology, and other forms of reflection that do the inverse of the clinical trial (i.e., examine the force of difference, context, history, culture, circumstance, and so forth on meaning and lives rather than control them) are critical practices for interrogating ‘science’ dressed in the form of randomized experiment” (257). Weinstein adds the aforementioned tools are needed to uncover the many meanings connected to the research methods prescribed by the NCLB Act for the various participants in the research course. The use of these tools can provide a deeper understanding of the implications of the NCLB Act on public education.

The NCLB Act requires all states to test mathematics and reading in grades 3-8 and at least once during high school. Lewis and Haug (2005) argue this Act presents the opportunity for consistent cut scores across the grades of a subject area. Inconsistent cut

50 Scientifically based research programs and practices are rooted in reliable evidence. These programs and practices are subject to random sampling, experimental groups, and control groups. See http://www.ed.gov/nclb/methods/whatworks/doing.html. (Accessed on May 19, 2007).
51 Cut scores are “operational representations of the goals of an education system…[they] represent the thresholds of various levels of achievement” (12). Usually, the “proficient” cut score represents the minimal goal for pupils.
scores send varying messages to students, teachers and parents. Students may become confused when efforts in previous years on standardized exams resulted in proficient scores and not thereafter due to changing cut scores. Teachers may identify students as proficient based on previous proficiency test scores and assume the students are on track in meeting the current grade’s performance goals when in fact, they are not on track as a result of changing cut scores. Parents of students could question the validity of the testing programs when their children’s performance on standardized tests varies from year to year if the cut scores change. The public could question the schools when they see these symbols of inconsistency. Lewis and Haug propose models of consistency for reading scores in grades 3-8. The scores range from 49-62. The authors also include an across-grade alignment model for other subject areas and believe these models may result in more sound testing practices.

Lembke and Stormont (2005) argue research-based practices “examined in a variety of settings, replicated over time, and utilized with a variety of learners” (761) should be more widely utilized. When teaching practices are analyzed using well-defined methodology and the results of these studies are published in good journals, educators can have greater assurance these practices may work with their pupils. Practices that are not well-researched may compromise the learning abilities of students with disabilities who are being increasingly placed in general education settings. The authors argue the use of these practices is increasingly important with the testing mandated by the NCLB Act. Well-defined practices are more likely to produce clear indicators of student and teacher progress.
Chval et al. (2006) find conducting mathematics research on teaching and learning in middle schools is challenging. Due to the political pressures of high-stakes accountability policies such as the NCLB Act, teachers and administrators are very hesitant to subject their teachers and students to further testing even if the research would inform practice. Common reasons that schools refuse researchers are the time it requires of teachers, the instructional time lost, and uncertainty regarding the reporting of results. The time lost is valuable time that can be spent preparing for state-mandated testing. The authors conclude with a variety of recommendations that would facilitate research in schools, including creating incentives for teachers and administrators such as support from funding agencies and showing how research can serve educators’ interests. The findings from this type of research could be helpful in improving future teaching and learning practices and helping schools meet the requirements of the NCLB Act.

**Accountability**

The accountability provisions are the focus of other literature on the NCLB Act. For example, Hanushek and Raymond (2005) examine whether or not school accountability leads to improvement in student performance. The authors use data regarding state differences in National Assessment of Educational Progress math and reading scores from fourth to eighth grades to make this determination. They find the implementation of accountability systems in states leads to greater student achievement than would have otherwise occurred. They discover Hispanic students benefit from accountability legislation while African-American students experience fewer gains. Hanushek and Raymond, contrary to popular belief, do not find students are being placed
in special education classes to avoid mandated tests. This research indicates the accountability provisions of the NCLB Act are resulting in gains for minority students.

Marx and Harris (2006) examine how the NCLB Act presents challenges, opportunities, and risks for science education in elementary and middle schools. The authors analyze the following areas of science education: standards, instruction, teachers, and curriculum. They study these areas in the context of the accountability provisions of the NCLB Act. States were not required to test students in science until the 2007 academic year. However, since the time the Act was signed into law and 2007, past research finds little time was being spent in the classroom on science. That is likely to change once the states are required to administer science assessments. Teachers will be hard pressed to incorporate science instruction into already busy school days. Marx and Harris’ findings are worrisome since science is a subject where students need a certain level of knowledge to learn new concepts and applications. This may result in low science scores on standardized exams.

Primont and Domazlicky’s (2006) analysis highlights the oftentimes unnoticed connection between resource management and school performance. They investigate school performance in Missouri by measuring how efficiently school districts are using their resources to enhance student performance. The authors find technical inefficiency is significantly greater for failing schools than for passing schools. They also simulate the effects of the school transfer and supplemental tutoring services sanctions on the

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52 They use linear programming methods from data envelopment analysis (DEA) to measure technical efficiency.
performance of failing schools mandated by the NCLB Act.\textsuperscript{53} They find managerial efficiency would improve for approximately “20% of the failing inefficient school districts as a result of the budget reallocation imposed by either sanction” (89). Based on the assumption that the failing school district’s value-added outputs will increase by 2 percentage points as a result of the sanction, the transfer of students sanction is more likely to improve managerial efficiency than the tutoring services sanction will. Under the transfer of students sanction, the authors find the imposed reallocation of spending on failing schools will result in an overall reduction in inefficiency of failing schools under the best output scenario (89).\textsuperscript{54}

**Impacts of the NCLB Act on Administration, Learning, and Student Outcomes**

Fusarelli (2004) identifies the pervasive impacts of the NCLB Act on minority students, the multicultural curriculum, and issues related to equity. The author analyzes state-level accountability initiatives and the NCLB legislation to determine the potential effects of the Act on the aforementioned issues in public education. There are several positive effects of the Act. Some school officials are analyzing student performance more closely, paying more attention to closing the achievement gap between minority groups, committing more resources to pupils poorly served by the current system, and promoting

\textsuperscript{53} The authors assume that failing school districts will not receive additional funding to pay for imposed sanctions. Rather, an increase in costs incurred by a sanction is presumed to cause schools to decrease their budget for teachers and administrators, leading to layoffs of teachers and administrators.

\textsuperscript{54} Specifically, 27 of the 28 failing school districts would become less inefficient. Under the tutoring services sanction, they find the imposed reallocation of spending on failing schools will result in an overall reduction of inefficiency in failing schools. Eighteen to 20 of the 28 inefficient, failing school districts would be less inefficient as a result of the sanction. Nevertheless, the remaining 8-10 school districts would become even more inefficient (89).
greater equity in public education. Consequently, these school officials are creating more reliable data tracking and reporting systems in addition to more cohesive, integral educational policies. One potential negative impact is the Act makes no distinction between a school that barely misses one annual yearly progress target (and is consequently listed as failing) and schools that fail on multiple accounts. Another negative effect is newly declared proficient students in English often fail to meet annual yearly progress. Also, the requirement that 95% of students need to be tested in each subgroup potentially creates a situation where if a handful of students were absent on the day that tests are administered, it could result in the whole school labeled as in need of improvement. Other possible negative impacts include reinforcing a culture of blaming the victim and forcing teachers to teach to the test rather than spend time on “authentic learning and teaching” (79) as well as narrowing the curriculum. By narrowing the curriculum, NCLB may harm students who process information differently, including culturally and linguistically diverse students. Furthermore, NCLB may prove to be hostile towards multiculturalism with its stress on testing and accountability standards. The Act may prompt states to lower their standards in order to make meeting the annual yearly progress requirement easier. The previously mentioned factors in addition to the lack of sufficient funding are likely to prevent states from achieving equity in public schools.

The Center on Education Policy (CEP) conducts an ongoing review of the NCLB Act, producing annual reports and papers on issues related to the law. The CEP gathers information for its reviews through surveys with officials in every state Department of Education and various school districts. It also conducts case studies of schools and school
districts, and monitors the implementation of the NCLB Act. Jennings and Rentner (2006) have identified “Ten Big Effects of the No Child Left Behind Act on Public Schools.” One is student reading and mathematics test scores on state exams are rising. However, states have adopted techniques such as the usage of confidence intervals which permit more test scores to be considered proficient. They also find teachers are spending more time on reading and math, sometimes at the expense of other subjects. Third, administrators are paying more attention to the alignment of curriculum and instruction. They are examining test score data more closely, too. Fourth, low-performing schools are making small-scale changes such as improving the curriculum, staffing, and leadership. They are making small-scale changes instead of radical types of restructuring such as being taken over by the states, disbanded, or changed into charter schools. Fifth, schools and instructors are making significant progress in ensuring that teachers meet the qualifications established by NCLB. Nevertheless, many educators question whether these requirements will improve teaching quality. Jennings and Rentner find students are taking a lot more tests, too. Their research reveals schools are paying more attention to achievement gaps and to the learning needs of traditionally low-performing students. The number of schools identified as in “need of improvement” is steady, but not growing. Penultimately, the authors find the federal government’s role in education has greatly expanded as a result of the passage of the NCLB Act. Finally, Jennings and Rantner conclude the NCLB requirements have resulted in the expansion of the roles of the state

\[55\] The authors refer to low-performing students as “from low-income families or ethnic and racial minorities, those who are learning English, or those who have a disability” (112).
governments and school districts in school operations. However, their roles have expanded without sufficient federal funds to carry out their responsibilities.

Abril and Gault (2006) examine the attitudes of elementary school principals towards the music curriculum at their respective schools. Principals with a variety of levels of experience and in rural, suburban, and urban schools completed these surveys. The last section of the survey determined the degree to which 10 factors were believed to affect the music program at the principals’ schools. School principals responded either negatively or strongly negative to the following variables: budget/finances (55.2%), the NCLB Act (45.1%), scheduling (40.1%), and standardized tests (34.4%). As indicated, almost half of the surveyed principals indicate that the mandates of the NCLB Act and state-testing negatively affected their music programs. This finding provides further evidence the NCLB Act is narrowing the curriculum in schools.

Other Literature

There is other literature on a variety of other topics related to the NCLB Act. For example, Lather (2004) uses Foucauldian policy analysis, feminism, and postcolonialism counterdiscourses to critique the NCLB Act requirement of the usage of “evidence-based” scientific methods as opposed to qualitative methods. Through the lenses of Foucauldian analysis, the author concludes the “privilege accorded to….’the sciences of man’” is based on the political arithmetic”\textsuperscript{56} which makes specific types of discourse possible and essential. According to Lather, this is a reference to claims to “scientificity as discursive events” (24). The “inexact knowledge” becomes “a field of strategic

\textsuperscript{56} Lather cites Foucault 1998, p. 323.
possibilities”, a “counterscience” of “indisciplined” policy analysis which plays into what we take for granted as the good in nurturing understanding, contemplation, and deed. Feminists likely view “science as a site of contestation, an always already gendered practice” (26). Adherents to postcolonialism interpret the NCLB Act as an “effort to standardize educational research in the name of quality and effectiveness [in] an attempt to hegemonize and appropriate to a reactionary political agenda deeper tendencies in cultural shifts” (26). Lather concludes the legislation of the scientific method is racist and sexist in light of qualitative critical approaches that have developed over the past two decades.

Gokcekus et al. (2004) examine the impact of campaign contributions on school choice votes cast by members of the House of Representatives. The authors find campaign contributions to House members by the American Federation of Teachers and the National Education Association (NEA) during the 2000 election reduces the likelihood that he/she voted for the school choice amendment to the NCLB Act. They add House representatives with large African American district populations and Republican representatives were more apt to vote for this amendment. Furthermore, NEA contributions made after the NCLB Act passed tend to reward anti-school choice representatives and penalize pro-school choice representatives.

57 Ibid. Lather states that by “indiscipline,” Foucault refers to “a mechanism by which a marginalized population/practice is created to exert pressure that cannot be tolerated by the very process of exclusions and sanctions designed to guard against irregularities and infractions” (27).
Conclusion

This chapter reviews the literature on many topics related to the NCLB Act. These topics include the genesis and politics surrounding formulation of the Act, its implementation, concerns about testing, its effects on special education, teacher quality provisions, research and testing practices, and accountability. As noted, the first section discusses literature pertaining to the origins and politics surrounding the legislation. Hochschild (2003) uses Baumgartner and Jones (1993) punctuated equilibrium theory to examine the policy development of the NCLB Act. This theory takes accounts for individuals and groups in creating institutions to sustain their preferred programs. Manna (2006a) creates a theory called “borrowing strength” that takes into consideration the impact of federal and state relations on agenda setting. If policy entrepreneurs are unable to push their policies at one level of government, they can attain them by “borrowing strength from other governments in the American federal system” (14). DeBray (2006) uses Kingdon’s policy streams model as a theoretical guide. She identifies key players in the Kingdon’s “primordial policy soup” and the policy window as the 2000 election of President George W. Bush. The theories in aforementioned literature is helpful in understanding the development of the NCLB Act, but it fails to capture the role of the worldviews held by members of epistemic communities and the dynamics within these communities on policy. Specifically, the previously mentioned theories do not take into account the creation, beliefs, communication, actions, contributions, and disbandment of epistemic communities. This study addresses this gap in the literature on the policy
development of the NCLB Act by using Antoniades’ model of epistemic communities and offering feedback on its applicability.
CHAPTER FIVE

RESEARCH DESIGN AND METHODOLOGY

Introduction

The purpose of this chapter is to discuss the research goals, hypotheses, research design, case study selection, sampling, data collection, and data analysis techniques used in this study. The main goal of this research—understanding the role of epistemic communities in the policy development of the No Child Left Behind Act—requires an in-depth investigation for which a single case study is well suited. The NCLB Act represents a major initiative in a policy domain where federal government involvement is traditionally minimal. Consequently, the No Child Left Behind Act represents a unique case, worthy of further study. Content analysis is used to examine interview transcripts and Congressional testimony. This chapter also demonstrates how validity and reliability are maximized during the research process.

Research Goals

This study has several research goals. One goal is to determine if Antoniades’s (2003) model of epistemic communities is applicable to the policymaking of the NCLB Act. According to Antoniades, epistemic communities are “conceptualized and defined as thought communities made up of socially recognized knowledge-based networks, the members of which share a common understanding of a particular problem/issue or a
common worldview and seek to translate their beliefs into dominant social discourse and social practice. Epistemic communities might be local, national, or transnational” (2003, 26). They can be *ad hoc* coalitions or have a more constant and holistic character. They take practical or cognitive actions as discussed in chapter two. Additionally, they serve as advisors and sources of information. Sometimes members of epistemic communities are also asked to expand and formulate policy in terms of negotiation strategy, article proposals, and public presentations (2003).

Furthermore, the typology of the epistemic communities as *ad hoc* coalitions or as more *constant and holistic* coalitions is established. This study also determines if the actions taken by the epistemic communities in the case of the NCLB Act were cognitive or practical. The social reality these groups have created and the identification of their discourses and worldviews is discussed. Furthermore, it examines if the epistemic communities involved in the policymaking of the NCLB Act used their power to impose their discourses and worldviews on policymakers. It also examines if they used “language power” to constrain and build the conceptual framework in which policymaking takes place. Additionally, this research establishes if members of these groups served as “advisors” or as “sources of information” to policymakers. It also determines if these groups altered the manner in which then-current issues were dealt with or conceptualized and if they drafted any of the NCLB Act legislation. Based on these findings, revisions to Antoniades’s framework are offered in chapter six.

Another research goal is the determination of whether the epistemic communities involved in the policy development of this act competed with each other. The effects of
any competition are identified in the next chapter. The varying levels of input from the epistemic communities that participated in the policy process are discussed. This study determines the varying levels of input from epistemic communities that participated in the policymaking of the NCLB Act and if the goals of corporate epistemic communities are more evident in the legislation of the NCLB Act than the goals of educators.

The final goal of this study is the contribution to the understanding of federal education policymaking. Again, the federal government generally permits state and local governments to make education policies. The study of the NCLB Act provides a unique opportunity to examine how federal education policymaking is conducted since federal education policymaking is not as common as it at the state and local levels of government.

**Hypotheses**

Three hypotheses guide this study. These hypotheses are drawn from Antoniades’s framework of epistemic communities. Again, Antoniades defines epistemic communities as “socially recognized knowledge-based networks, the members of which share a common understanding of a particular problem/issue or a common worldview and seek to translate their beliefs into dominant social discourse and social practice” (26). The hypotheses are:

H1: Epistemic communities with similar policy visions were better able to work together than groups with dissimilar policy visions.

H2: Epistemic communities with similar policy visions continued to work together after the NCLB Act was signed into law.
H3: More epistemic communities with a constant and holistic character were involved in the policymaking of the NCLB Act than ad hoc groups.

The first hypothesis tests whether individuals who share a “common worldview” are better able to work together to pursue their policy goals. The second hypothesis tests if similar policy goals are conducive to the longevity of epistemic communities. The third hypothesis tests if epistemic communities with a more permanent character were involved in the policymaking of the NCLB Act than temporary ones.

**Case Study Method**

As noted, this research employs the single case study method. The case study is “a research strategy which focuses on understanding the dynamics present within single settings” (Eisenhardt 2002, 8). The logic of design of a case study includes “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident” (Yin 2003, 13). Case studies address situations where the investigation deals with more variables of interest than data points and there is a reliance on many data sources oftentimes requiring triangulation. This method also benefits from earlier development of theories to guide the collection and analysis of data (Hodson 1999; Yin 2003). Antoniades’s (2003) theory of epistemic communities is used to guide data collection and analysis of this study.

According to Yin (2003), there are certain instances where utilization of a single case study design is appropriate (40-45). One instance is where is it justifiable to use this design is when the case represents “an extreme case or a unique case” (40). In regards to
this study, the case study approach is appropriate since the federal government did not typically get involved in education policy. Furthermore, the research on epistemic communities in U. S. domestic policy is very limited, as demonstrated in chapter two that reviews epistemic communities, rendering this method suitable. This investigation will presumably be among the first to examine epistemic communities in federal education policy. It will permit the collection of data that no other researcher has collected to date, providing further justification for the use of this research design (Yin 2003, 40-45).

Despite the advantages of the single case study method, there are limitations to it. One risk associated with using this technique is that “a case study may later turn out not to be the case it was thought to be at the outset” (Yin 2003, 42). The focus on one case can result in the explanation of events in terms of the epistemic communities’ members’ decisions, rather than in terms of social and institutional structures that change over time. Moreover, the epistemic communities’ members’ language and values may have changed during the period of time of interest and this research may not uncover these dynamics. These concerns are addressed by triangulating data from Congressional testimony on the NCLB Act (King, Keohane, and Verba 1994; Miles and Huberman 1994) with interviews. The interviews include questions that capture gaps in content analysis and changes in the values and language of epistemic community members. The interviews and content analysis portions of this research will be discussed later in this chapter.

Validity and Reliability Concerns of Case Study Research

Four tests are typically used to establish the quality of any empirical social research. These criteria are construct validity, internal validity, external validity, and
reliability. Measures have been taken to address the aforementioned criteria. Construct validity refers to creating the appropriate operational measures for the concepts under study (Yin 2003, 34). The interview questions are structured to test Antoniades’s theory of epistemic communities. The development of the interview questions is discussed in the data collection section of this chapter. Construct validity is maximized through using multiple sources of evidence and establishing a chain of evidence during the data collection phase of the research (Yin 2003). Content analysis of Congressional testimony held prior to the passage of the NCLB Act is triangulated with personal interviews. When data are triangulated, the events of a case are supported by more than one source (King, Keohane and Verba 1994; Miles and Huberman 1994; Yin 2003). This portion of the data collection stage of this research will be discussed further later in this chapter.

Construct validity and reliability are also maximized through the establishment of a chain of evidence. Dates, times, places and transcripts of the interviews are documented. The Congressional testimony analyzed is available to the public.

Internal validity is established when “certain conditions are shown to lead to other conditions, as distinguished from spurious relationships” (Yin 2003, 34). Establishing internal validity is particularly difficult to do in case study research. Miles and Huberman (1994) suggest checking out rival explanations to strengthen internal validity. This research uses the policy community framework (Kingdon 1995) as a rival explanation to the epistemic community approach developed by Antoniades (2003). Policy communities

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consist of specialists in a specific policy area. Members are scattered within and outside of government. Examples of members of policy communities are committee staffs in Congress, congressional staff agencies, academics, consultants, or specialists from interest groups. Their commonalities are their concern regarding one policy domain and their interactions with each other. These communities are largely not affected by changes in administration or pressure from constituents. Policy communities can be cohesive or fragmented (Kingdon 1995, 117-118).

External validity or generalizeability refers to “the domain in which a study’s findings can be generalized.” (Yin 2003, 34). The case of the NCLB Act is chosen for “analytic generalization” instead of “statistical generalization” (Kennedy 1976; Yin 2003, 32). Statistical generalization is where “an inference is made about a population (or universe) on the basis of empirical data collected about a sample” (32). This method is the most common since researchers have easy access to formulas for finding the confidence from which generalizations can be arrived at. These generalizations usually depend on the size and variation within the sample and universe it came from. In contrast, analytic generalization occurs when “a previously developed theory is used as a template with which to compare the empirical results of the case study” (32-33). In summation, the basis for generalization is its relationship to theory for the purpose of this research. Limitations to generalizeability are discussed in this chapter. The scope and boundaries of generalization from this study to Antoniades’s theory of epistemic communities and settings for further research are suggested in the concluding chapter (Miles and Huberman 1994).
Data collection procedures are documented to increase reliability (Miles and Huberman 1994; Yin 2003). The sampling procedures and interview questions are discussed in more detail later in this chapter. However, due to Human Subject Review Guidelines, the names of the individuals interviewed are not disclosed.

**Sampling Techniques**

Qualitative researchers usually focus on rather small samples chosen purposefully (Patton 1990). The sample size in qualitative studies is usually between five to twenty units of analysis. Random sampling is not appropriate for qualitative projects since generalization is not made to the larger population (Kuzel 1999). Instead, theory is the basis for generalization. Furthermore, since some data sources are better than others, a random sample could cause the researcher to overlook opportunities to collect rich information. Purposive sampling is used, in part, for this study. The purposive sample includes names from three elite newspapers in the United States from January 20th, 2001, the date President George W. Bush was sworn into office, until January 2nd, 2002, the day the NCLB Act was signed into law. The newspapers are *The Washington Post*, *The Washington Times*, and *The New York Times*. These newspapers were chosen since they are widely read by members of the policy community. One hundred fifty-four names were generated using this sampling technique. All of these individuals or their staff were contacted for interviews. Appendix A includes the initial cover letter that was sent to this purposive sampling frame.

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59 Kuzel cites Marshall 1996.
Those who consented to interviews were asked to name additional potential interviewees. This technique is known as snowball sampling. In this method of sampling, the interviewee identifies members of the group under study. These members are used to identify others and so on and so forth (Lincoln and Guba 1985, 233). Not only is this method useful for finding hard-to-identify individuals, but it is also helpful in determining the relationships between members of communities. Individuals who were contacted via snowball sampling received the same cover letter as the purposive sample.

Despite the advantages of this approach, there are some problems connected to it. For example, early contacts may shape the entire sample and preclude access to some members of the population of interest. It is unlikely that all epistemic community members involved in the policy development of the No Child Left Behind Act are identified in this study. However, during the course of interviewing, respondents began to name the same individuals and no new names surfaced. In other words, the interview research reached a saturation point.

Purposive sampling is also used in regards to Congressional testimony. The transcripts of every (non-politician) individual who testified before Congress on behalf of the NCLB Act during 2001 are triangulated with the aforementioned interviews. Skocpol (1984) suggests the collection and analysis of relevant content for the testing of the theory in question. Lustick (1996) asserts that this method introduces bias into the sample. He recommends “explicit triage,” whereby the author explains the reasoning for the content selected for analysis to readers. Following Lustick’s advice, these accounts are selected since they depict an unbiased representation of the testimonies of individuals.
who participated in the policymaking of the NCLB Act. They are also included in this study since they are helpful for the testing of Antoniades’s model of epistemic communities.

**Data Collection**

The first stage of data collection consists of in-depth interviews with individuals involved with the policymaking of the NCLB Act. The analysis draws primarily from the interviews. Permission was granted by the Kent State University Human Subjects Review Board (HSRB) to conduct interviews. An interview schedule was created to test Antoniades’s (2003) theoretical propositions. The interview schedule was pre-tested twice to ensure question clarity. However, interview questions were sometimes rephrased during the interviews to make sure the question was understood. The interview schedule features mostly open-ended questions, with some close-opened items to facilitate recall. (See Appendix B). Open-ended questions are utilized to test the theoretical model of epistemic communities and their actions as fully as possible. Interview questions are modified based on the profession of the individuals interviewed.

The interview schedule is organized into several sections. The first section addresses the goals of the individual and/or the organization he/she worked for during the time NCLB was considered in Congress and whether or not he/she partnered with any other organizations or individuals. If the interviewee did not work with others, the interviewee was asked questions in the last section where he/she is asked about the decision to work alone. The second section asks interviewees who he/she worked with during this time. The third section aims to uncover the nature of the partnership of
epistemic communities and if consensus was reached. The next section contains questions regarding the sharing of information. The fifth section addresses the interviewee’s view on the influence of the partnership. The remaining sections seek to determine if the partnership lasted after the NCLB Act was passed and if there were other coalitions of individuals or groups during the policymaking phase of the Act with whom the interviewee did not collaborate.

Sixteen interviews were conducted between January and March of 2007. The interviews lasted anywhere from five to fifty minutes each. All individuals signed a consent form prior to the interview. Every interview was digitally recorded and transcribed. Notes were also taken during each interview. Two former members of Congress, four former Congressional staff members, and ten current or former members of think tanks or non-profit organizations were interviewed to understand the influence of individuals during the policymaking of the NCLB Act. Six of the interviews were conducted in-person. The in-person interviews were conducted at the location chosen by the interviewee. Letting the interviewees select the location for the interview built trust and rapport (Rubin and Rubin 2005). The remainder of the interviews was conducted over the phone. Depending on time availability, additional questions were sometimes added to probe participants for further information on the policymaking of the NCLB Act (Rubin and Rubin 2005).

All of the analyzed data draws from the transcripts of knowledgeable and experienced interviewees. They each had first-hand experience that is relevant.
Furthermore, each interviewee appears to be credible. At no time did it seem that any of them were deceptive (Rubin and Rubin 2005).

The accuracy of the recall of interviewees could present a potential threat to validity, since some events are likely to have occurred over six years before the interviews were conducted. To deal with this problem, questions are included in the interview schedule to serve as memory triggering devices. Cross-respondent validity is also employed to increase validity. Congressional testimony is used, where possible, to supplement data from the interviews and to check the validity of the interview responses. Triangulation of data sources, as noted earlier, helps guard against problems associated with subjective or inaccurate reporting in addition to problems with recall.

Three Congressional testimonies are also used for data analysis purposes. See Appendix C for a list of these individuals and their positions at the time they testified. There are eight other testimonies on the NCLB Act. However, none of the individuals who gave these testimonies were available for an interview. Furthermore, no linkages between them and the epistemic communities identified in this study were made.

**Data Analysis**

Content analysis is used to examine the Congressional testimony on the NCLB Act and transcripts of the aforementioned interviews. Content analysis is a research technique for systematically examining and making inferences from text (Weber 1985, 9). It is appropriate for theory verification and development. The theoretical goal of this study, the application of Antoniades’s theory of epistemic communities, guides data collection (Hodson 1999). Content analysis will be utilized to identify “the artifacts that
are significant carriers of meaning for a given policy issue” and “communities of meaning/interpretation/speech/practice that are relevant to the policy issue under analysis” or members of epistemic communities that were involved in the policymaking of the No Child Left Behind Act. Words and phrases that measure goals, influence, coalition type, practical and cognitive actions are coded for the purpose of data analysis. A portion of this analysis includes descriptive statistics of words, sentences, phrases, and themes in the Congressional testimonies and interviews. To maximize reliability, another person recoded 10% of the data.

There are several advantages to using content analysis. One is the systematic analysis of the Congressional testimonies establishes an analytic connection between the interviews and quantitative research methods (Hodson 1999). In this case, descriptive statistics are used as the quantitative method. Another strength of content analysis is that validity problems associated with using interview data are addressed using content analysis. The analysis of documents also results in greater objectivity in the analysis of these accounts since “theory testing is spatially and temporally separated from the primary data collection” (Hodson 1999, 69) and they are not created specifically for the purpose of study (Reinharz 1992). Cultural artifacts are not affected by their study as people are (as in interviews, for example). This decreases the chances of intentionally or unintentionally skewing the data in support of the theory tested. One of the most important advantages of content analysis is the ability to eliminate outdated theories (Hodson 1999). Again, one goal of this research is to test the applicability of Antoniades’

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60 See Reinharz 1992, pg. 147.
theory of epistemic communities to the NCLB Act. The addition of Congressional testimonies to the interviews increases the theoretical generalizeability of this research.

Despite the benefits of using content analysis, there are some limitations to this method. The classification, coding, and quantification of documents result in the loss of some of the richness of initial observations. The data will be less sensitive and precise. This sacrifice in the validity of indicators takes place due to the trade-off to attain more generalizeability and the ability to sort between defensible and less defensible conclusions (Hodson 1999).

**Coding Procedures**

The transcription of the interviews resulted in 85 pages of single-spaced text. Thirteen pages of single-spaced Congressional testimony on the NCLB Act are also analyzed. NUDIST-QSR (N6) is used to code the data from the interview transcripts and Congressional testimonies. It allows for the management, storage, and manipulation of large amounts of unstructured data. Coded units ranged from a couple of words to several paragraphs.

Nineteen tree nodes were created using NUDIST. Goals, advancement and hindrance of goals, epistemic community collaboration, partnership, their actions and activities, consensus and lackthereof, methods of information sharing, methods of influence, ongoing collaboration, identification of other groups involved in the policymaking of the NCLB Act, actions of other groups, reasons for not collaborating

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with others, approach from other organizations, opinion regarding the helpfulness of working with other organizations, and other comments are tree nodes created to test Antoniades’s model of epistemic communities.

To summarize, the research design, hypotheses, case study selection, sample selection, data collection, and data analysis described demonstrate that this study is theoretically driven and empirically challenging. The data analysis methods provide for a nuanced and thorough investigation of the data. Efforts are made to enhance internal validity and theoretical generalization throughout the research process.
CHAPTER SIX

EPISTEMIC COMMUNITIES INVOLVED IN
THE POLICYMAKING OF THE NCLB ACT

Introduction

This chapter briefly reviews Antoniades’ framework of epistemic communities. Then it focuses on the responses of the interviewees with regard to their collaboration and partnership with other groups. Next, it discusses the methods interviewees used to influence others. Subsequently, it discusses if interviewees continued to work together to influence policy after the NCLB Act was signed into law. Afterward, whether the stated policy goals of the interviewees for the NCLB Act were met is addressed. Next, the competing groups whom interviewees were aware of that were present during the policymaking surrounding the NCLB Act is discussed. The aforementioned items are analyzed in terms of Antoniades’ theory of epistemic communities.

This chapter also discusses the interview responses of those who chose not to collaborate with other individuals or organizations in their efforts to influence the NCLB Act. These interview responses are not examined in light of Antoniades’s framework of epistemic communities since the framework only takes into account those who operate in networks rather than those who attempt to influence policy individually. Subsequently,

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62 This study draws on data from sixteen interviews and three Congressional testimonies on the NCLB Act for a total of 19 different data sources.
63 Again, Antoniades’ framework of epistemic communities retains the same constitutive traits of Haas’s (1992a) theory of epistemic communities (2003, 27).
the applicability of Antoniades’s framework to the policymaking of the NCLB Act is discussed. Finally, modifications to this framework are suggested.\textsuperscript{64}

**Antoniades’s Framework of Epistemic Communities**


<table>
<thead>
<tr>
<th>Definition: “a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy relevant knowledge within that domain or issue-area” (1992a, 3)</th>
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<tbody>
<tr>
<td><strong>Four Traits Members of Epistemic Communities Share</strong></td>
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<tr>
<td><em>Shared normative and principled beliefs</em> → provide a value-based rationale for the social action of epistemic community members</td>
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<td><em>Shared causal beliefs</em> → “derived from their analysis of practices leading or contributing to a central set of problems in their domain that serve as the basis for elucidating the multiple linkages between possible policy actions and desired outcomes” (1992a, 3)</td>
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\textsuperscript{64} It is important to note that if respondents answered “no” to question number three in the interview, they were not asked questions 4-12. (See Appendix B for the list of interview questions). Instead, they answered questions 13-15. Consequently, some sections of this chapter contain lengthier discussions than do other sections. It is also important to note that some of the interviewees faced time constraints during the interview and were not able to answer every question or to provide as much detail in responses to some questions as others were.
Table 6.2: Andreas Antoniades’s Model of Epistemic Communities

**Definition:** “thought communities made up of socially recognized knowledge-based networks, the members of which share a common understanding of a particular problem/issue or a common worldview and seek to translate their beliefs into dominant social discourse and social practice” (2003, 26)

<table>
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<tr>
<th>This model builds on Peter Haas’s model and retains the same traits.</th>
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**Components of Antoniades’s Model Not Included in Haas’s Model**

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<th>Classification of epistemic communities as <em>ad hoc</em> coalitions or ones that have a <em>constant and holistic character</em></th>
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<td><strong>ad hoc coalitions</strong> ⇒ life is confined to the time and space defined by the problem and its solutions</td>
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<tr>
<td><strong>constant and holistic character</strong> ⇒ “aimed at the establishment and perpetuation of beliefs and visions as dominant social discourses” (2003, 28)</td>
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**Classification of epistemic communities as taking *cognitive* or *practical* action**

<table>
<thead>
<tr>
<th>Cognitive ⇒ epistemic communities control knowledge which gives them the power to impose particular discourses and worldviews on societies</th>
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<tr>
<td>Practical ⇒ epistemic communities influence the policy process by acting as “sources of information” (32), adding new issues to the agenda, mobilizing people and groups to increase support for their ideas, organizing conferences, seminars, press conferences, public discussions, lectures, publications, and working out the details of a policy</td>
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Antoniades’s framework retains many of the same traits as Haas’s, but assigns a prioritization to the social recognition of knowledge authority, giving it the ability to integrate epistemic communities into their social context. This permits the concepts of
knowledge, knowledge authority, and science to be contextualized and historicized, and various historical and cultural “knowledge structures” can be taken into consideration and analyzed (26). Moreover, Antoniades’s notion of “thought community” allows the normative and scientific beliefs that bind “a knowledge-based network” to be brought to the forefront. Additionally, Antoniades’s theory does not appear to imply either the existence of a “unitary science,” from which members draw their expertise, or the existence of a unique methodology in which knowledge is based and tested. Furthermore, as previously stated, some past research has identified weaknesses in Haas’s theory of epistemic communities (Baark and Strahl 1995; Dunlop 2000; Toke 1999). For these reasons, Antoniades’ model of epistemic communities is being used instead of Haas’s.

Antoniades (2003) believes that epistemic communities are “conceptualized and defined as thought communities made up of socially recognized knowledge-based networks, the members of which share a common understanding of a particular problem/issue or a common worldview and seek to translate their beliefs into dominant social discourse and social practice. These thought communities might be local, national, or transnational” (2003, 26). There are two types of epistemic communities in his approach. The first type is an ad hoc coalition. This kind of epistemic community is based on the understanding that policy problems are what define the thought communities and their life is confined to the time and space defined by the problem and its solutions (Antoniades 2003; Adler and Haas 1992). The second type of epistemic community “has a more constant and holistic character aiming at the establishment and perpetuation of

65 Please refer to Table 6.1 on page 179 for a comparison of Haas and Antoniades’s models of epistemic communities.
beliefs and visions as dominant social discourses” (Antoniades 2003, 28). These communities are based on the logic that social reality defines them and that their life spans are dependent on the social interactions and outcome of social struggles, which “produce” that reality (28).

According to Antoniades (2003), epistemic communities take two different levels of action. The first type of action is cognitive. This action concentrates on the role of epistemic communities in the (re)production of (world) social reality, defined as a “game” of social interactions. In this game, epistemic communities control knowledge and knowledge is power to the players. “The logic of the argument is as follows: social reality consists of social facts, social structures and identities” (29). The last three concepts make up intersubjective knowledge, permitting epistemic communities to exercise a “cognitive authority” in regards to this knowledge (29). Consequently, these communities have the power to impose particular discourses and worldviews on societies. This ability permits these groups to have the power to shape individual and group self-understanding in addition to their understanding in regards to their wants and interests. Furthermore, it influences the knowledge and ideas formed within social structures. Antoniades contends epistemic communities are not exogenous to social interactions. Rather, they have the power to develop new understandings and impact the evolution of current intersubjective understandings through which reality and world politics consist (2003, 29-30).

The second type of action these thought communities take is practical. This type of action is related to the policy process. According to Antoniades, epistemic
Communities shape the conceptual framework in which the policy process in question is embedded through influencing social reality. Epistemic communities have the ability to describe and depict this reality through “language power” (31). This power permits them to further constrain and build the conceptual framework in which policymaking takes place. Epistemic communities play an important role in the manner in which states interpret their environments and define their interests. They do this through engaging either directly or indirectly in the policy process. Groups that participate as decision makers in policymaking have a greater ability to integrate their ideas and create their “vision” in the policy process. In fact, this involvement blurs the limits between decision makers and experts/policy advisors (2003, 31).

There are many ways that epistemic communities are involved in policymaking, according to Antoniades. Most importantly, they act as “advisors” or “sources of information” (32). Through this role, they can strongly influence an agent’s policy and interests. These groups can also affect agenda-setting in both domestic and world politics. They do this by either adding new issues to the agenda or by changing the manner in which current issues are dealt with and conceptualized. These communities often inform and mobilize as many people and groups as possible in order to increase support for their ideas and put pressure on the government in question to accept their ideas. The methods employed to attain these goals usually include the organization of conferences, seminars, press conferences, public discussions, lectures, and publications. Access to the media and the existence of an institutional structure are needed in order for epistemic communities to operate at this stage of the policy process (2003).
The last dimension of involvement for epistemic communities in the policy process is more direct. Oftentimes, members of epistemic communities are asked to work out the details of a policy. For example, a government could ask a group of experts to expound on and formulate its position in terms of negotiation strategy, article proposals, and public presentations (2003). Antoniades states there can be direct involvement of epistemic community members in the policy process. This occurs when “experts” are political leaders.

According to Antoniades, no single “knowledge elite” exists. Building on Antoniades, it can be argued that the education policy elite does not exist within a single, coherent knowledge-based community. Instead, it consists of a variety of epistemic communities, which hold differing normative beliefs and visions. They struggle with one another in their effort to establish their discourses and visions of societies. Discourse theory is useful in “understanding the interactions and processes that form ‘reality’ as conflicts and struggles between antagonistic/competitive forces over the structuring of social meaning” occur (36). These struggles take place at both the macro and micro levels. At the macro level, epistemic communities and epistemes struggle with each other to define the ideas in which social structures exist. This structure is related to two other elements of social structures: material capabilities and institutions. “The result of these struggles is the establishment of specific social discourses, of specific cognitive orders” (36). The micro level of struggle takes place in the reality of the macro level. At this level epistemic communities emerge and struggle and cease to exist in relation to specific policy issues and problems (2003, 36). Antoniades argues these two fields/levels of
struggle should be viewed in “concentric terms,” in the sense that the values and visions that struggle at the macro level inform the struggles within the micro level. He asserts that the “overlapping nature of the two levels becomes apparent if one takes into consideration the overlapping memberships between the holistic and the *ad hoc* communities” (2003, 36).

This study finds Antoniades’s framework of epistemic communities is helpful, for the most part, in understanding the policymaking surrounding the NCLB Act. Five different epistemic communities involved in the policymaking of the NCLB Act are identified in this study: four epistemic communities with constant and holistic characteristics and one *ad hoc* epistemic community. These epistemic communities did struggle against each other as Antoniades claims. Furthermore, they were found to take many of the cognitive and practical actions Antoniades describes. Additionally, they did have access to an institutional structure, Congress, that Antoniades claims is necessary for epistemic communities to have to be effective.

However, Antoniades’s model does not take into account some circumstances. One is members of epistemic communities do not necessarily share common worldviews or understandings of policy problems. Nevertheless, individuals in these groups are willing to put their differences aside and work together on shared policy goals. Also, Antoniades’s model should be modified to take into account the fact members of epistemic communities do not need access to the media or to hold press conferences, seminars, or lectures in order to be effective. Furthermore, the findings from this study indicate that, contrary to Antoniades’s model, epistemic communities do not necessarily
emerge, struggle, and/or cease to exist in regards to policy problems and issues. Only one epistemic community identified in this study, the business epistemic community, emerged as a result of the NCLB legislation and ceased to exist after it was enacted.

The following sections describe and analyze the responses of the interviewees. Again, the interview questions are designed to gauge the accuracy of Antoniades’s model of epistemic communities. The interview questions are listed in Appendix B.

**Collaboration and Partnership**

All interviewees were asked if they worked with anyone else (organizations or other people) while NCLB was considered in Congress. The purpose of this question is to determine if they belonged to any of the “socially recognized knowledge-based networks” described by Antoniades and to identify which characteristics defined those networks. Seventy percent of those interviewed indicate they collaborated and partnered with other individuals and organizations in hopes of advancing their policy goals for the NCLB Act. Five different epistemic communities are identified from this question.

The following responses describe the collaboration of the interviewees with other individuals and groups. Three former Senate staff members indicate they worked with outside groups in shaping the NCLB Act. One states she worked with think tanks, professional organizations, school administrators, and interest groups. Another former staff member states he worked closely with several think tanks located in Washington, D.C. He also worked with these organizations since he was familiar with working with

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66 Two employees of these think tanks were interviewed and mentioned they worked with this staff member.
them on “The Three Rs”\textsuperscript{67} proposal during the late nineties. The third former staff member mentions she worked with left-leaning think tanks, teachers’ unions and other interest groups involved in education policy. She worked closely with Democratic staffers\textsuperscript{68} when they drafted the Three Rs proposal and mentions ideas from the Three Rs proposal were incorporated into the NCLB Act. She collaborated with these groups since she was employed by a Democratic senator at that time. All three former Senate staffers worked for Democratic senators and report working more closely with a network of liberal organizations than other networks. The remarks from the aforementioned individuals suggest a liberal epistemic community participated in the policymaking of the NCLB Act.

The director of an education-based think tank located in Washington, D.C. indicates she worked with three other liberal-leaning think tanks in addition to a business interest group.\textsuperscript{69} She worked more closely with the coalition of liberal organizations than the business group. A former employee of a conservative think tank located in D.C. recalls she worked with many other think tanks since the 1998 reauthorization of the Elementary and Secondary Act and until she left her position at her organization in 2005. These think tanks are primarily conservative think tanks, indicating the involvement of a

\textsuperscript{67} The Three R’s bill was proposed by the “New Democrats” as a reauthorization of the Elementary and Secondary Act. The bill’s formal name is the Public Reinvestment, Reinvention, and Responsibility Act. It aimed to increase Title I funding, funding to charter and magnet schools, funding to create new school choice programs, and increase funding for Limited English Proficient students. The bill also included provisions for the upgrade of facilities, better training and pay for teachers, reduced class sizes, and funding for innovative learning experiences. See http://209.85.165.104/search?q=cache:qvxmR-BW2GYJ:www.dlc.org/ndol_ci.cfm%3Fkaid%3D110%26subid%3D900023%26contentid%3D2948+%22the+three+r%27s+proposal%22&hl=en&ct=clnk&cd=1&gl=us.

\textsuperscript{68} These staffers are mentioned in several of the other interviews.

\textsuperscript{69} Her name is mentioned in many of the other interviews as a key person involved in the policymaking surrounding the NCLB Act.
conservative epistemic community in the policymaking of the NCLB Act. When asked why they chose to work with these organizations, both interviewees stress the greater numbers of individuals and organizations involved, the greater they thought their voice would be heard, even if the people they worked with did not agree on “every piece of this.”

While answering a different question later in the interview, a member of a liberal think tank recalls a network of education groups was opposed to the ideas of the liberal coalition with which he collaborated.\textsuperscript{70} He states the education network was comprised of interest groups such as the National Education Association, the American Teachers Federation, and other education interest groups. He adds many professional educator associations also collaborated with the aforementioned interest groups. This interview response suggests the involvement of an epistemic community comprised of education groups.

The response to an employee at a non-profit organization committed to advocacy for Hispanics indicates an epistemic community comprised of Hispanic groups participated in the formulation of the NCLB Act. He recalls working with many non-profit organizations committed to Hispanic rights, a coalition of civil rights organizations,\textsuperscript{71} a professional organization, and a coalition of groups committed to Hispanic education. His organization lobbied with one civil rights group because “at the time they were highly-skilled lobbyists on the issues affecting ELL students and teachers

\textsuperscript{70} The question the interviewee was asked was if he was aware of any groups that opposed the ideas of the group with which he worked. His response is included here for the purpose of identifying the epistemic community comprised of education organizations.

\textsuperscript{71} The interviewee notes over 180 groups make up the civil rights coalition.
who work with them.” It also chose to lobby with another Hispanic rights group because of its skilled lobbying abilities and interest and knowledge about ELL issues.

The testimonies of Edward B. Rust, Jr. and Keith E. Bailey and the research of McGuinn (2006) and Manna (2006a) suggest business groups collaborated with each other to advance their policy goals for the NCLB Act. Rust and Bailey testified on behalf of the Business Coalition for Excellence in Education. Bailey is the Chairman, President, & Chief Executive Officer of Williams. Rust is the Chief Executive Officer of State Farm Insurance Companies. The Business Coalition for Excellence in Education is an ad hoc group consisting of U.S. companies and business organizations that supports “a defined set of principles for education excellence.” Bailey stated the coalition represented over 70 of the leading business organizations and corporate executives in the country. Some of these organizations are the Business Roundtable, the National Alliance of Business, Intel, and Texas Instruments (Manna 2006a). The collaboration of these groups implies an epistemic community of business organizations was involved in the development of the NCLB Act.

As demonstrated in the preceding paragraphs in this section, the interviewees recall they worked with a variety of organizations including professional organizations, interest groups, think tanks, non-profit organizations, and even private individuals. The employees interviewed who were employed at think tanks mention they worked with

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72 Manna (2007) discovers in an interview with Susan Traiman, director of the Education Initiative at the BRT, that President George W. Bush encouraged business leaders to support the NCLB Act. Furthermore, McGuinn (2006) also finds that lobbying by business groups such as the National Alliance of Business, Achieve, Inc., and the Business Coalition for Excellence in Education were “crucial in defeating attempts by liberals and conservatives to water down or remove many of the [NCLB’s] standards, testing, and accountability provisions” (174).
individuals from other think tanks during the time the NCLB Act was pending in Congress. Furthermore, they appear to have worked together prior to 2001 and as will be discussed later in this chapter, they continue to work together. This suggests seventy percent of those interviewed belong to a “socially recognized knowledge-based network” or epistemic community. The remaining thirty percent of interviewees were not permitted by their employers to lobby or work with outside groups. The interview responses of these individuals are discussed later in this chapter.

In summary, the responses to the first interview question indicate there were at least five epistemic communities operating in Washington, D.C. at the time the NCLB Act was pending in Congress. One epistemic community is focused on issues related to the Hispanic community. This epistemic community includes Hispanic education and civil rights organizations. Another epistemic community is comprised of individuals from conservative organizations. This epistemic community included members from large and small conservative think tanks as well as conservative advocacy groups. An additional epistemic community is made up of individuals who have liberal views. This epistemic community was comprised of members of liberal think tanks and newly elected Democrats in Congress. As noted, sometimes individuals from both liberal and conservative think tanks work together. Also, the Business Coalition for Excellence in Education represents a fourth epistemic community. The Business Coalition for

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73 The next section provides evidence these five epistemic communities are indeed epistemic communities based on Antoniades’s definition of epistemic communities.
74 This epistemic community is mentioned in an interview with a member of a think tank centered on Hispanic civil rights issues.
75 The epistemic community comprised of conservative think tanks is mentioned in an interview with a former think tank employee and in an interview with a former Senate staff member.
76 This epistemic community is mentioned in an interview with a former think tank employee.
Excellence in Education is suggested in the testimony of Edward B. Rust, Jr. and on the NCLB Act. Again, the testimony and research of McGuinn (2006) and Manna (2006a) suggests business groups collaborated with each other to advance their policy goals for the NCLB Act. A fifth epistemic community is made of education interest groups and professional organizations. This epistemic community is mentioned in an interview with a member of a liberal think tank.

### Consensus

Those interviewed were asked if they shared the same policy goals with other individuals and organizations with which they collaborated and why. If they did not share similar policy goals, they were asked what the reasons for disagreement of goals were. Interviewees were asked this question to determine if epistemic communities “share a common understanding of a particular problem/issue or a common worldview” as Antoniades argues. In other words, Antoniades asserts members of epistemic communities should share the same conceptions of policy problems.

Only two of those interviewed recall that most of the goals they had were similar to those with whom they collaborated. Eighty-five percent of those interviewed collaborated with other organizations with which they did not enjoy total consensus. For example, a former member of a conservative think tank remembers there was disagreement among the groups her organization collaborated with in regards to mandatory participation in the National Assessment of Educational Progress. A member of a Hispanic think tank notes “we went through a rigorous process to get to a place where we had consensus. We also had rules of engagement in which we would not work
on stuff on which there wasn’t consensus.” A former Democratic Senate aide comments there was consensus on closing the gap, but not “on how to get there.” Another former Democratic aide states there was disagreement among his colleagues on how to implement the NCLB Act. “Different perspectives brought us to the same place” remarks a director of a liberal think tank on the various organizations with whom her think tank collaborated. A former Democratic Senate aide perhaps sums it up best with the comments “I don’t think there’s ever total consensus on anything. I mean every interest group, every individual, has their own personal interest.”

These responses suggest the “socially recognized knowledge-based networks” that Antoniades refers to as epistemic communities do not always share the same understanding of a problem or a common worldview. Antoniades’s framework should take into account that individuals who participate in epistemic communities do not need to share the same worldview for membership and participation in epistemic communities. Despite the lack of a common worldview, these coalitions should still be classified as epistemic communities. As one former Democratic Senate aide states “There’s never consensus on anything.” Since these coalitions work towards a common purpose, they should be identified as epistemic communities. Antoniades’s framework should be modified to consider that members of epistemic communities must work towards a common purpose even if they do not share the same worldview or understanding of policy problems. As demonstrated, some of the interviewees did not share the same worldview with those with whom they collaborated, but decided to work together on certain provisions in the NCLB Act anyway.
These findings do not support the first hypothesis. The first hypothesis postulates groups with similar policy visions were better able to work together than groups with dissimilar policy visions. Given the aforementioned interview responses in this section, Antoniades’s framework should be revised to take into account that individuals who do not share a common worldview put their differences aside to work towards a common purpose or policy solution on issues on which they agree. The aforementioned examples of Hispanic, liberal and conservative organizations putting their differences aside to work towards common goals illustrate this point. As one member of a conservative epistemic community comments “you work together with your allies on those things you have consensus on.”

**Methods of Influence**

The interviewees were asked to describe the types of actions they undertook to advance their policy goals for the NCLB Act. The intention of this question is to determine the types of cognitive and practical actions epistemic communities use. A vast range of action is reported in the interviews. The next two sections focus on the cognitive actions epistemic communities took and on the practical actions members of epistemic communities took.

**Cognitive Action**

Antoniades (2003) argues epistemic communities take two different levels of action. The first type of action is cognitive. This action concentrates on the role of epistemic communities in the (re)production of (world) social reality, defined as a
“game” of social interactions. In this game, epistemic communities control knowledge and knowledge is power to the players. This permits epistemic communities to exercise a “cognitive authority” in regards to this knowledge (29). Consequently, these communities have the power to impose particular discourses and worldviews on societies. This ability permits these groups to have the power to shape individual and group self-understanding in addition to their understanding in regards to their wants and interests.

It is evident from the interviews and testimonies on the NCLB Act that members of epistemic communities engaged in the cognitive action described by Antoniades. For example, all of the interviewees who participated in epistemic communities recall they received information and shared information they had with other members of their respective epistemic communities. A member of a liberal think tank emphasizes the importance of information. He states “in this town, information, it's the currency. Actually, you share two kinds of information. The policy substantive information about ideas, what's going on and also gossip in the sense of who's doing what and so forth and what's happening and all that.” According to a former Democratic aide, “lots of information that people give us is to give to everybody, it’s kind of their platform. We would share everything I got. We shared with everyone on the committee on the Democratic side, and then everybody who really wanted it.” A member of Hispanic epistemic community stresses “Information is everything and communication is key.” The other individuals interviewed for this research also shared and requested information from the organizations with which they collaborated.
This information sharing suggests there is social interaction between people interested in education policy in Washington, D.C. It appears members of epistemic communities exercised some “cognitive authority” at this time and were able to impose certain discourses on the NCLB Act. The next section discusses the cognitive authority members of epistemic communities exercised in regards to the NCLB Act.

Policy Goals Met by the NCLB Act

Many of the goals of the interviewees and those who testified before Congress on the NCLB Act were translated into policy through the NCLB Act. Closing the achievement gap, administrative and school accountability, student competency, accountability for English Language Learners, teacher quality, attracting and retaining qualified teachers, professional development for teachers, higher compensation for teachers, school safety and discipline, services for expelled children, rewards and consequences for schools, supplemental support for students, testing, high standards for students, aligning systems to standards, math and science excellence, class size reduction, and parental involvement were advanced through the enactment of the NCLB Act. These policy goals are explained in more detail in the rest of this section.

One policy goal that was realized by the NCLB Act is closing the achievement gap. A former Democratic Senate staffer mentions closing the achievement gap was a policy goal he had during the time the NCLB Act was pending in Congress. Weingarten\textsuperscript{77} testifies the American Federation of Teachers (AFT) “appreciates the emphasis on

\textsuperscript{77} Randi Weingarten was the Vice-President of the American Federation of Teachers when she testified on the NCLB Act.
closing the achievement gap.” The NCLB did increase federal funding to $26.5 billion representing the largest dollar increase ever in federal aid (Education Week on the Web 2002). The NCLB Act also strengthened Title I, which is the section of the policy that focuses on increasing funding for schools in lower-income areas.78 These provisions imply the liberal epistemic community and the epistemic community centered on education issues enjoyed “cognitive authority” in regards to closing the achievement gap.

Another policy goal pursued by the business and liberal epistemic communities is school accountability. Rust, CEO of the State Farm Insurance Companies and a member of the Business Coalition for Excellence in Education, testified in support of accountability for schools. In separate interviews, a director of a liberal think tank says she wants schools “accountable for moving the performance of low-income kids and kids of color” and a former Democratic Senate aide states holding the “schools accountable for serving kids. And making sure that they get what they’re supposed to get which is graduating ready for whatever they want to do in life” was a policy goal she had for the NCLB Act. The policy goal of school accountability was met through increases in Title I aid and the provision of supplemental education services, federal efforts were made to improve education for low-income and minority students. The inclusion of these provisions suggests the business and liberal epistemic communities were able to impose the discourse of school accountability on lawmakers.

Student competency is another goal that was translated into policy through the NCLB Act. Two former members of Congress mention student competency was an

important policy goal they had for the NCLB Act. A former Democratic member of Congress remarks a “goal of No Child Left Behind was to try to ensure that when you passed or were promoted from one grade to the next, you actually had knowledge and a comprehension of educational material that earned you that right of passage.” A previous Republican member of Congress states “On the most basic level, I wanted to make sure that every kid who went to school in this country, public or private, was coming out with the competencies that would be maximizing their potential.” These policy goals were met since NCLB requires states to bring all pupils up to the proficient level on state tests within twelve years. Each state, district, and school is expected to make progress toward meeting state standards for students as well. Individual schools must meet yearly targets toward this goal for both their student populations as a whole and for certain demographic groups. Examples of these subgroups include the financially disadvantaged, racial and ethnic minorities, and students with disabilities or limited English proficiency (U.S. Department of Education 2002a). These provisions suggest liberal and conservative epistemic communities exercised “cognitive authority” in regards to student competency.79

“Keeping English Language Learners a part of the accountability system of the NCLB Act” is a policy goal mentioned in an interview with a member of a Hispanic think tank that was enacted by the NCLB Act. States are required to meet yearly target test scores for students with limited English proficiency (U.S. Department of Education 2002a). An additional goal advanced by this think tank member was “to ensure that

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79 Antoniades states “many decision makers are themselves experts” (2003, 37) and hence members of epistemic communities.
Congress…does not mandate English-only instruction for ELL students.” This goal was also met since nowhere in the NCLB Act is English-only instruction mandated. The realization of these policy goals suggest the epistemic community comprised of Hispanic organizations enjoyed “cognitive authority” in regards to the NCLB Act.

The liberal and business epistemic communities exercised “cognitive authority” in regards to teacher quality, too. For example, a director of an education think tank in Washington, D.C. remarks, “something [needs to be done] about the inequitable distribution of teacher talent with low-income kids and kids of color getting less than their fair share of our strongest and best educated teachers.” A former Democratic Congressman states:

One goal was to try to make sure that we have the right teachers in the schools with the right education and training. Too oftentimes we found that a teacher that was certified in physical education was teaching a math or science course. Too often we found that it was becoming more and more difficult to get quality teachers into some of the poorer school districts and some of the rural areas and trying to make sure that we had good quality teachers, not only teaching math and science subjects and certified in those areas, but teachers in some of the poorer schools and the more difficult rural communities was just essential.

Keith E. Bailey, Chairman, President, & CEO of Williams and a member of the Business Coalition for Excellence in Education, asserts “States should ensure that teachers have the necessary skills and expertise in the content areas in which they teach.” Rust also argues teachers must have “meaningful preparation” in his testimony on the NCLB Act.
Teacher quality was addressed in the NCLB Act. By the beginning of the 2002-03 academic year, all states must create a definition for “highly qualified teachers” that meets the requirements of the NCLB Act. The States’ definition of highly qualified elementary, middle, and secondary school teachers must include provisions for license or certification by the state. New elementary teachers must have a bachelor’s degree and pass a state test demonstrating subject knowledge and teaching skills in the basic elementary school curriculum. New middle/secondary teachers must have a bachelor’s degree and demonstrate competency in each of the academic subjects taught or complete an academic major or coursework equivalent to a major, graduate degree, or advanced certification. Existing elementary teachers must demonstrate a competency in all subjects taught and have a bachelor’s degree. Existing middle/secondary school teachers must have a bachelor’s degree and meet the requirements for new middle/secondary school teachers or demonstrate competency in all subjects taught. State evaluation standards must be in place to judge teacher competency for existing elementary, middle, and secondary teachers (Education Commission of the States 2003). Again, the inclusion of teacher quality provisions suggest the liberal and business epistemic communities exercised “cognitive authority” in regards to the NCLB Act.

The policy goal of recruitment and retention of qualified teachers was advanced by Randi Weingarten, the former Vice-President of the American Federation of Teachers (AFT). She advocates “attracting and retaining qualified teachers in particularly hard-to-staff areas.” Title II, Part A of the NCLB Act provides funds to attract and retain high
quality teachers (U.S. Department of Education 2008a). The inclusion of this provision in the NCLB Act indicates the epistemic community comprised of education groups exercised “cognitive authority” in regards to attracting and retaining quality teachers.

Professional development is a goal held by the education and business epistemic communities that was translated into policy. Weingarten, Rust, and Bailey’s testimonies support professional development for teachers. For example, Weingarten stresses there should be an “emphasis on improving the quality of teaching by providing teachers with high quality professional development and ensuring that all teachers are qualified and teaching in field.” Rust testifies “Teachers and administrators require…..continuing education focused on content knowledge, improved teaching skills and school management.” Support for professional development for teachers was included in the NCLB Act. States can use NCLB funds for initiatives that improve teacher knowledge in one or more of the subjects they teach (National Humanities Center 2008). In regards to professional development for teachers, the testimonies of Weingarten, Rust, and Bailey imply the business and education epistemic communities had “cognitive authority.”

Weingarten’s testimony requests higher compensation for teachers. She states “in February, our national Executive Council adopted a resolution calling for enhancing the traditional teacher compensation schedule because AFT believes it is time to explore viable, fair and educationally sound teacher compensation options that will raise salaries.” This policy goal was met since under the NCLB Act, districts can use Title I funds to meet their specific needs such as increasing teacher pay or merit pay (U. S.

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Department of Education 2002a). The inclusion of provisions for higher compensation for teachers indicates the education epistemic community enjoyed “cognitive authority” in this regard.

The inclusion of school safety provisions in the NCLB Act implies the business epistemic community exerted “cognitive authority.” The testimony of Rust, the former CEO of State Farm Insurance Companies and a member of the Coalition for Excellence in Education, supports school safety. He notes “Student learning is best achieved in a safe, well-disciplined and caring environment.” The NCLB Act contains a provision for safe schools indicating this policy goal was met. By the beginning of the 2003-04 academic school year, States were required to develop criteria for identification of “persistently dangerous” schools. Under this category, States establish and implement a policy to permit students to transfer out of a school that has been identified as persistently dangerous into another public school within the district. States are required to create and execute a policy of permitting pupils who are victims of violent criminal offenses to transfer to another public school within the district (Education Commission of the States 2003).

The testimony of Weingarten, former Vice-President of the AFT, supports services for expelled children. She advocates “alternative services for children who have been expelled from school.” Title IV, Part A of the NCLB Act provides grant money to states for services for expelled children as well as those who are homeless, pregnant,

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parenting, or are dropouts (U. S. Department of Education 2002a). The provision of services for expelled children suggests the education epistemic community exercised “cognitive authority” in regards to services for expelled children.

Both Rust and Bailey, members of the Business Coalition for Excellence in Education, testified there should be rewards for schools that improve student achievement and consequences for schools that do not in their testimonies. This policy goal was met since there are provisions in the NCLB Act for school rewards and punishments. States may offer rewards for school divisions that exceed adequate yearly progress requirements for two consecutive years. If a Title I school does not show annual yearly progress for two consecutive years, then the school is identified as being in need of improvement. If a school fails to meet annual yearly progress for two consecutive years, parents can use vouchers to purchase supplemental services for their children from public and private schools. Parents can also opt to transfer their child to a better public school in the same district (U. S. Department of Education 2002b). The inclusion of rewards and punishments for schools implies the business epistemic community enjoyed “cognitive authority” on this matter.

The business epistemic community also exercised “cognitive authority” in regards to supplemental support for students. Bailey, Chairman, President & CEO of Williams testifies “The Coalition would support adding language to the bill that would get additional education assistance to those individual students who are assessed as falling short of standard, so that they will have every chance to come up to standard with timely,

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appropriate remediation.” The business epistemic community had this goal met since the NCLB Act provides parents with children in a school identified as “in need of improvement” federal educational dollars in the form of vouchers to obtain supplemental educational services. These services include tutoring, after school services, and summer school programs, which can be obtained at religious, secular, public, or private schools.

Both Rust and Bailey testify in support of annual assessments of student academic progress in reading and math in grades 3-8. According to Rust, “Well constructed, academically sound tests aligned to State standards can be a useful diagnostic tool for teachers to help students meet their highest academic potential.” These policy goals were met under the NCLB Act. Beginning with the 2002-03 school year, schools were required to administer tests in each of three grade spans, grades 3-5, grades 6-9, and grades 10-12. By the 2005-06 academic year, States were required to test pupils yearly in mathematics and reading (U. S. Department of Education 2002a). The student testing required by the NCLB Act indicates the business epistemic community exercised “cognitive authority” in this regard.

The business epistemic community also exerted “cognitive authority” in regards to high standards for students. Both Rust and Bailey’s testimonies address this matter. “All States should have high quality, rigorous academic standards that reflect the levels of student achievement necessary to succeed in society, higher education, or the modern workplace” according to Bailey. This was also a policy goal of a former Democrat Senate aide. “The most important thing was to make it so that schools were all working toward some sort of minimum standard of curriculum, and that minimum standard applied to all
students” stressed this aide. This policy goal was realized by the NCLB Act since States are required to bring all pupils up to the proficient level on state tests within twelve years. Each State, district, and school is expected to make progress toward meeting State standards, too. Individual schools must meet yearly targets toward this goal for both their student populations as a whole and for demographic groups such as the financially disadvantaged, racial and ethnic minorities, and students with disabilities or limited English proficiency (U.S. Department of Education 2002a).

Aligning systems to standards is a policy goal advanced by the business epistemic community. Bailey, Chairman, President, & CEO of Williams, testifies “To be held accountable, school officials and teachers must be supported by aligned systems of assessments and standards for academic content.” According to Rust, CEO of State Farm Insurance Companies, “States should be provided specific support for the joint planning and design among education authorities to help them align systems of teacher preparation, professional development, curriculum development, assessments, and accountability to high state academic standards.” Under Title I of the NCLB Act, States are required to align systems and standards (U.S. Department of Education 2002c). The alignment of systems and standards required by the NCLB Act suggests the business epistemic community enjoyed “cognitive authority.”

The testimonies of Rust and Bailey indicate the business epistemic community exercised “cognitive authority” in regards to math and science excellence, too. Rust testifies “We strongly urge additional resources targeted towards math and science

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education with a strong emphasis on the effective use of technology to help improve student achievement.” Bailey testifies “the Coalition supports aggressive leadership and investments to support improvements in math and science excellence. Efforts must be undertaken to increase the number of skilled math and science teachers in K-12 by substantially improving the quality of their preparation and professional development and by expanding recruitment incentives.” Math and science excellence were translated into policy since the NCLB Act requires schools to hire teachers who are knowledgeable and experienced in math and science by 2005 (U. S. Department of Education 2008b). As previously stated, States can use NCLB funds for initiatives that improve teacher knowledge in one or more of the subjects they teach (National Humanities Center 2008), which includes math and science.

The education epistemic community enjoyed “cognitive authority” on the matter of class size reduction. The testimony of Weingarten, former Vice-President of the American Federation of Teachers, supports continued federal funds for class size reduction. This policy goal was realized since federal funds are allocated under the NCLB Act for class size reduction. The Class-Size Reduction Program was incorporated into NCLB Title II Teacher Quality block grant. States and local education agencies may use any portion of the nearly $3 billion in Title II funds to hire qualified teachers to reduce class size (U.S. Department of Education 2008c).

Rust’s testimony encourages parental involvement. He argues, “Involved parents support the learning process, influence schools and make choices about their children’s

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education.” This policy goal was met since funding for parental involvement is provided for under Title I of the NCLB Act (U. S. Department of Education 2003),\textsuperscript{88} suggesting the business epistemic community exerted “cognitive authority” in this regard.

As previously stated, each of the five epistemic communities was able to impose a discourse or worldview on lawmakers in regards to the NCLB Act. The liberal epistemic community imposed the discourses of closing the achievement gap between affluent students and their counterparts, administrative and school accountability, student competency, and teacher quality. The conservative epistemic community imposed the discourse of student competency. Closing the achievement gap, attracting and retaining qualified teachers, professional development, higher compensation for teachers, services for expelled children, and class size reduction were the discourses accepted by lawmakers by the epistemic community comprised of education groups. The business epistemic community imposed the discourses of administrative and school accountability, teacher quality, professional development for teachers, safety and school discipline, services for expelled children, rewards and consequences for schools, supplemental support for students, testing, high standards for students, aligning systems to standards, math and science excellence, and parental involvement. The epistemic community comprised of groups that focus on Hispanic issues imposed the discourses of keeping English language learners a part of the accountability system and the omission of English only instruction in schools.

\textsuperscript{88} See \url{http://www.ed.gov/parents/academic/involve/nclbguide/parentsguide.pdf}. 
One likely reason why these epistemic communities were successful in advancing some of their policy goals is that several of these policy goals were shared by at least two epistemic communities. For example, the policy goals of closing the achievement gap, school accountability, student competency, teacher quality, and professional development for teachers were shared by two epistemic communities. A few of those interviewed for this study felt working with other groups on shared policy goals would give them greater influence on policymakers. For example, when asked why she worked with outside organizations on the NCLB Act, a conservative think tank member notes “it was the numbers, I guess” indicating the more people she and her organization worked with, the more influence they would have on the NCLB legislation. A member of a liberal think tank agrees. She comments “We generally think, obviously, that the more voices on the same side of an issue, the better.”

Another probable reason why the aforementioned epistemic communities had so many of their policy goals met is because many of these policy goals were already included in the blueprint President Bush sent to Congress shortly after he was inaugurated or in the original NCLB Act. This blueprint proposed the consolidation of categorical grant programs, yearly testing in Grades 3-8, yearly participation of fourth and eighth graders in the National Assessment of Educational Progress, rewards and

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89 Closing the achievement gap is a goal shared by the liberal and education epistemic communities. Student competency was pursued by both the liberal and conservative epistemic communities. Accountability for schools is a goal shared by the business and liberal epistemic communities. The liberal and business epistemic communities pursued the policy goal of teacher quality. Professional development for teachers was a goal shared by the education and business epistemic communities.

90 Shortly after President Bush sent the blueprint to Congress, the Committee on Education and the Workforce drafted a preliminary version of the NCLB Act. This version of the bill is 107 H.R. 1. This bill is discussed in more detail later in this chapter.
consequences for schools that fail to meet annual yearly progress, vouchers to private schools for supplemental services, provisions for closing the achievement gap, and State and school report cards that report racial achievement data (DeBray 2004, 87).

Antonaides states one of the weaknesses of his model of epistemic communities is that it does not “draw meaningful boundaries between the *political* and the *epistemic*; between power and knowledge” (2003, 37). Consequently, “the production of socially legitimate knowledge *is* politics, and politics *is* the legitimization of (some) knowledge.” This means politics, at least in part, determines which epistemic communities are going to be more successful than others. Since the Bush Administration supported many of the goals the epistemic communities identified in this study had, the political climate at the time may have determined the extent to which epistemic communities are successful in their policy pursuits. This weakness in Antonaides’s model is discussed in more depth later in this chapter.

Even though all of the epistemic communities identified in this study were able to impose their discourses or worldviews in regards to some policy goals, they had some policy goals that were not met. The next section describes the policy goals these epistemic communities had that were not realized by the NCLB Act.

**Policy Goals Not Met**

Members of the epistemic communities identified in this study had other goals that were not translated into policy. These unmet goals suggest their influence or “cognitive authority” on legislation is limited in some regards. The goals of greater flexibility, greater school choice, the consolidation of categorical grants, school
autonomy, and funding for afterschool programs were not met since there are no provisions for them in the NCLB Act. The likely reasons why the epistemic communities did not have all of their policy goals met are discussed later in this section.

Interviews with individuals from the liberal and conservative epistemic communities indicate their respective epistemic communities were not successful in imposing the flexibility discourse or worldview on lawmakers. An interviewee from a liberal think tank remarks “I don't think the law is successful in really getting that sort of flexibility for accountability bargain right.” One former conservative think tank employee notes, “it had very little flexibility.” These interview responses indicate the cognitive authority of the liberal and epistemic communities was not accepted by lawmakers in regards to flexibility.

School choice is an example of another policy goal that was not realized to a great extent by the NCLB Act. An interviewee bemoans the fact “the [school] choice provision was just sort of miniscule.” This “miniscule” provision indicates the epistemic community comprised of conservative think tanks was not successful in imposing its discourse or worldview on policymakers. Under the NCLB Act, parents with children in a school identified as “in need of improvement” are able to use federal education dollars in the form of vouchers to obtain “supplemental educational services” (U. S. Department of Education 2002a) from secular and religious private schools. These services include tutoring, after school services, and summer school programs. Parents can also send their children to a better performing public school or a public charter school if their child is attending a school in need of improvement. The conservative epistemic community
hoped school choice would be extended to vouchers for full-time attendance at private schools. The limited school choice in the NCLB Act suggests the cognitive authority of the conservative epistemic community itself was limited.

Randi Weingarten, the former Vice-President of the American Federation of Teachers, testified school choice should only be available within the public school system. She testified against the usage of federal funds for education at private schools. Her testimony suggests the epistemic community comprised of education organizations was limited in terms of policy success since there is a provision in the NCLB Act that allows for the usage of federal funds for supplemental services from private schools. However, the Act also provides for school choice within public schools, which Weingarten supports. The provision of federal funds for supplemental services at private schools indicates the “cognitive authority” of the epistemic community made of groups focused on issues was not accepted on this matter.

The “cognitive authority” of this epistemic community is also limited in regards to the consolidation of federal education grants to the States. Weingarten states “The AFT believes that the Administration bill is fatally flawed, however, with its incorporation of vouchers and block grants” in her testimony on the NCLB Act. However, categorical grants were consolidated under the NCLB Act. Title VI, Part A of the NCLB Act provides for the consolidation and flexible use of funds for States, if eligible.91 Title IX, Part B provides for the consolidation of State administrative funds for elementary and

91 According to section 6142 of Title VI, Part A of the NCLB Act, States must apply for flexible use of funds.
secondary education programs. It also provides for the consolidation of funds for local administration.

However, the conservative epistemic community did not feel that enough categorical grants were consolidated into block grants. A former member from a conservative think tank notes “Lots of small programs have patrons” and adds, as a result, these programs were not consolidated into block grants. The inclusion of categorical grants in the NCLB Act suggests the “cognitive authority” of the conservative epistemic community was limited in this regard.

Rust’s testimony also addresses school autonomy. He states, “School autonomy provides individual schools the responsibility and accountability to make decisions needed to achieve high performance and accountability.” However, there is no provision for school autonomy in the NCLB Act. This suggests the business community’s “cognitive authority” was not accepted in regards to school autonomy.

Weingarten, former Vice-President of the AFT, requests funding for afterschool programs. Nevertheless, there is no provision for funding for afterschool programs in the NCLB Act. The omission of this provision suggests the influence of the epistemic community comprised of education groups was limited on this matter.

As demonstrated, the policy success of four of the five epistemic communities identified in this study is limited. The liberal epistemic community did not secure the degree of flexibility it wanted. The conservative epistemic community was not satisfied with the degree of flexibility and school choice provided for by the NCLB Act. The epistemic community comprised of education groups was not satisfied with the provision
in the NCLB Act that permitted vouchers for supplemental services from private schools. It was not satisfied with the consolidation of some federal categorical grants to States and the omission of funding for afterschool programs. The epistemic community composed of business groups was not satisfied by the lack of school autonomy provided by the NCLB Act either.

One likely reason why the conservative and education epistemic communities did not have some of their policy goals met is the need for members of Congress and the President to compromise with competing interests. For example, members of the conservative epistemic community wanted greater school choice than the NCLB Act permitted. The conservative epistemic community wanted school vouchers available for students to escape low-performing public schools and attend private schools full-time. Instead, the NCLB Act only provided vouchers for supplemental services such as tutoring at private schools. Randi Weingarten testified against the usage of federal funds for private schools. However, again, the NCLB Act does provide funds for supplemental services at private schools.

The consolidation of education grants provides another example of the need of policymakers to compromise with competing interests. Again, Weingarten’s testimony is opposed to the consolidation of federal categorical education grants to the States. Nevertheless, the NCLB Act provides for the consolidation of administrative funds for elementary and secondary education programs. However, members of the conservative epistemic community did not believe that enough categorical grants were consolidated. In summation, the limited school choice available under the NCLB Act and the
consolidation of education grants provide examples of provisions that reflect the compromise of competing interests.

**Practical Action**

The second type of action epistemic communities take is practical. Epistemic community members who participate as decision makers in policymaking have a greater ability to integrate their ideas and create their “vision” in the policy process. In fact, this involvement blurs the line between decision makers and experts/policy advisors (2003, 31). Two members of Congress were interviewed for this study and did serve as both experts and decision makers in regards to the NCLB Act. Nevertheless, there are many ways that members of epistemic communities who are not lawmakers are involved in policymaking. Most importantly, they act as “advisors” or “sources of information” (32). All of the epistemic communities identified in this study served as advisors or sources of information. These findings are discussed in more detail later in this section.

According to Antoniades, these groups can also affect agenda setting in both domestic and world politics by adding new issues to the agenda or by changing the manner in which current issues are handled and conceptualized. These communities often inform and mobilize as many people and groups as possible in order to increase support for their ideas and put pressure on the government in question to accept their ideas. The methods epistemic communities use typically includes the organization of conferences, seminars, press conferences, public discussions, lectures, and publications. Antoniades notes access to the media and the existence of an institutional structure are needed in
order for epistemic communities to operate at the agenda-setting stage of the policy process (2003). This section discusses the support this study finds for these claims.

The last dimension of involvement for epistemic communities in the policy process is less direct. Oftentimes, members of epistemic communities are asked to work out the details of a policy. For example, a government could ask a group of experts to expound on and formulate its position in terms of negotiation strategy, article proposals, and public presentations. None of the interviewees indicate they were approached by the government to formulate its position, negotiate, write article proposals, or give public presentations.

Advisors and Information Sources

All of the think tank employees interviewed did present information to members of Congress, serving as “advisors” and information sources. Every past or present Senate aide also shared information with other members of Congress and their staff, too. Since the former Senate aides are members of the liberal epistemic community described in this study, this suggests the liberal epistemic community attempted to influence members of Congress to pass education legislation the liberal epistemic community supported. A former conservative think tank employee notes she and her colleagues used a “flurry of papers, memos, and meetings with members of Congress.”92 An employee at a think tank comprised of groups focused on issues that concern the Hispanic community notes he and his colleagues presented information to lawmakers. He states:

92 The interviewees who collaborated with others were asked if they still had any reports or other documents they used to influence members of Congress. All but one of the interviewees no longer had this documentation. The interviewee who still had the relevant documents was unable to locate them.
We were able to get information through the Hispanic Education Coalition…

We were also able to get information from some research communities which we supplied to the White House on effective schooling for ELL students because they didn’t believe us that English immersion isn’t always the most effective way to work with these kids…And then there’s the typical-as far as sharing kind of behind-the-scenes information among different groups. And then there’s just the typical things where we did talking points and other fact sheets, stuff like that we sent to members [of Congress] to shape their thinking on this.

Furthermore, the testimonies of Keith E. Bailey and Edward B. Rust, Jr., members of the Business Coalition for Excellence in Education, indicate the business epistemic community engaged in practical action via testimony to influence policymakers. The testimony of Randi Weingarten, former Vice-President of the American Federation of Teachers, also implies the education epistemic community used practical action through testimony to persuade lawmakers.

The aforementioned interview responses indicate members from the liberal and conservative epistemic communities and the epistemic community comprised of organizations focused on Hispanic civil rights did serve as “advisors” and information sources to members of Congress. Furthermore, the testimonies of Bailey and Rust indicate the business epistemic community also served as information sources to members of Congress. These findings support Antoniades’s contention that epistemic communities act as “advisors” or “sources of information.”
Agenda-setting

As previously stated, Antoniades argues epistemic communities can help set the agenda. Epistemic communities attempt to set the agenda by adding new issues to the agenda or by changing the manner in which current issues are handled and conceptualized. These communities often inform and mobilize as many people and groups as possible in order to increase support for their ideas and put pressure on the government in question to accept their ideas. The methods epistemic communities use typically includes the organization of conferences, seminars, press conferences, public discussions, lectures, and publications. Antoniades notes access to the media and the existence of an institutional structure are needed in order for epistemic communities to operate at the agenda-setting stage of the policy process (2003). As previously stated, this study finds mixed support for Antoniades’s aforementioned claims. The rest of this section discusses the support found for and against these arguments. These findings are then analyzed in light of the political climate during the time the NCLB Act was pending in Congress.

Education reform was an agenda priority for President Bush and was a focal point of his 2000 campaign. Before he was inaugurated, Bush invited twenty members of Congress, both Republican and Democrat, to Austin to discuss education policy. On January 23rd, 2001, three days after President Bush’s inauguration, the Bush

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93 Several of the twenty members invited to President Bush’s home in Austin are Representative Rob Andrews (D-NJ), Senator Evan Bayh (D-IN), Representative John Boehner (R-OH), Representative Timothy Roemer (D-IN), Senator Judd Gregg (R-NH), Senator Jim Jeffords (formerly R-NH, now an Independent), Senator Jeff Bingaman (D-NM), Representative Michael Castle (D-DE), Representative George Miller (D-CA), Representative Rob Andrews (D-NJ), and Senator Zell Miller (D-GA) (DeBray 2004, Rudalevige (2003), and Manna 2006).
Administration sent a thirty-five page blueprint of the NCLB Act to Congress. This blueprint included the input of Bush’s former education adviser in Texas, Margaret La Montagne, Sandy Kress, a former White House staff member, Sarah Yousseff, a former staff member from the Heritage Foundation, and the twenty members of Congress Bush invited to Austin (DeBray 2004, Rudalevige 2003). Bush’s campaign proposals for education reform were included in this blueprint. It proposed the consolidation of categorical grant programs, yearly testing in Grades 3-8, yearly participation of fourth and eighth graders in the National Assessment of Educational Progress, rewards and consequences for schools that fail to meet annual yearly progress, vouchers to private schools for supplemental services, provisions for closing the achievement gap, and state and school report cards that report racial achievement data (DeBray 2004, 87).

President Bush left the drafting of the NCLB legislation to the Committee on Education and the Workforce in the House of Representatives. However, the Bush Administration had a great deal of influence on the drafting of this legislation. In an interview with an employee at a liberal think tank, outside organizations were not involved in the drafting of the NCLB Act. DeBray’s (2004) research also indicates outside groups did not play much of a role in the drafting of the NCLB legislation (87).

Antoniades claims epistemic communities influence the governmental agenda. As previously stated, each of the epistemic communities identified in this study had some of their policy goals met. However, most of these policy goals were already included in the blueprint Bush sent to Congress shortly after he was inaugurated. Only one of the

94 Margaret La Montagne is Margaret Spelling, the current Secretary of Education.
epistemic communities identified in this study, the epistemic community comprised of education groups, may have influenced the governmental agenda in regards to the NCLB Act. Consequently, the remaining four epistemic communities identified in this study most likely had indirect influence on the governmental agenda at this time or no influence at all. Table 6.3 lists policy goals advanced by the NCLB Act on the next page. It includes the policy goals that were mentioned in Bush’s blueprint and in 107 H.R. 1 as well as the policy goals pursued by the epistemic communities identified in this study.
Table 6.3: Policy Goals Advanced by the NCLB Act

<table>
<thead>
<tr>
<th>Policy Goals</th>
<th>Inclusion in Bush’s Blueprint</th>
<th>Inclusion in 107 H. R. 1</th>
<th>Epistemic Community Policy Goal</th>
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<tr>
<td>Closing the Achievement Gap</td>
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<td>X</td>
<td>Liberal and Education</td>
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<tr>
<td>Administrative &amp; School Accountability</td>
<td>X</td>
<td>X</td>
<td>Business and Liberal</td>
</tr>
<tr>
<td>Student Competency</td>
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<td>X</td>
<td>Liberal and Conservative</td>
</tr>
<tr>
<td>Better Testing</td>
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<td>X</td>
<td>Hispanic</td>
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<tr>
<td>Accommodations for English language learners</td>
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<tr>
<td>Better Assessments for English language learners</td>
<td></td>
<td>X</td>
<td>Hispanic</td>
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<tr>
<td>Omission of English-only Instruction in NCLB Act</td>
<td></td>
<td>X</td>
<td>Hispanic</td>
</tr>
<tr>
<td>Teacher Quality</td>
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<td>X</td>
<td>Liberal and Business</td>
</tr>
<tr>
<td>Attracting and Retaining Qualified Teachers</td>
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<td>Education</td>
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<td>Professional Development for Teachers</td>
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<td>Higher Compensation for Teachers</td>
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<td>School Safety and Discipline</td>
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<td>Business</td>
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<td>Services for Expelled Children</td>
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<td>Business and Education</td>
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<tr>
<td>Rewards and Punishments for Schools</td>
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<td>X</td>
<td>Business</td>
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<tr>
<td>Supplemental Support for Schools</td>
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<td>Testing</td>
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<td>High Standards for Students</td>
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<td>Aligning Systems to Standards</td>
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<td>Math and Science Excellence</td>
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<td>X</td>
<td>Business</td>
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<td>Class Size Reduction</td>
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<td>Parental Involvement</td>
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<tr>
<td>Vouchers for Supplemental Services</td>
<td>X</td>
<td>X</td>
<td>Business and Conservative</td>
</tr>
</tbody>
</table>
Consolidation of Categorical Grants | X | X | Conservative

The epistemic community focused on issues related to the Hispanic community pursued securing testing accommodations, better assessments for English Language Learners, and keeping English-only instruction out of the NCLB Act. There are provisions for these policy goals in 107 H.R. 1, suggesting this epistemic community did not necessarily influence the governmental agenda during the time the NCLB Act was considered in Congress.

The liberal epistemic community pursued the policy goals of closing the achievement gap between affluent and disadvantaged students, administrative and school accountability, student competency, and teacher quality. There are provisions for these policy goals in 107 H.R. 1 and Bush’s blueprint. The inclusion of these provisions suggests the liberal epistemic community may not have influenced the governmental agenda during the time the NCLB Act was pending in Congress.

Closing the achievement gap, attracting and retaining qualified teachers, professional development, greater compensation for teachers, and services for expelled children are policy goals pursued by the epistemic community comprised of education organizations. There are provisions for these policy goals in 107 H.R. 1, too. Moreover, there are provisions for closing the achievement gap and teacher development in Bush’s blueprint, as well. The inclusion of these provisions suggests this epistemic community did not necessarily influence the governmental agenda in regards to these policy goals either. However, there is a provision for class size reduction that was included in the
enacted NCLB Act (P.L. 107-110), but was not included in the initial bill (107 H.R. 1) or in Bush’s blueprint. The inclusion of class size reduction in the enacted NCLB Act indicates the epistemic community comprised of education groups may have shaped the governmental agenda in this regard.

The epistemic community comprised of business groups pursued the policy goals of administrative and school accountability, teacher quality, professional development for teachers, safety and school discipline, services for expelled children, rewards and consequences for schools, supplemental support for students, testing, high standards for students, aligning systems to standards, math and science excellence, and parental involvement. There are provisions for these policy goals in the initial NCLB bill, as well. Provisions for administrative and school accountability, teacher quality, rewards and consequences for schools, supplemental support for students, testing, and high standards are also included in Bush’s blueprint. The inclusion of these provisions in 107 H.R. 1 and Bush’s blueprint indicate this epistemic community did not necessarily influence the governmental agenda.

Student competency and vouchers for supplemental services are policy goals pursued by the conservative epistemic community. However, there are provisions for these goals in both Bush’s blueprint and 107 H.R. 1, suggesting this epistemic community did not have influence on the governmental agenda in regard to the NCLB Act.

In summary, only one of the five epistemic communities may have shaped the governmental agenda. The epistemic community comprised of education groups may
have added class size reduction to the governmental agenda since there is no provision for it in Bush’s blueprint or 107 H.R. 1. However, federal funds had been committed to class size reduction in previous federal policies. The commitment of federal funds to class size reduction suggests that certain interests have policy monopolies in some policy domains (Baumgartner and Jones 1993). This study finds very limited support for Antoniades’s claim that epistemic communities set the agenda in the case of the NCLB Act.

Again, Antoniades asserts the methods employed to attain policy goals usually include the organization of conferences, seminars, press conferences, public discussions, lectures, and publications. A member of a think tank that focuses on issues related to the Hispanic community notes he attended a conference to advance his organization’s policy goals. According to a former member of a conservative think tank, she and others interested in education issues participated in public discussions on problems facing public education. Writing position papers is one method that is mentioned in all of the interviews with past or current members of think tanks. In summary, some support is found for Antoniades’s assertion that the aforementioned methods are used by members of epistemic communities to pursue policy goals. However, none of the interviewees mentioned attending a press conference or giving a lecture to influence the NCLB legislation.

According to Antoniades, access to the media is necessary for epistemic communities to operate at the agenda-setting stage of the policy process. Two former liberal think tank employees mention they wrote opinion-editorials to influence the
NCLB Act. Both were also interviewed by online newsmagazines for their opinion on the NCLB Act before it was enacted. Furthermore, the Democratic Senate aides also had access to the media. A former conservative think tank employee indicates she had access to the media, too. She states the New York Times contacted her as well as television shows. The former Republican and Democratic Congressmen had access to the media. Also, the epistemic community comprised of business groups, the Business Coalition for Excellence in Education also had access to the media. During the time the NCLB Act was pending in Congress, the Business Roundtable, a member of the Business Coalition for Excellence in Education issued one news releases related to the NCLB Act. The epistemic community composed of education groups had access to the media, too. For example, Sandra Feldman, former head of the American Federation of Teachers and Bob Chase, former president of the National Education Association are quoted in an article that appeared in the Washington Post on February 27th, 2001. Both leaders are also quoted in an article in Business Week titled “How to Fix America’s Schools.” These findings suggest four epistemic communities had access to the media. These epistemic communities are the liberal, conservative, education, and business epistemic communities. However, the epistemic community centered on Hispanic issues also enjoyed policy successes despite the fact it does not appear to have had access to the media. This epistemic community imposed the discourses of keeping English Language

95 These news release is “The Business Roundtable Calls Conference Report a Vital Step Forward for American education.” This news release was issued in December of 2001.
96 This article is titled “The First Lady’s School Cheers; Mrs. Bush Stresses the Need for Teachers.” It is on page C1.
97 This article was featured in the March 19th, 2001 issue on page 66.
Learners a part of the accountability system and the omission of English only instruction in schools.  

As demonstrated in the preceding paragraph, this study finds mixed support for Antoniades’s claim that access to the media is necessary for epistemic communities to operate. Four of the five epistemic communities identified in this study had access to the media. However, the epistemic community focused on Hispanic issues had its policy goals met without access to the media. Antoniades’s framework should take into account that networks can successfully operate without access to the media. The epistemic community comprised of Hispanic groups had access to the White House. With the exception of the two former members of Congress, no one interviewed for this study indicates they had access to the White House. Perhaps access to this institution is at least as important for policy success as access to the media is.

Antoniades asserts an institutional structure is needed for epistemic communities to operate at the agenda-setting stage of the policy process. This study supports Antoniades’s claim that access to an institutional structure is needed for epistemic communities to function. The interviews and testimonies on the NCLB Act indicate there is interaction between epistemic communities and Congress. Congress largely served as the institutional structure epistemic communities communicated with during the time the NCLB Act was pending legislation. However, the epistemic community centered on issues related to Hispanics also communicated with the White House, another institutional structure. It is important to note that some institutional structures may be

98 Google and Lexis-Nexis searches did not indicate this epistemic community used the media to add to the governmental agenda.
more effective than others. Again, the epistemic community comprised of Hispanic groups was the only epistemic community to have access to the White House. Despite the fact that it did not have access to the media, its primary goals (the inclusion of English language learners in assessments and the omission of English only instruction in the NCLB Act) were met. Perhaps access to the White House is more important than access to Congress for policy success under some circumstances.

In summary, support is found for Antoniades’s arguments that members of epistemic communities serve as “advisors” or “sources of information” (32). Some support is found for Antoniades’s assertion that access to the media is needed for epistemic communities to be effective. Four out of five of the epistemic communities identified in this study had access to the media. The epistemic community comprised of Hispanic groups did not have access to the media. However, it had access to the White House and was able to have two of its chief policy goals met under the NCLB Act. This study also supports Antoniades’s claim that access to an institutional structure is necessary for epistemic communities to be successful. Four epistemic communities had access to Congress whereas one, the Hispanic epistemic community, had access to the White House. In the case of the NCLB Act, access to the White House is more important than access to Congress for the policy goals of epistemic communities to be met.

**Attempts to Influence Others**

Next, interviewees were asked if they tried to influence others with the information they had and if so, how. The purpose of this question is to determine if they sought to “translate their beliefs into dominant social discourse and social practice”
(Antoniades 2003, 26). All of the interviewees with the exception of those who worked for non-profit organizations indicate they shared information they had in hopes of advancing their policy goals for the NCLB Act. These interview responses support Antoniades’s concepts of a “thought community” that binds together a “knowledge-based network” (27) and the idea that members of epistemic communities participate in the policy process by acting as “advisors” or “sources of information” (32). For example, one former Senate staff member recalls being presented with information from various groups in hopes of influencing the language in the NCLB Act. She used this information to influence others. She states, “That is the fundamental job of what Congress does and what staff do, so yes. No question. And that’s what we do, we not only take information, we try to influence, we have an agenda, and most importantly we have to get the job done. Our job is to get this law passed and do it well, and to do that you have to try to influence other people.”

In summary, all of the interviewees except those who worked at non-profit organizations did share information in hopes of advancing their policy goals for the NCLB Act. Again, non-profit employees could not share information or get involved directly in policymaking due to employer restrictions. Information sharing among the other interviewees occurred via meetings, email, letters, phone calls, sharing reports, and other documents. The interview responses to this question support Antoniades’s concept of a “thought community” that binds together a “knowledge-based network” (27). The epistemic communities identified in this study are knowledge-based as a result of ongoing information sharing in hopes of influencing policymakers to support the policies
they advocate. The findings from this study also support the notion that members of epistemic communities participate in the policy process by serving as “advisors” or “sources of information” (32). Again, the information the epistemic communities identified in this study had was presented to policymakers in hopes of influencing the NCLB Act.

**Did Anyone Listen?**

Next, interviewees were asked if others were interested in what they had to say. This interview question attempts to gauge epistemic community influence on policymakers. Every interviewee indicates the people and groups they presented information to were interested in what they had to say. For example, a former member of a think tank states:

> Lots of different people were interested simply because we were in the middle of the debate. You have to pay attention to groups whether or not you agree with them….So, lots of people were interested in the general sense of the term. In terms of interest in a more finite sense of who was interesting in caring about some of the ideas we were coming up with, it was definitely that moderate coalition of Democrats. 99

A director of an education-based think tank states many of the people she and her colleagues presented information to were interested in what they had to say. She remarks, “Again on both the Democrat side and the Republican side, we’d get called as witnesses

99 The coalition of Democrats is comprised of mainly Senate Democrats.
when they’d do hearings about how things are going and our work is reasonably well respected by all of them. That doesn’t mean that they’ll always agree with us though.”

A former member of a conservative think tank in Washington, D.C. believes she and her colleagues enjoyed a great deal of influence in regards to the NCLB Act. She states, “A lot of people (were interested)…..Members of Congress think very highly of [our organization]. They see it as a source of information. I worked very closely with members of the House Committee…..we worked together quite a bit. They would talk to us about things they were doing and I would say ‘this is good’ or whatever.”

It is evident from the interviews that the thoughts and concerns of think tanks and other organizations within epistemic communities are considered by those working in Congress. In other words, the efforts of epistemic communities to have influence on the policy process are, at least, somewhat successful. Both former members of Congress who were interviewed for this project indicate they did not meet with outside groups personally. Instead, their staff members did. The former Congressmen interviewed for this study indicate they relied on information passed onto them from their staff from outside groups when discussing the NCLB legislation with other members of Congress. If this is the case, it is likely their staff passed on information to them from epistemic communities since other interviews indicate Congressional staff members were interested in the information they had at the time.

Antoniades notes one of the weaknesses of his framework is that it does not “draw meaningful boundaries between the political and the epistemic; between power and knowledge” (2003, 37). Epistemic communities exist through power and power draws its
substance from the epistemic. As a result, “the production of socially legitimate knowledge is politics, and politics is the legitimization of (some) knowledge.” In other words, politics determines which epistemic communities are going to be more successful than others. As noted, the NCLB Act was a reincarnation of the “Three Rs” proposal introduced by Democrats in Congress in the late 1990s. This could be one reason why the liberal epistemic community enjoyed the degree of policy success it had. Some of the policy proposals the liberal epistemic community presented to members of Congress already had support among liberal legislators. Also, during the time the NCLB Act was pending in Congress, Republicans controlled the House, Senate, and White House. This could be a reason why the conservative epistemic community had some of its policy goals met. It is likely that Republican members of Congress felt obliged to support the policy proposal of the President. Republican domination in Congress and the White House is perhaps a reason why the business epistemic community enjoyed some policy successes, too. The Republican Party and the business community have enjoyed a relationship that dates back to the Industrial Revolution (Dalton 1996). Republican legislators likely already supported some of the proposals the business epistemic community presented to them. As for the epistemic community focused on issues related to Hispanics, a member of a Hispanic think tank states, “The White House didn’t want to pass legislation that the major Hispanic groups were vigorously opposed to.”

Politics also determines which ideas do not receive support. In an interview with a member of a liberal think tank, the interviewee stated the White House and Congress were not very interested in many of the policy goals members of the epistemic
community comprised of education groups had at the time. This is an example of politics determining that an epistemic community would not be successful. In comparison to the proposals of the other epistemic communities, the proposals of the epistemic community comprised of education groups did not have as much support among both Republican and Democratic members of Congress. The aforementioned interview responses indicate politics played a role in determining the degree to which epistemic communities exercised influence on the NCLB Act. In summary, the proposals of the liberal, conservative, and Hispanic epistemic communities received support from policymakers whereas many of the proposals of the epistemic community comprised of education groups did not.

Continued Partnership

Interviewees were asked if they have continued to work together since the NCLB Act was signed into law. The purpose of this question is to analyze interview responses in light of Antoniades’s typologies of epistemic communities. As previously noted, the first type of epistemic community is an ad hoc coalition. This kind of epistemic community is based on the understanding that policy problems are what define the thought communities and their life is confined to the time and space defined by the problem and its solutions (Antoniades 2003; Adler and Haas 1992). The second type of epistemic community “has a more constant and holistic character aiming at the establishment and perpetuation of beliefs and visions as dominant social discourses” (Antoniades 2003, 28). These communities are based on the logic that social reality defines them and that their life
spans are dependent on the social interactions and outcome of social struggles, which “produce” that reality (28).

All of the interviewees were asked if they continued to work with those they collaborated with to advance policy goals for the NCLB Act after it was enacted. All four of the Senate aides indicate they worked with outside groups on education issues after the NCLB Act was passed until they left their positions in the Senate.100 The past or current think tank employees state they worked with outside organizations after the NCLB Act was enacted. Three of the interviewees currently work with outside organizations on education policy. One interviewee does not work with any other organizations since she no longer lives or works in Washington, D.C.

Although the interviewees were not specifically asked if they collaborated with each other on earlier authorizations of the Elementary and Secondary Education Act (ESEA), a couple of them indicated they worked together before the NCLB Act was introduced to Congress. For example, a member of a liberal think tank recalls working with Democrats in Congress and their staff on the three Rs proposal. The director of a liberal think tank also remembers working with other liberal organizations on the 1998 reauthorization of the ESEA.

It appears from the interviews with members of think tanks, they are part of epistemic communities that have a constant and holistic character.101 In other words, they tend to remain intact even after the policy they work on together has been enacted (or

100 All four former Senate aides no longer work in the Senate or have a government position. In interviews, the former Senate aides also indicate some of the groups they worked with before they left their positions continue to work together.  
101 These epistemic communities are the education, Hispanic, liberal, and conservative epistemic communities.
rejected). After legislation is enacted, they continue to work together to advance policy goals such as school choice and Hispanic education issues. The interview responses do not support the second hypothesis. The second hypothesis is groups with similar policy visions continued to work together after the NCLB Act was signed into law. Again, groups continue to work together despite a lack of a “common worldview” or shared understanding of policy problems. These findings suggest Antoniades’s framework should be altered to consider that epistemic communities with a constant and holistic character do not necessarily “share a common understanding of a particular problem/issue.” In summary, even though members of four of the epistemic communities identified in this study do not necessarily share the same worldview, they remain intact in order to collaborate on future federal education bills.

However, even though the liberal, conservative, education, and Hispanic epistemic communities remain intact, the epistemic community comprised of business groups dissolved. Edward B. Rust, Jr. testifies, “I am co-chair of the Business Coalition for Excellence in Education, an ad hoc coalition that brings together leading U.S. companies and business organizations to support federal education legislation that satisfies a defined set of principles for education excellence so all children will have an opportunity to succeed.” This quote from his testimony on the NCLB Act suggests some business organizations did not continue to work with other organizations to advance
federal education policy goals after the NCLB Act was enacted\textsuperscript{102} indicating that at least one \textit{ad hoc} epistemic community participated in the policymaking of the NCLB Act.\textsuperscript{103}

**Presence of Competing Groups**

Interviewees were asked if they were aware of any other groups that pushed similar or dissimilar views during the time the NCLB Act was pending in Congress. This question was asked to determine whether no single “knowledge elite” exists as Antoniades claims. Interviewees were first asked if there were any other groups they were aware of that had similar policy goals to their own. None of those interviewed indicate they were aware of any such group. One employee at a think tank centered on Hispanic civil rights issues states: “Any groups that are inside the beltway in D.C., we work together. It’s a very tight knit group. The groups outside of the beltway basically all oppose NCLB and so we didn’t work with them. Typically it’s hard to work with groups outside of D.C. The groups in D.C. work very hard to gain consensus.”

Those interviewed were also asked if they are aware of any groups with policy goals different from their own and what activities they undertook to advance their policy goals. All of those interviewed indicated that there were competing coalitions of organizations opposed to their policy preferences.

\textsuperscript{102} See footnote 67.

\textsuperscript{103} A phone number for the Business Coalition for Excellence in Education is provided on the following web site: \url{http://74.125.95.104/search?q=cache:n7ccfeZsk-oJ:lobby.la.psu.edu/_107th/132_Math_Science_Funding/Organizational_Statements/BCEE/Business_Coalition_for_Excellence_in_Education_Summary_of_Fed_Ed_Reforms_Under_NCLB_12_11_01.pdf+%22Business+Coalition+for+Excellence+in+Education%22+2001&hl=en&ct=clnk&cd=1&gl=us}. This phone number has been disconnected and no new phone number is available, suggesting the Coalition no longer exists.
From the interview responses and the testimonies of Edward B. Rust, Jr. and Keith E. Bailey, it appears epistemic communities do struggle with each other as Antoniades predicts. There are at least five co-existing epistemic communities in the case of the NCLB Act. Again, these are the coalitions of liberal and conservative think tanks, the epistemic community made of Hispanic groups, and the Business Coalition for Excellence in Education. The last epistemic community is the coalition of professional education-related organizations and interest groups.

As previously stated, Antoniades argues epistemic communities and epistemes struggle with each other to define the ideas of which social structures exist at the macro level. The consequence of these battles is the creation of social discourses of special cognitive orders. All of the interviewees that partnered with other individuals and organizations note there were other coalitions of groups they competed against. Members of the liberal epistemic community note education organizations and conservative organizations were groups opposed to the ideals of their epistemic community. A former member of a liberal epistemic community recalls “We used to call them jokingly the ed blob, it was like, it's a group of people who kind of had a vested interest in the system remaining the same.” Another former member of a liberal epistemic community remembers “Republicans and conservative think tanks” were opposed to the policy preferences of those with whom she collaborated. A former member of a conservative epistemic community notes the epistemic community comprised of education groups: wanted more money and they got it. They wanted more programs. In the end,
they at least managed to make sure that none were cut. They oppose the accountability provisions. There was a couple of small provisions they opposed. They didn't like the school choice. They didn't like the supplemental services. They didn't like the grant program in there for marriage.

Some discourses of these epistemic communities were accepted by lawmakers while others were not. The liberal epistemic community imposed the discourses of closing the achievement gap between affluent students and their counterparts, administrative and school accountability, student competency, and teacher quality. The conservative epistemic community imposed the discourse of student competency and limited school choice in the form of vouchers for supplemental services at private schools. Closing the achievement gap, attracting and retaining qualified teachers, professional development, higher compensation for teachers, services for expelled children, and class size reduction were the discourses accepted by lawmakers from the epistemic community comprised of education groups. The business epistemic community imposed the discourses of administrative and school accountability, teacher quality, professional development for teachers, safety and school discipline, services for expelled children, rewards and consequences for schools, supplemental support for students, testing, high standards for students, aligning systems to standards, math and science excellence, and parental involvement. The epistemic community comprised of groups that focus on Hispanic issues imposed the discourses of keeping English language learners a part of the accountability system and the omission of English only instruction in schools.
There are two likely reasons why these epistemic communities were successful in the pursuit of their policy goals. One reason is many of these policy goals were shared by two different epistemic communities. For example, the policy goals of closing the achievement gap, school accountability, student competency, teacher quality, and professional development for teachers were shared by two epistemic communities. Another reason why these epistemic communities were successful in their policy pursuits is because many of these policy goals were already included in the blueprint President Bush sent to Congress shortly after he was inaugurated or in the original NCLB Act (107 H.R. 1). Bush’s blueprint proposed the consolidation of categorical grant programs, yearly testing in Grades 3-8, yearly participation of fourth and eighth graders in the National Assessment of Educational Progress, rewards and consequences for schools that fail to meet annual yearly progress, vouchers to private schools for supplemental services, provisions for closing the achievement gap, and State and school report cards that report racial achievement data (DeBray 2004, 8). Furthermore, all of policy goals mentioned in Bush’s blueprint were present in 107 H.R. 1. This bill also included other policy goals advanced by epistemic communities. These policy goals include better testing accommodations for English language learners, better assessments for English language learners, the omission of English-only instruction, attracting and retaining qualified teachers, services for expelled children, aligning systems to standards, and parental involvement. The inclusion of these policy goals in 107 H.R. 1 aided the epistemic communities in the pursuit of their policy goals.
However, the “cognitive authority” of at least four epistemic communities was not accepted by lawmakers. The liberal epistemic community did not secure the degree of flexibility it wanted in the NCLB Act. The conservative epistemic community did not impose the discourse of flexibility and school vouchers on lawmakers. The epistemic community composed of education groups was not satisfied with the provision in the NCLB Act that permitted vouchers for supplemental services from private schools. Furthermore, this epistemic community was not satisfied with the consolidation of some federal categorical grants to states and the omission of funding for afterschool programs. The epistemic community composed of business groups was not satisfied with the omission of school autonomy from the NCLB Act.

One probable reason why the conservative and education epistemic communities did not have some of their policy goals met is because members of Congress and the President need to compromise with competing interests. School choice is an example of a policy domain where there are competing interests. Members of the conservative epistemic community wanted school vouchers available for students to escape low-performing public schools to attend private schools full-time whereas the education epistemic community was opposed to federal funds for private schools. The NCLB Act represents a compromise between these interests since it only provides vouchers for supplemental services such as tutoring at private schools.

The consolidation of education grants provides another example of the need for policymakers to compromise with competing interests. The education epistemic community was opposed to the consolidation of federal categorical education grants to
the States whereas the conservative epistemic community supported the consolidation of these grants. In summation, the limited school choice available under the NCLB Act and the consolidation of education grants provide examples of provisions that reflect the compromise of competing interests.

Again, Antoniades argues epistemic communities emerge, struggle, and cease to exist in regards to policy problems and issues at the micro level. Many of those interviewed who work or worked at think tanks indicate they had worked with other groups prior to the passage of the NCLB Act. This is not surprising since the NCLB Act was signed into law as the reauthorization of the Elementary and Secondary Education Act (ESEA), which was first enacted in 1965. Every six years the ESEA is eligible for reauthorization. Some of these groups had worked together on previous reauthorizations of the ESEA in the 1990s. In fact, three interviewees state they are currently working with the same individuals and organizations on the reauthorization of the NCLB Act bill that is currently pending in Congress, implying they did not cease to exist as a result of the passage of NCLB. Given the high turnover in administrative positions in Congress, think tanks, and other organizations in Washington, D.C., it is likely that many epistemic communities change over time rather than emerge or cease to exist. However, the business epistemic community emerged as a result of the NCLB legislation and ceased to exist after its passage. Table 6.4 summarizes the findings of this study on the next page.
Table 6.4: Summary of Support for Antoniades’s Model of Epistemic Communities

<table>
<thead>
<tr>
<th>Antoniades’s Model</th>
<th>Liberal</th>
<th>Conservative</th>
<th>Education</th>
<th>Business</th>
<th>Hispanic</th>
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</thead>
<tbody>
<tr>
<td>Consensus on Policy Goals</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Constant &amp; Holistic Character</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Ad Hoc Character</td>
<td>X</td>
<td></td>
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<tr>
<td>Cognitive Action</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Emerge as a Result of the NCLB Act</td>
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<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cease to Exist as a Result of the NCLB Act</td>
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<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Agenda-setting</td>
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<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advisors or Sources of Information</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Holding Press Conferences</td>
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<tr>
<td>Hold Conferences</td>
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<td>X</td>
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<tr>
<td>Attending Seminars or Lectures</td>
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<tr>
<td>Attending Public Discussions</td>
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<td>X</td>
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<tr>
<td>Access to the Media</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Access to an Institutional Structure</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Working out the Details of a Policy</td>
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</table>
Conclusion

Antoniades’s framework of epistemic communities is used as a theoretical lens for the policymaking of the NCLB Act. The three hypotheses that guide this study are also derived from Antoniades’s framework. The hypotheses are:

H1: Epistemic communities with similar policy visions are better able to work together than groups with dissimilar policy visions.

H2: Epistemic communities with similar policy visions continued to work together after the NCLB Act was signed into law.

H3: More epistemic communities with a constant and holistic character were involved in the policymaking of the NCLB Act than ad hoc groups.

The table below summarizes the support found for the aforementioned hypotheses.

Table 6.5: Support for Hypotheses

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Support</th>
<th>No Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1</strong>: Groups with similar policy visions were better able to work together than groups with dissimilar policy visions.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>H2</strong>: Groups with similar policy visions continued to work together after the NCLB Act was signed into law.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>H3</strong>: There were more epistemic communities with a constant and holistic character than ad hoc ones involved in the policymaking of the NCLB Act.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Antoniades’s model of epistemic communities is helpful for explaining many of the efforts of various individuals and their respective organizations to advance their policy goals for the NCLB Act. There were a variety of coalitions of think tanks, interest groups, professional organizations, and non-profit organizations that participated in the policymaking of NCLB. Those who did partner with other organizations report working together before the NCLB Act was introduced to Congress and after it was signed into law. Furthermore, they report engaging in information sharing with members of their respective epistemic communities. This suggests they belong to a “socially recognized knowledge-based network” or an epistemic community.

Also, all of those interviewed who partnered with other organizations report belonging to epistemic communities with a constant and holistic character aimed at the continuation of their beliefs and visions as dominant social discourses (Antoniades 2003, 28). They worked together before and after the NCLB Act was signed into law. Also, the testimonies of Edward B. Rust, Jr. and Keith E. Bailey on behalf of the ad hoc Business Coalition for Excellence in Education indicate at least one ad hoc coalition participated in the policymaking of the NCLB Act. Support is found for the third hypothesis that postulates there were more epistemic communities with a constant and holistic character than ad hoc epistemic communities.

These coalitions of organizations did engage in the cognitive and practical actions described by Antoniades. In regards to cognitive actions, members of the epistemic communities that participated in the policymaking surrounding the NCLB Act were able to control a certain degree of knowledge and exercise “cognitive authority” in regards to
this knowledge (29). Again, the liberal epistemic community exercised cognitive authority in regards to closing the achievement gap between wealthy students and their counterparts, administrative and school accountability, student competency, and teacher quality. The conservative epistemic community exercised cognitive authority in regards to student competency and school choice in the form of vouchers for supplemental services from private schools. Closing the achievement gap, attracting and retaining qualified teachers, professional development for teachers, higher compensation for teachers, services for expelled children, and class size reduction are examples of the cognitive authority accepted by lawmakers by the epistemic community composed of education groups. The business epistemic community exercised cognitive authority in regards to administrative and school accountability, teacher quality, professional development for teachers, safety and school discipline, services for expelled children, rewards and consequences for schools, supplemental support for students, testing, high standards for students, aligning systems to standards, math and science excellence, and parental involvement. Keeping English language learners a part of the accountability system and omitting English only instruction in public schools are examples of how the epistemic community focused on issues affecting the Hispanic community exercised cognitive authority in regards to the NCLB Act.

In regards to practical action, Antoniades claims epistemic communities can help set the agenda. Epistemic communities attempt to set the agenda by adding new issues to the agenda or by changing the manner in which current issues are handled and conceptualized. However, as demonstrated, members of the epistemic communities
involved in the policymaking of the NCLB Act did not necessarily set the agenda. As previously stated, President Bush met with twenty members of Congress and personal staff to set policy goals for education reform before he was even inaugurated. Three days after he was inaugurated he sent a blueprint for the NCLB Act to Congress. By March 22\textsuperscript{nd}, the Committee on Education and the Workforce drafted a bill that the White House influenced a great deal. This study and other research\textsuperscript{104} indicate outside organizations had little influence on the initial NCLB Act bill. Provisions for class size reduction were not included in the blueprint President Bush sent to Congress nor in 107 H.R. 1. The inclusion of this provision in the NCLB Act (P.L. 107-110) indicates the epistemic community comprised of education groups may have influenced the governmental agenda in regard to class size reduction.

Those interviewed for this project report serving as advisors or sources of information to members of Congress in hopes of having legislation passed they supported. Some of the interviewees also indicate they organized or participated in conferences, public discussions, and publications in order to influence the NCLB Act, providing some support for Antoniades’s claim that these methods are undertaken by members of epistemic communities. However, none of the interviewees mentioned holding press conferences, attending seminars or lectures, or working out the details of the NCLB Act. Antoniades’s model should be modified to consider epistemic communities do not need to hold press conferences, attend seminars or lectures to be successful, or work out the details of a policy to be effective.

\textsuperscript{104} See DeBray 2006; Manna 2006; and Rudalevige 2003.
Antoniades also argues access to the media is necessary for epistemic communities to operate. Four of the five identified epistemic communities in this study had access to the media. These epistemic communities are the conservative, liberal, business, and education epistemic communities. However, there is no indication the epistemic community comprised of groups focused on issues facing the Hispanic community had access to the media. Antoniades’s framework should take into consideration that epistemic communities can successfully operate without access to the media.

As noted, Antoniades claims access to an institutional structure is necessary for and epistemic community to operate. Over 90% of those interviewed who collaborated with other organizations report having access to Congress. These interviewees presented information to members of Congress, wrote op-ed pieces in newspapers, and position papers on the NCLB Act. These findings support Antoniades’s assertion.

Antoniades argues no single “knowledge elite” exists and that epistemic communities compete with each other “to establish their discourses and visions of society.” Those who did partner with other organizations indicate they were aware of competing groups that aimed to impose their discourses on the NCLB Act. These groups were composed of five different coalitions. The coalitions include a network of liberal think tanks in Washington, D.C., a network of conservative think tanks, a network of professional education-related organizations and interest groups, a network of groups focused on issues affecting the Hispanic community, and the Business Coalition for Excellence in Education, an ad hoc group.
Those who did not partner with other individuals and organizations were asked why they chose to work alone to advance their policy goals for the NCLB Act. Their responses are not analyzed in terms of Antoniades’s framework. However, their interviews provide a unique contribution to the literature since previous research on epistemic communities does not examine the role of individuals who do not participate in these networks.

One interviewee states he works for a private foundation. There are restrictions on what employees at this foundation can do in regards to the formulation of policy. Employees at this foundation cannot lobby or get involved “in a specific way” in regards to policymaking. However, he was permitted to give information to interested groups. Another interviewee states he works at a non-profit organization that does not permit employees to lobby either. None of the people who did not collaborate with others to advance policy goals were approached by other individuals or organizations to advance policy goals for the NCLB Act. One of the interviewees does not think it would have been useful to partner with others to advance policy goals. Another interviewee comments other organizations were advancing the policy goals he had for the NCLB Act anyway.

As demonstrated, many individuals who hold an interest in education policy cannot get involved in policymaking due to their employer’s policy regarding lobbying. However, the media takes an interest in their opinion on federal education policy since their names were part of the sampling frame used for this study. It was constructed using the search phrase “No Child Left Behind Act” for articles the N.Y. Times, Washington
Post, and Washington Times dated between January 20\textsuperscript{th}, 2001, the date President Bush was sworn into office and January 2\textsuperscript{nd}, 2002, the date the NCLB Act was signed into law.

Antoniades’s framework does not take into account a couple of circumstances. One is members of epistemic communities do not necessarily share common worldviews or understandings of policy problems. However, individuals in these groups are willing to put their differences aside to work towards a common purpose on issues in which they agree. The first hypothesis is not supported by the findings from this study. Again, this hypothesis is groups with similar policy visions were better able to work together than groups with dissimilar policy visions.

Furthermore, as demonstrated, seventy-five percent of interviewees who belonged to an epistemic community report working with the same organizations after the NCLB Act was signed into law. As noted, the majority of those the interviewees who collaborated with others do not report sharing the same worldview. These findings do not support the second hypothesis. The second hypothesis postulates groups with similar policy visions continued to work together after the NCLB Act was signed into law.

Also, Antoniades asserts epistemic communities emerge, struggle, and cease to exist in regards to policy problems and issues. As shown, most of the epistemic communities identified in this study did not necessarily emerge or cease to exist as a result of the passage of the NCLB Act. These epistemic communities were intact prior to the passage of the NCLB Act since it was the latest reincarnation of the ESEA of 1965. Furthermore, since they are aware of the fact the ESEA needs to be reauthorized, they know they can engage in efforts to advance their policy goals for the next reauthorization.
of the ESEA, which is likely to occur in 2008. As a result, members of epistemic communities often continue to work together. People in Washington, D.C. switch jobs, take different jobs, retire and new organizations are created and others cease to exist. Consequently, on a personal level and sometimes an organizational level, epistemic communities change. Education epistemic communities are likely to change in Washington, but most are not likely to emerge or cease to exist. An exception is the Business Coalition for Excellence in Education. This coalition is a self-professed ad hoc group that formed to influence the NCLB Act and disbanded after the Act was signed into law.

Antoniades claims his theory of epistemic communities is useful to explain policymaking at the transnational, national, and local levels (2003, 26). As demonstrated, it is somewhat helpful to explain federal education policymaking in the United States. However, since federal policies often require reauthorization in the United States, it may not be helpful in explaining some facets of domestic federal education policymaking. Epistemic communities do not necessarily form when policies are considered in Congress or disband after the policies have been enacted or rejected. It is likely the epistemic communities involved in the policymaking of federal bills have been around a long time and continue to exist because they know that many federal laws require reauthorization. The reauthorization of federal laws such as the NCLB Act gives epistemic communities incentive to stay intact.

As previously stated, one weaknesses of Antoniades’s framework is that it does not “draw meaningful boundaries between the political and the epistemic; between power
and knowledge” (2003, 37). In other words, politics determines which epistemic communities are going to be more successful than others. As noted, the NCLB Act was a reincarnation of the “Three Rs” proposal introduced by Democrats in Congress in the late 1990s. This may account for why the liberal epistemic community enjoyed the degree of policy success it had. Also, during the time the NCLB Act was pending in Congress, Republicans controlled the House, Senate, and White House, which may be one reason why the conservative epistemic community has some of its policy goals met. Republican domination in Congress and the White House is perhaps a reason why the business epistemic community enjoyed some policy successes. A member of a liberal think tank stated in an interview that the White House and Congress were not very interested in many of the policy goals members of the epistemic community centered on education issues had at the time. As for the epistemic community focused on issues related to Hispanics, a member of a Hispanic think tank states, “The White House didn’t want to pass legislation that the major Hispanic groups were vigorously opposed to.” These interview responses indicate politics played a role in determining the degree to which epistemic communities exercised influence on the NCLB Act.

Another shortcoming of Antoniades’s framework is that it “does not accurately describe the nature of the policy process, as long as many decision makers are themselves experts” (2003, 37). Lawmakers can be members of epistemic communities. Lawmakers’ membership in any epistemic community undoubtedly influences their worldviews and may influence how receptive they are to epistemic communities to which they do not belong. Two former members of Congress were interviewed for this study. It is likely that
their worldview determined their acceptance of information presented to them by other epistemic communities.

Despite the shortcomings of Antoniades’s model, it is still a useful theoretical lens. This study finds support for Antoniades’s assertions that epistemic communities can exhibit constant and holistic characters or ad hoc ones. It also finds support for the claims epistemic communities serve as advisors or sources of information and have access to the media and institutional structures. However, it finds limited support for the arguments that epistemic communities set the agenda and attend conferences and public discussions. There is no support for the arguments epistemic communities hold press conferences, attend seminars and lectures, work out the details of a policy, or enjoy consensus on all policy goals. The findings from this study suggest Antoniades’s model should be revised to account for the fact that members of epistemic communities do not need to share consensus on all policy goals to work together or hold press conferences, attend seminars, and lectures, or work out the details of a policy to be effective.
CHAPTER SEVEN

CONCLUSION

This research fills a gap in the literature on the NCLB Act. Chapter seven discusses how previous research on the NCLB Act is helpful in understanding its development, but fails to capture the role of the worldviews held by members of epistemic communities and the impact of the dynamics within these communities on policymaking. It also addresses a rival theoretical explanation for the development of the NCLB Act. The remainder of the chapter discusses the support and lack thereof for Antoniades’s model of epistemic communities. Next, it proposes modifications to his model based on the findings of this study. It also discusses the limitations of this study. Finally, it provides direction for future research on the role of epistemic communities in federal policymaking in the United States.

Gaps in the Literature Concerning the NCLB Act

A few earlier studies analyze the formulation of the NCLB Act, but do not identify the worldviews and dynamics of competing interests like this study does. For example, Hochschild (2003)\textsuperscript{105} uses Baumgartner and Jones’ (1993) model of agenda-setting to explain the push for education reform from all levels of government. She uses

\textsuperscript{105} See pages 75-76 for a more detailed discussion of Hochschild’s study.
their concept of issue expansion\textsuperscript{106} to demonstrate that in the case of NCLB, the specialists were state supreme courts that demanded satisfactory schooling, business leaders who wanted a well-trained workforce, college professors and professional groups who created the standards, and commercial test companies that developed and sold exams. Her research makes an important contribution to the applicability of issue expansion to federal education policy, but fails to capture the worldviews represented by competing groups in the policymaking surrounding the NCLB Act.

Manna (2006a)\textsuperscript{107} developed a theory called “borrowing strength.” This theory explains the relationship between the national government and the states in regards to the education agenda since the mid-1960s. “Borrowing strength” makes a significant contribution to the agenda-setting literature, but also fails to capture the rival interests represented by different groups in the policymaking surrounding the NCLB Act.

Hess and Petrilli (2006)\textsuperscript{108} provide background on the origins of the NCLB Act, explain the provisions of the Act, its implementation, and critics’ concerns. This study provides interesting information on the legislative genesis of the Act and discusses recent public support for NCLB, but, like the aforementioned studies, does not identify the worldviews of the competing groups who participated in the policymaking surrounding the NCLB Act.

\textsuperscript{106} According to Baumgartner and Jones (1993), issue expansion occurs when political leaders provide support to specialists who convince them they have the ability to solve a national problem.

\textsuperscript{107} See pages 76-77 for a more detailed description of Manna’s theory.

\textsuperscript{108} See page 78 for a lengthier discussion of Hess and Petrilli’s findings.
DeBray (2006)\textsuperscript{109} examines the politics surrounding the NCLB Act using Kingdon’s policy streams model as a theoretical lens and finds support for it. Unlike the aforementioned studies, DeBray’s research reveals key individuals and groups who were involved in the policymaking of the NCLB Act. For example, she identifies President George W. Bush, the Progressive Policy Institute, the Fordham Foundation, and the Education Trust as key players in Kingdon’s “primordial policy soup.” However, DeBray’s study does not indicate if there was consensus on policy goals between and within organizations such as the Progressive Policy Institute, the Fordham Foundation, and the Education Trust. Furthermore, this study does not indicate if these groups worked together before and after the NCLB Act was signed into law. Moreover, it does not specify which actions organizations such as the ones mentioned above took to influence the NCLB Act.

In summary, the aforementioned studies make important contributions to the literature on the legislative origins of the NCLB Act. Manna’s (2006a) study adds to the literature on agenda-setting theory. Hess and Petrilli’s (2006) research provides important background information on the NCLB Act and speculation about its future. Hochschild (2003) and DeBray (2006) use existing agenda-setting theory to analyze the NCLB Act and find support for their respective models. However, with the exception of DeBray’s study, the other literature fails to identify the groups involved in the policymaking of the NCLB Act. DeBray’s research identifies these groups, but does not specify if these groups collaborated before and after the NCLB Act was enacted or the actions they took.

\textsuperscript{109} See pages 78-79 for a more detailed discussion of DeBray’s study.
to influence the NCLB Act. Using Antoniades’s framework of epistemic communities as a theoretical lens, this study reveals if the epistemic communities identified in this study had a constant and holistic character or an *ad hoc* character in addition to the cognitive and practical actions they took to influence the Act. The findings from this study are discussed later in this chapter.

**Rival Theoretical Explanations**

The policy communities framework advanced by Kingdon (1995) provides a rival explanation for collective policymaking to Antoniades’s model of epistemic communities. Like Antoniades’s model of epistemic communities, the policy community framework also seeks to explain the dynamics within organizations that are involved in the policymaking in their respective domains. Policy communities consist of specialists in a specific policy area. Members are scattered within and outside of government. Examples of members of policy communities are committee staffs in Congress, congressional staff agencies, academics, consultants, or specialists from interest groups. Their commonalities are their concern regarding one policy domain and their interactions with each other. These communities are largely not affected by changes in administration or pressure from constituents. Policy communities can be cohesive or fragmented. Cohesive policy communities are close-knit, generate common outlooks, orientations, and ways of thinking whereas fragmented policy communities are diverse and fragmented. Oftentimes, in fragmented policy communities, “the left hand does not know what the right hand is doing” (119) and consequently, the left hand does something that greatly impacts the right hand with unforeseen results.
Policy communities work to make policymakers receptive to their ideas (Kingdon 1995, 117-122). They engage in “softening up,” where “ideas are floated, bills are introduced, speeches made; proposals are drafted, then amended in response to reaction and floated again” (117). Oftentimes, policy communities are led by policy entrepreneurs who are willing to invest time, energy, reputation, and money in hopes of a future return. They are willing to make these investments for one or more of several reasons. One possible reason is the promotion of personal welfare. For example, they might want to keep their job, expand their agency, or promote their career. Another reason is the promotion of their values. Finally, these entrepreneurs may be “policy groupies” who enjoy advocacy. They make “phone calls, have lunch, write memos, and draft proposals” (123-24).

There are some similarities between Kingdon’s model of policy communities and Antoniades’s model of epistemic communities. Both organizational arrangements include individuals inside and outside of government focused on one policy domain. Members of epistemic communities and policy communities both work to make lawmakers receptive to their ideas, too. Kingdon’s model indicates members of policy communities work together to make the general public, specialized publics, and their own members receptive to its ideas. In contrast, epistemic communities are not concerned with gaining the support of the general public. They are primarily concerned with winning the support of policymakers. Also, according to Antoniades, members of epistemic communities have shared principles and causal beliefs. Therefore, there is no need for members to make their colleagues receptive to their ideas. Moreover, Kingdon indicates policy
Communities can exhibit a cohesive or fragmented character. Antoniades’s model assumes epistemic communities are close-knit. None of the individuals interviewed for this study indicated the epistemic community they belonged to was fragmented. Finally, there is no leadership position within Antoniades’s model of epistemic communities. In Kingdon’s framework, some policy communities have policy entrepreneurs who lead their respective policy communities. None of the interviewees indicate there were leaders in their epistemic communities.

Antoniades’s model of epistemic communities is more congruent with the findings of this study than Kingdon’s model of policy communities. First, epistemic communities are primarily concerned with influencing policymakers rather than the general public. Therefore, members of epistemic communities are not inclined to make speeches or take other actions to influence public opinion on a policy proposal. Second, according to Antoniades, members of epistemic communities have shared principles and causal beliefs. Consequently, members of epistemic communities do not have to convince their colleagues to accept their ideas as in the case of policy communities. Third, policy communities can either be cohesive or fragmented. Antoniades’s model assumes epistemic communities are close-knit rather than fragmented. None of the individuals interviewed for this study suggested their epistemic community was fragmented. Fourth, Antoniades’s model of epistemic communities does not include a leadership position like Kingdon’s policy communities framework does. No one interviewed for this study suggests there were leaders in the epistemic communities to which they belonged.
Support for and Limitations to Antoniades’s Model of Epistemic Communities

This section discusses the support and lack thereof found for the components of Antoniades’s model of epistemic communities. Support is found for Antoniades’s assertion that epistemic communities can exert *ad hoc* or *constant and holistic* characters. All interviewees who collaborated with other individuals to advance their policy goals for the NCLB Act indicate they belonged to networks or epistemic communities with a constant and holistic character. The interviewees collaborated with others before and after the NCLB Act was signed into law. Also, the testimony of Edward B. Rust, Jr. and Keith E. Bailey on behalf of the *ad hoc* Business Coalition for Excellence in Education suggests at least one *ad hoc* coalition participated in the policymaking of the NCLB Act. This study also finds support for the hypothesis that more epistemic communities with a constant and holistic character were involved in the policymaking of the NCLB Act than *ad hoc* epistemic communities.

This research also finds support for Antoniades’s claim epistemic communities engage in *cognitive* and *practical* actions. They were able to control knowledge and exercise “cognitive authority” in regards to it. The liberal epistemic community exercised cognitive authority in regards to closing the achievement gap between affluent students and their underprivileged counterparts, administrative and school accountability, student competency, and teacher quality. The conservative epistemic community exercised cognitive authority in regards to student competency and school choice in the form of vouchers for supplemental services from private schools. Closing the achievement gap, attracting and retaining qualified teachers, professional development for teachers, higher
compensation for teachers, services for expelled children, and class size reduction are examples of cognitive authority accepted by policymakers from the epistemic community made of education groups. The business epistemic community exercised cognitive authority in regards to administrative and school accountability, teacher quality, professional development for teachers, safety and school discipline, services for expelled children, rewards and consequences for schools, supplemental support for students, testing, high standards for students, aligning systems to standards, math and science excellence, and parental involvement. The epistemic community comprised of groups that focus on Hispanic issues exercised cognitive authority by keeping English language learners a part of the accountability system and through the omission of English only instruction in schools.

Some of the interviewees also report engaging in practical action. One example of the practical actions they undertook is serving as advisors or sources of information to members of Congress. They provided this information with the intention their policy goals would be enacted. Other examples of the practical action described by Antoniades include the organization and participation in conferences, public discussions, and publications to influence the NCLB Act. However, none of the interviewees mention holding press conferences or attending seminars or lectures. Antoniades asserts access to the media is necessary for epistemic communities to operate. However, only four of the five epistemic communities identified in this study appeared to have had access to the media during the time the NCLB Act was pending in Congress. Again, the epistemic community comprised of organizations focused on issues related to the Hispanic
community does not appear to have had access to the media at this time, but were nonetheless successful in having their policy goals met. Antoniades’s model of epistemic communities should be altered to consider the idea that access to the media and holding press conferences, seminars, and lectures is not necessarily needed for epistemic communities to operate or be successful.

Antoniades’s model of epistemic communities cannot explain other circumstances, too. It cannot explain the fact that individuals who do not share common worldviews and understandings put their differences aside to work towards a common purpose. A couple of the interviewees state they worked with others they did not always agree with since they believe that the greater “numbers” of organizations involved would increase their influence on the NCLB Act. These findings do not support the hypothesis that groups with similar policy visions were better able to work together than groups with dissimilar policy visions.

Moreover, seventy-five percent of the interviewees who belonged to an epistemic community state they continued to work with the same organizations after the NCLB Act was enacted. These interview responses do not support the hypothesis that groups with similar policy visions continued to work together after the NCLB Act was signed into law. Groups with dissimilar policy visions can set their differences aside and continue to work with each other on issues on which they agree, too.

Furthermore, this study suggests most epistemic communities focused on federal education issues do not emerge or cease to exist as a result of proposed policies. Most of the interviewees indicate they worked with individuals from other organizations prior to
the passage of the NCLB Act and continue to work with them. The NCLB Act is a
reauthorization of the ESEA that was first signed into law in 1965. Since it needs to be
reauthorized, epistemic communities know they will have the opportunity to influence its
reauthorization at later times. Consequently, epistemic communities are likely to change
as people in epistemic communities switch jobs or retire and new organizations are
created and others disband. One exception is the Business Coalition for Excellence in
Education. It is an *ad hoc* group that formed to influence the NCLB Act and disbanded
after it was enacted.

**Suggested Modifications to Antoniades’s Model of Epistemic Communities**

Antoniades’s model of epistemic communities is somewhat useful in predicting
the role of epistemic communities in federal policymaking in the United States. Reasons
for its limited usefulness are discussed in this section. First, this study finds epistemic
communities can predate federal policy proposal whereas none of the previous literature
on epistemic communities describes their role in the policymaking of legislation that
requires reauthorization. In the United States, epistemic communities may work years
before a bill is introduced in Congress knowing that many federal policies require
reauthorization. In fact, many of the interviewees indicate they were working on the
reauthorization of the NCLB Act before it was even eligible for reauthorization. The
findings from this study suggest that Antoniades should take into consideration that
epistemic communities do not necessarily emerge or cease to exist as a result of federal
policy proposals.
Second, the most significant finding of this study is that members of epistemic communities do not necessarily need to share a common worldview or understanding of policy problems in order to operate and be successful. Antoniades should consider that members of epistemic communities can put their differences aside to advance the policy goals they do share.

Third, epistemic communities do not necessarily need to hold press conferences, have access to the media, or attend seminars to operate or be effective. As previously stated, the epistemic community made of organizations focused on issues affecting the Hispanic community did not have access to the media. However, a member did report attending a conference and having access to the White House and Congress. Based on the findings from this study, it is suggested that Antoniades’s framework be modified to state that epistemic communities use one or more of the aforementioned tactics to pursue their policy goals. Again, these tactics are holding press conferences, influencing the agenda, access to an institutional structure (the White House or Congress in the case of the NCLB Act), attending seminars, and access to the media.

Fourth, this model of epistemic communities does not emphasize the role of politics enough. Antoniades does acknowledge that his model of epistemic communities does not “draw meaningful boundaries between the political and the epistemic; between power and knowledge” (2003, 37). However, the findings of this study suggest politics is the most formidable determinant in an epistemic community’s success or failure. The NCLB Act was a recreation of the “Three Rs” proposal introduced by Democrats during the late 1990s. Plus, the Bush Administration exhibited a willingness to work with the
Democrats on this policy. The reincarnation of this policy may account for why the liberal epistemic community enjoyed the degree of policy success it had. Also, during the time the NCLB Act was pending in Congress, Republicans controlled both chambers of Congress and the White House. This is a likely reason why the conservative epistemic community had some of its policy goals met. Republican control of Congress and the White House may be another reason why the business epistemic community had some of its policy goals met, too. A member of a liberal think tank mentions in an interview that the White House and Congress were not very interested in many of the policy goals pursued by the epistemic community focused on education issues. In regards to the epistemic community focused on issues pertaining to Hispanics, a member of a Hispanic think tank comments, “The White House didn’t want to pass legislation that major Hispanic groups were vigorously opposed to.” These findings suggest politics played a significant role in determining the success and failure of epistemic communities in the case of the NCLB Act.

If Antoniades’s model was revised to take the aforementioned findings into consideration, it could be useful for predicting federal policymaking surrounding policies that require reauthorization in the United States. Politics and the reauthorization of many federal policies have a significant impact on the role of epistemic communities in policymaking. The reauthorization of many federal policies gives epistemic communities incentive to continue to work together rather than “cease to exist.” Furthermore, epistemic communities in this study did not “emerge” when the NCLB Act was introduced in Congress. Each of them predated the introduction of the NCLB Act to
Congress. Also, as demonstrated, politics plays a significant role in determining the success or failure of epistemic communities. Specifically, Republican domination of the White House and Congress at the time had a great impact on the policy successes of the five epistemic communities identified in this study.

**Limitations to this Study**

There are some limitations to this study. External validity could have been strengthened if more interviews were conducted. Greater understanding of the influence of business and education groups could have been gained if individuals from these communities were available for interviews. However, the influence of these groups is mentioned in interviews with some individuals from other epistemic communities. Furthermore, this study draws on past research (Rudalevige 2003; DeBray 2006; Manna 2006) that describes the roles of these groups in the policymaking of the NCLB Act. Also, two Congressional testimonies of members from the business community and one testimony from a member of the education community are analyzed in this study. The combination of the interviews with members of other epistemic communities, past research on the role of business and education groups in the policymaking of the NCLB Act, and the Congressional testimonies provides some understanding of the impact of these groups on the policymaking of the NCLB Act.

Furthermore, many of the individuals from the initial sampling frame declined interviews. Several of those who did consent to interviews were pressed for time. Consequently, these individuals were not able to answer all of the questions on the
interview schedule in Appendix B. Moreover, no interviews were conducted with those who testified on the NCLB Act since none of them responded to requests for interviews.

**Future Research**

To date, this research and Dias and López’s (2006) are the only known studies that use Antoniades’s model of epistemic communities as a theoretical lens. Dias and López’s study examines the role of epistemic communities in education policy in Brazil. This study analyzes the role of epistemic communities in the United States at the federal level. Future research should focus on the role of epistemic communities in other nations to determine its applicability in different political contexts.

Research on the roles of epistemic communities in other policy domains can determine the applicability of Antoniades’s framework to American politics. For example, it would be interesting to see if new epistemic communities would emerge if a new, controversial bill (such as selling newborns for profit, for example) was introduced in Congress. New epistemic communities could form since a proposal for the legalization of the sale of newborns has not received much, if any, consideration from policymakers in the past. For instance, would epistemic communities comprised of oil companies cease to exist if drilling in the Arctic National Wildlife Refuge or offshore were permitted? Research on federal policies related to the War on Terror could reveal the role of epistemic communities in this policy domain, too. Future research can add to the literature by revealing the extent of the participation and impact of epistemic communities on different federal policy domains in the United States.
It would also be interesting to learn about the role of epistemic communities in state and local policymaking in the United States. For example, the role of epistemic communities in the ban of smoking in public places in several states and cities could be examined. Future research can reveal the varying roles epistemic communities play at different levels of government in the United States and other nations with federal governments such as Germany and Canada.

Furthermore, Antoniades does not state if his model of epistemic communities applies to all types of governmental arrangements. It appears that his framework explains policymaking in democratic governments better than in authoritarian governments. Past research does not indicate if epistemic communities play a role in policymaking in nations such as China, Cuba, or North Korea. It is not known if epistemic communities even exist in these nations. If they do exist in authoritarian nations, their role in policymaking may be more limited than it is in democratic nations. Future research on the role of epistemic communities in the policymaking of authoritarian governments could fill this gap in the literature on epistemic communities.
Appendix A

To Whom It May Concern:

Hello. My name is Lisa Dotterweich and I am a doctoral candidate at Kent State University. I am conducting research on the roles of individuals and groups in the policy development of the No Child Left Behind Act of 2001 as a part of my dissertation. For this project to succeed, it is very important for me to fully comprehend the values and goals of the NCLB Act. It is in this capacity that I am contacting you as I am hoping to schedule an interview with you so as to communicate firsthand with people who were involved with the policy discussion surrounding the NCLB Act.

This research is innovative. It is the first to analyze the values and interests of individuals and groups involved in recent federal education policy. In the interests of accuracy and thoroughness, I would thus really appreciate an opportunity to interview you personally. I am flexible and would, of course, do my best to work within your availability. The interview should last no more than 30 minutes.

I will provide you with a summary of my research findings after my study is completed. Anonymity will be strictly maintained. Taking part in this process is voluntary; and, if you elect to participate, you may stop the interview at any time.

If you want more information about this research project or the interview process, you may contact me at ldotterw@kent.edu or my advisor, Dr. Trudy Steuernagel at (330) 672-0902 or tsteuern@kent.edu. These interviews have the approval of Kent State University’s Human Subjects Review Board. If you have any questions about Kent State University’s rules for research you may contact Dr. John L. West, Vice President for Research and Dean of Graduate Studies at (330) 672-3012 or jwest@kent.edu.

Please call me at (330) 309-5776 or e-mail me at ldotterw@kent.edu if you have any questions about setting up an interview.

Sincerely,

Lisa J. Dotterweich
Department of Political Science
Kent State University
Appendix B

Goals and Identification of Partnership

1. During the time NCLB was considered in Congress, could you tell me what goals you considered to be the most important for education policy?

2. Did you/ your group believe that NCLB advanced your goals or hindered them?

3. Did you work with anyone else (organizations or other people) to advance position while NCLB was considered in Congress? If the answer is no, skip to question 13.

YES, Partnership

4. If yes, who did you work with? Why did you work with these people?

Nature of partnership; consensus/disconsensus

5. How did you communicate with each other? What kind of actions or activities did you and your colleagues undertake to advance your goals?

6. Was there consensus about education policy among those you worked with?
   -If not, what were the sources of disagreement regarding goals?
   -If yes, why do you think you all were so closely aligned? Had such similar visions/thoughts about NCLB?

Information sharing

7. Did you share information with those you worked with?

8. Did you and your colleagues try to influence others with the information you had? If so, how?
Views on influence w/ partnership

9. Could you tell me a little bit about who was interested in what your group had to say? Who were these people?

Continued partnership? Why/Why not?

10. Have you worked together since the NCLB Act was passed? Could you tell me why (or why not)?

Other Individuals/Groups

11. Did other groups/individuals push visions similar to your group’s or did they view the problems facing public education differently? Who were these groups/individuals?

12. Are you aware of any actions that members of these networks took to influence others? If so, what were these actions?

If interviewee didn’t partner with anyone else

13. Could you tell me why you decided to work alone? Was this your choice or the choice of others?

14. Did another organization or individual approach you about advocating/pressuring others together?

15. In hindsight, do you think working with others would have facilitated the advancement of your goals?

Are there other people you would suggest I contact about my research?
Appendix C

Congressional Testimonies on the NCLB Act

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edward B. Rust, Jr.</td>
<td>Co-Chairman of the Business Coalition for Excellence in Education &amp; CEO of the State Farm Insurance Companies</td>
<td>March 8&lt;sup&gt;th&lt;/sup&gt;, 2001</td>
</tr>
<tr>
<td>Keith E. Bailey</td>
<td>Chairman, President, &amp; CEO of Williams on the behalf of the Business Coalition for Excellence in Education</td>
<td>March 29&lt;sup&gt;th&lt;/sup&gt;, 2001</td>
</tr>
<tr>
<td>Randi Weingarten</td>
<td>Vice-President of the American Federation of Teachers</td>
<td>March 29&lt;sup&gt;th&lt;/sup&gt;, 2001</td>
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</tbody>
</table>
### Appendix D

**Policy Goals Mentioned in Interviews & Testimonies on the NCLB Act**

<table>
<thead>
<tr>
<th><strong>Accountability</strong></th>
<th><strong>Subcategories of Accountability</strong></th>
<th><strong>Interview/Testimony Details</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>More Resources to Enhance Accountability</strong></td>
<td>1 interview (former committee staff member), 1 testimonies (Randi Weingarten)</td>
<td></td>
</tr>
<tr>
<td><strong>Closing the Achievement Gap</strong></td>
<td>1 interview (former Senate staffer), 1 testimony (Randi Weingarten)</td>
<td></td>
</tr>
<tr>
<td><strong>Supplemental Support for Students</strong></td>
<td>1 testimony (Keith Bailey)</td>
<td></td>
</tr>
<tr>
<td><strong>School Accountability</strong></td>
<td>2 interviews (former Senate staff member and director of think tank), 1 testimony (Edward B. Rust, Jr.)</td>
<td></td>
</tr>
<tr>
<td><strong>English Language Learners</strong></td>
<td>1 interview (employee of D.C.-based think tank)</td>
<td></td>
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<tr>
<td><strong>Teacher Accountability</strong></td>
<td>1 interview (former Senate aide)</td>
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</tr>
</tbody>
</table>

#### Subcategories of Teacher Accountability

| **Teacher Quality** | 2 interviews (Think tank employee, former Congressman), 1 testimony (Rust, Jr.) |
| **Teacher Preparation** | 1 testimonies (Bailey) |
| **Teacher Development** | 3 testimonies (Weingarten, Bailey & Rust) |
| **Teacher Recruitment and Retention** | 1 testimony (Weingarten) |
| **Teacher Compensation** | 1 testimony (Weingarten) |

<p>| <strong>Flexibility</strong> | 2 interviews (2 employees of think tanks), 1 testimony (Bailey) |
| <strong>School Choice</strong> | 2 interviews (1 employee of a private foundation &amp; one former employee of D.C.-based think tank) |
| <strong>Improving Student Achievement</strong> | 4 interviews (two non-profit employees, 2 former members of Congress), 2 testimonies (Weingarten &amp; Rust) |
| <strong>Standards of Curriculum</strong> | 1 interview (former Senate staff member), 2 testimonies (Bailey &amp; Rust) |</p>
<table>
<thead>
<tr>
<th>Topic</th>
<th>Testimonies/Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turning Around Low Performing Schools</td>
<td>1 testimony (Weingarten)</td>
</tr>
<tr>
<td>Math and Science Excellence</td>
<td>2 testimonies (Bailey &amp; Rust)</td>
</tr>
<tr>
<td>Testing</td>
<td>3 testimonies (Rust, Weingarten, &amp; Bailey)</td>
</tr>
<tr>
<td>Rewards and Consequences Based on Student Performance</td>
<td>1 testimony (Rust)</td>
</tr>
<tr>
<td>School Autonomy</td>
<td>1 testimony (Rust)</td>
</tr>
<tr>
<td>School Safety and Discipline</td>
<td>1 testimony (Rust)</td>
</tr>
<tr>
<td>Consolidation of Education Block Grants</td>
<td>1 interview (former think tank employee)</td>
</tr>
<tr>
<td>Opposition to the Consolidation of Education Block Grants</td>
<td>1 testimony (Weingarten)</td>
</tr>
<tr>
<td>Parental Involvement</td>
<td>1 testimony (Rust)</td>
</tr>
</tbody>
</table>
REFERENCES


Cawthon, S. W. 2004. “Schools for the Deaf and the No Child Left Behind Act.” 


Hopkins, R. F. 1992. “Reform in the International Food Aid Regime: The Role of


