JUDICIAL BELIEFS AND EDUCATION FINANCE ADEQUACY REMEDIES

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CHAPTER I

INTRODUCTION

For about 30 years the adequacy of education finance has been litigated in state courts across the United States. Ironically these suits have been filed, pursued, and decided without a firm consensus in the educational or political communities about what adequacy means. Instead, judges have rendered opinions about the amount and distribution of money in the state's education system based on sentences or phrases in state constitutions (Banks, 1991; Thro, 1993, 1994). What guides jurists from cryptic constitutional phrases to adequacy rulings?

Academic theories about adequacy probably have not guided judicial decision-making. Verstegen explains that, "unlike the notion of equity, the conceptualization and measurement of adequacy in education has received a paucity of attention" (1998, p. 52), while Ladd and Hansen say "that adequacy as an equity concept still requires much development and must be used with an awareness of this fact" (1999, p. 132).

The four primary methods the courts use for determining adequacy are practical rather than theoretical. They attempt to provide courts with the cost of an adequate education. The statistical approaches used by Duncombe and Yinger as well as Reschovsky and Imazeki (2001; 2003) use existing data about school inputs and outputs to determine the amount of resources needed to produce a level of student achievement. Augenblick's (1997) method looks at the resource levels used in "successful" districts and projects those resources onto other districts, assuming that if one district can be

successful with a level of resources, then all could be successful with that level of resources. Haveman's (2004) model is similar; however it is more sophisticated in comparing district characteristics. The Professional Judgment approach pioneered by Chambers and Parrish and used by Guthrie and Rothstein (1999) removes the black box of statistics and simply tallies the best educated opinions of knowledgeable experts to determine the cost of an adequate education. Finally some studies indicate some commercial packaged educational systems are effective. New Jersey's high court accepted those costs as proof that the state was spending enough to provide an adequate education (Goertz & Edwards, 1999; Ladd & Hansen, 1999; Ritter & Lauver, 2003).

While courts have considered these practical approaches to funding adequacy, researchers have had mixed success explaining judges' rulings in education finance cases. Potential influences include case facts and legal rules, the judges' personalities or political views, other governmental branches, the economy or social trends, or institutional features such as selection method of judges and term length (Lundberg, 2000, p. 1101; Swenson, 2000). State per capita income and political culture were significant predictors of judicial behavior, but constitutional language and case facts, court partisanship and institutional features were not significant (Lundberg, 2000; Swenson, 2000; van Geel, 1982). Thro (1993) thought the strength of a state constitution's education clause should predict court rulings on the constitutionality of education funding systems; however research indicates education clauses do not explain judges' rulings (Banks, 1991; Dayton, Dupre, & Kiracofe, 2004; Lundberg, 2000, p. 1115; Swenson, 2000). Dayton et al. thought the economy's condition influenced judicial orders (2005); however, Smith interviewed judges who "all said they took into

consideration the political and economic repercussions their decisions might have," but "they all also agreed that such considerations had very little or no influence on their decisions" (1994, p. 222, 224). Enrich noticed that courts turned "to a variety of sources – constitutional history, expert opinion and testimony, dictionary definitions, the thinking of other courts" to justify their decisions, "but it remains unclear how any of these can truly ground the crucial step from generic constitutional language to specific substantive criteria." Enrich declares, "Ultimately, these courts have simply, and boldly, taken it upon themselves to define the contours of educational adequacy" (1995, p. 175).

One under-explored possibility is whether judicial beliefs affect adequacy rulings. Danelski asserts the "concept of values is central to the explanation of judicial decisionmaking" (1966, p. 722). Pritchett (1941) pioneered research into judicial attitudes and their effect on judicial decision making. Segal and Spaeth (2002) added economic models and rational choice models to the list of techniques used to study judicial rulings. Schubert put behavioral research into judicial decisions "under four major categories: group interaction, courts as small groups, the political socialization of judges and the social psychology of judicial attitudes" (1963, p. 433). Based on his analysis of the U. S. Supreme Court from 1943 to 1944, Schubert says "the inference seems warranted that the attitudes of the justices toward issues of civil liberties and economic liberalism probably have, together, dominated the disposition of most cases decided by the Supreme Court on the merits during at least the past two decades (1963, p. 433). Tate attributed justices' background characteristics to their eventual voting behavior on the court (1981; Tate & Handberg, 1991). If there is no consensus about the theoretical or practical meaning of adequacy of educational financing, and if constitutional language does not predict judicial behavior, and if judicial attitudes do sometimes explain judicial behavior, then might judicial attitudes explain adequacy remedies? If value judgments are "inherent in alternative standards of equity as applied to school finance" (Berne & Stiefel, 1979, p. 15) then do judicial values, beliefs or attitudes influence adequacy rulings?

Scholars have created various scales to examine judicial beliefs, values and attitudes; however, none seemed appropriate for this study. Danelski (1966) created value spaces according to the intensity, congruity and cognitive completeness of the judge's ideas. This described judicial beliefs in three dimensions. It also required more information than was likely to be revealed in court dicta. Schubert (1965) scaled judicial beliefs according to economic and political liberalism, Segal and Cover (1989) used a liberal-moderate-conservative scale, and Lundberg (2000) used judicial political party membership, but these all seemed too crude for education finance research, especially since politicians of all stripes call for better schools. New York's Judge Jones said, "It is not whether education is of primary rank in our hierarchy of societal values; all recognize that it is" (Levittown School District v. Nyquist, 439 N.E.2d 359 (1982), p. 370). Segal and Spaeth (2002) defined judicial values based on rulings across a variety of cases; however, this involved greater knowledge of judicial rulings than was reasonable for this study, and other research indicated that technique might not work at the state court level (Fair, 1967). Berne and Stiefel offered important questions guiding value judgments in equity cases; however, they were inappropriate for this study. Similarly, Guthrie (2004) suggested that all educational finance decisions revolve around questions of equity, efficiency and liberty; however, they required trade-offs that limited the value space between them.

What was needed were scales of the beliefs that would shape the development of an educational system. Beliefs about resources were an obvious choice, starting with the minimalist ideas of Milton Friedman (1962) and ending in an ideal world where money is no object. Children are the input, focus, and product of the education system; so judges' beliefs about children's entitlements seemed fundamental to designing an adequate education system. Finally the purpose of schools in society seemed critical, since purpose should drive design. As a result of this thinking, this study will examine judges' beliefs about resources, school's role in society, and children's entitlements.

More specifically, by analyzing high court orders this study hopes to find indications of judicial beliefs about education. These beliefs will be scaled and compared to the resulting remedy to see if there is a correlation.

Statement of the Problem

The study uses scales of belief about education and a theoretical model of adequacy to examine the relationship between judicial beliefs and state high court adequacy remedies. The underlying hypothesis is that high court orders contain implicit models of adequacy that reflect judicial beliefs about the availability of resources, school's role in society, and student entitlements. "Law not only reflects differences of political influence and economic interests; it also expresses *beliefs* in systematic and binding terms, thus framing the ways in which people can make claims on government" (Tyack, James, & Benavot, 1987, p. 4, emphasis added). These beliefs affect the breadth and level of knowledge, and intended student recipients of educational resources. To test

these hypotheses, this paper measures and compares judicial beliefs and remedies as reflected in state high court rulings on the adequacy of education finance systems.

For this paper, judicial beliefs about education include beliefs about resources, student entitlements and school's role in society. Judicial beliefs about the availability of resources are presumed to range from scarce to abundant. Judicial beliefs about student entitlements are presumed to range from no entitlement to an entitlement to equal educational outcomes. Judicial beliefs about school's role in society are presumed to range from no role to that of social equalizer and leveler.

Similarly judicial ideas about the adequacy of an education system involve the breadth of courses and the level of learning for a hypothetical student population. The breadth of courses concerns the variety of subjects students should learn. The level of learning concerns the extent to which students should learn the various subjects. Finally all students will not learn all subjects with equal aplomb, so that a hypothetical student body can be described according to their educability, or the proficiency with which they can master the various subjects to the level of ability society expects. Beliefs about resources, school's role in society and student entitlements may interact with the three dimensions of an adequate education system in various ways.

Judges who believe resources are scarce will be less likely to interfere with their use or to try to use them for the benefit of the less fortunate at the expense of those who have those resources already, while judges who believe that resources are plentiful will be more interested in using them to influence students' lives and the future of society.

Hypothesis 1: Judges who believe resources are scarce will distribute resources equally to students of all educability, while judges who believe resources are plentiful will give more resources to the least educable students.

Judges who believe students are entitled to whatever their families or circumstances provide are unlikely to interfere with the distribution of resources, while judges who believe students are entitled to a certain result after attending school will try to move resources to the least educable students.

Hypothesis 2: Judges who believe students are entitled to what their families can provide or to equal resources from the state will allow inequities or provide money equally to all students, while judges who believe students are entitled to equal outcomes from education will focus resources on the least educable students.

Judges who hold a minimalist view of the role of school in society will expect little from and pay little for education and will not expect the legislature to use schools to enhance the future prospects for all children, but judges who believe schools are implements of social policy will target educational resources at the least educable.

Hypothesis 3: Judges who believe education is a parental responsibility or that schools must only enable students to read, write and count will distribute resources equally to all students or perhaps allow the wealthy the liberty to spend more, while judges who believe schools exist to enable students to pursue personal fulfillment or to reduce social inequity will target more resources on the least educable students.

Judges who believe the state has limited resources and must chose wisely in dedicating them to various good purposes will be reluctant to expand the range of courses

or objectives for the school system, while judges who believe the state has plentiful resources will be more willing expand what schools enable children to do.

Hypothesis 4: Judges who believe resources are scarce will demand a narrow breadth of knowledge, while judges who believe resources are plentiful will demand students get a broader range of knowledge.

Judges who hold a narrower view of students' entitlements will demand that the schools do less for them than judges who hold a broader view of students' entitlements.

Hypothesis 5: Judges who believe children are entitled to equal resources or what their parents can provide will call for a narrower breadth of knowledge, while judges who believe children are entitled to the maximum opportunity or equal outcomes will demand students learn a wider breadth of knowledge.

Judges who believe schools are only one part of a child's overall development will demand that schools do less for their students, while judges who believe schools are an instrument of social policy intended to enhance the future prospects for children will demand schools enable students to do a broader range of things.

Hypothesis 6: Judges who believe education is a family responsibility or that schools must enable students only to read, write and count will require a narrower breadth of knowledge, while judges who believe schools must enable citizens to compete in the market or pursue personal fulfillment will demand a wider breadth of knowledge.

Judges who believe resources are scarce will resist ordering a high level of student accomplishment, while judges who believe resources are bountiful or otherwise misused will demand resources be used to increase the levels of student learning.

Hypothesis 7: Judges who believe resources are scarce will call for lesser levels of accomplishment in students, while judges who believe resources are plentiful will call for higher levels of student accomplishment.

Judges who believe students are entitled only to a minimum education will only demand schools develop a minimal level of skill in their students, while judges who believe students are entitled to the best that society can provide will demand students be educated to a higher level of accomplishment.

Hypothesis 8: Judges who believe education is a family responsibility or that schools must enable students only to read, write and count will call for a lesser level of accomplishment in students, while judges who believe students deserve the maximum opportunity will claim students have a right to higher levels of accomplishment.

Judges who see schools as merely enabling students to master the basics will demand schools bring students to a lesser level of learning, while judges who believe schools exist to provide all a student needs to succeed in life will demand schools equip students with higher levels of learning.

Hypothesis 9: Judges who believe schools must only enable citizens to read, write and count will call for lower levels of student accomplishment, while judges who believe schools must enable citizens to compete in the market or pursue personal fulfillment will demand higher levels of student accomplishment.

Definitions

Adequacy – There is no single definition of adequacy accepted among scholars. Webster's defines adequate as "1. equal to the requirement or occasion; sufficient;

suitable" and "2. barely satisfactory; acceptable but not remarkable" ("Webster's New Universal Unabridged Dictionary," 1983). While defining adequate is easy, defining an adequate education is infinitely more difficult and much less sure. The Rhode Island state high court opined "what constitutes an 'equal, adequate, and meaningful' [education] is not likely to be divined for all time even by the scholars who now so earnestly debate the issues" (City of Pawtucket v. Sundlun, 662 A.2d 40 (R.I., 1995)), and others assure us "no standard definition of adequacy exists" (First & DeLuca, 2003, p. 190) and the "meaning of adequacy is still unclear" (Ladd & Hansen, 1999, p. 132). Nevertheless, the education finance literature is replete with references to adequacy. Core defining characteristics of adequacy as discussed in the literature are in Chapter II. Parrish and Chambers defined adequacy as "the provision of learning services sufficient to meet a goal" (1982, p. 7). Using that starting point, this paper defines adequacy as the provision of learning services sufficient to enable the top 95% of students to meet a criterion-referenced goal.

Educability – Educability refers to the ease with which a learner can acquire knowledge, skills or attitudes (KSAs) valued by society. Synonyms include trainability, aptitude or quickness. Webster's describes educability as "capacity for receiving education or of being instructed" ("Webster's New Universal Unabridged Dictionary," 1983). A more educable child requires fewer resources to acquire the same KSAs. All learners will not acquire all KSAs with the same ease. A child could learn to play a tuba easily while she struggled to wield a paintbrush. Another child could diagnose a mechanical problem in a car but have trouble reading the manual (Gardner, 1983).

Breadth of skills – Breadth refers to the range of KSAs schools try to impart to students. Breadth refers to the extent to which schools attempt to make students jacks of all trades. Ladd and Hansen call this the "adequacy of what" and refer to it as "qualitative adequacy" (1999, p. 104). Traditionally this has included the "three R's," i.e. reading, writing and arithmetic; however, it could include the entire gamut of human capabilities; musical and artistic skills and appreciation, physical training, interpersonal skills, intrapersonal skills, vocational skills, etc.

Ability Level – Ability level refers to the level of skill schools provide their students. There are levels of ability or achievement in all KSAs. Ladd and Hansen refer to this as "quantitative adequacy" or the question of "how much" (1999, p. 104). Wise (1983) might consider this the goal of education.

Educator Effort – Educator effort refers to the amount of resources needed to bring a learner to a defined ability level in a defined KSA, including teacher time and energy, administrative and support personnel, materials, buildings, transportation, school-delivered social services, and the entire expenditure of resources that enable a child to learn. Educator effort does not include effort expended by family, friends, clergy, Little League coaches, and the rest of the "village" that helps a child develop (Clinton, 1996).

Beliefs, values and attitudes – These terms are used interchangeably to indicate underlying motives that shape judicial behavior. Value is used in the sense of "acts, customs, institutions, etc. regarded in a particular, especially favorable way." Belief means "an opinion; expectation; judgment," and attitude is "one's disposition, opinion, etc." (Definitions from Webster's New Universal Unabridged Dictionary, 1983).

High Court – Because the highest court in every state is not called the "Supreme" court, this paper uses the term high court to refer to each state's highest court.

Delimitations

Although the model is rooted in the thinking of other scholars (Ladd & Hansen, 1999; Wise, 1983), it is a new and untested idea. This theory, like all theories, is a speculative explanation, tentatively held, waiting to be disproved or discarded. It is offered with the understanding that, "All theories are provisional and partial, and particularly in the social sciences, they tend to be imperfectly articulated, imperfectly operationalized and imperfectly tested" (Willower, 1980, p. 1-2). Consequently it might not represent theoretically what adequacy is all about. Later scholars might devise better models of what "adequacy" really means. Theories and models simplify, and thus distort, reality. While this model might indicate something about reality, there is much about reality it cannot explain. Segal and Spaeth say, "all models are false in that they purposefully exclude idiosyncratic and trivial factors that may marginally influence the behavior in question" (2002, p. 46). In its defense, "even if the model has elements that appear unrealistic, as long as it is internally consistent (logically deduced from first premises) and useful, it is acceptable" (van Geel, 1982, p. 77).

The model depends upon the assumption that increased levels of inputs will result in increased levels of student achievement. "All plaintiffs in school finance litigation rely on the common assumption that the level of funding of a school district has a direct effect on the quality of the program provided and the education the children receive" (Underwood, 1989, p. 414). Addonizio characterized the education production function

as "an elusive concept that remains controversial despite enormous research literature" (2003, p. 481). Hanushek might be the best known and most outspoken critic of the assumption that increasing educational inputs will increase student performance. He states bluntly, "Extensive scientific evidence indicates quite clearly that there is little if any relationship between the resources devoted to schools and their performance – at least as schools are currently organized" (Hanushek, 1994, p. 468).

While there is debate about whether more money creates more educational opportunity, certainly some money is required to create some educational opportunity.

In short, the scholarly retort to the argument that money does not matter when it comes to improving educational outcomes has made two solid points. First, increased expenditures, targeted wisely, have in fact had a good effect in many school environments. Second, much of the increased expenditures have gone to meet new school commitments such as special education, transportation, and the like – not to improving regular education. (DeMitchell & Fossey, 1997, p. 141)

McUsic notes that leaning on a minimum standard of output interpretation of state constitution education provisions avoids the problem of if and how money results in educational opportunity (McUsic, 1991, p. 310). Also, as long as courts behave as if the education production function were valid, then whether it is actually valid is less important to this study. The Alabama court found "that the results of production function studies alone are in any case not an appropriate basis for concluding that additional funding for public schools is unnecessary or misguided" (*Hunt*, 1993, p. 140).

It is also possible that the model does not capture what judges have tried to do in their adequacy rulings. Judges might have different theoretical ideas about what adequacy means, so that what they are trying to do and what this model tries to show are too imperfectly matched (Grossman, 1962). For example, Dworkin, "arguably this

generation's preeminent legal theorist" (Segal & Spaeth, 2002, p. 49), distinguishes between arguments of policy and arguments of principle. The model is a tool for rationally defining adequacy according to beliefs about social goals and social policy. Dworkin says "arguments of principle are arguments intended to establish an individual right; arguments of policy are arguments intended to establish a collective goal" (1975, p. 1067). Further, Dworkin says "rights may be absolute" and "rights may also be less than absolute; one principle may have to yield to another" (1975, p. 1069). If judicial decisions in adequacy are based purely on principle and rights without regard for social goals, then the model might not measure what judges are really doing or thinking. If the rulings reflect a balancing of rights and social goals then the model might be more useful.

Perhaps court decrees do not reflect the values and goals of their authors. "Values and all the other postulated variables that connect stimuli and responses in some meaningful way are, of course, only theoretical constructs" (Danelski, 1966, p. 737). What may appear to be values to the reader may not exist at all. Or, to the extent that the most carefully crafted writing may not say what we really mean, there might be some difference between what the decrees said and what the judges really believed. "Much of the real decision making may occur off the record and out of public view, and publicly stated motivations may not always coincide with true motivations" (Dayton, 1996, p. 20). Judges may have felt constrained by precedent, political pressure, or other factors from expressing their visions of adequacy fully. "The nature of the legal profession – its concern with precedent, its opaque language – often makes law a screen to obscure social change and to blur conflicts of values and interests" (Tyack, 1982, p. 3; Tyack et al., 1987). Judges may restrain their prescriptions to the legislature so that orders are "aimed"

less at remedying the particular plaintiffs' situation than at getting the legislature to do something about the general problem analyzed in the court's initial declaration" (Brown, 1994, p. 565). Also, "reasons, motives, and the like surely influence action but not in ways that are easily isolated as discrete, measurable, determinate variables" (McCann, 1996, p. 460). Last, the decrees may reflect the beliefs of an anonymous clerk and not the beliefs of the signatories (Brenner, 1990, p. 4; Ely, 1980; Schubert, 1963, p. 433).

Finally, the author may not grasp what the courts were genuinely trying to do with their adequacy opinions. "Given that individuals rarely understand their own decisions, it is immeasurably more difficult to fully understand the decisions of others" (Segal & Spaeth, 2002, p. 45), or as Dayton et al. explain, there are "at least three reasons for our conduct: What we tell ourselves; what we tell others; and the real reasons" (2005, p. 18). Opportunities to misunderstand and misconstrue abound.

Analytic Techniques

The fundamental analytic technique for this paper is document analysis. The texts of the high court rulings will be analyzed (Patton, 2002), and the judges' beliefs will be scaled (Danelski, 1966; Fair, 1967; Segal & Cover, 1989) regarding resources, student entitlements, and school's role in society. Simultaneously, the rulings will be examined to find the theoretical model of adequacy the judges are demanding, as described by the breadth, height and intended student recipients of educational resources. The result will be a belief score and a three-dimensional theoretical picture of the adequacy remedy.

Judicial beliefs will be measured along the scales in Tables 1-3. The three belief scores are then multiplied together to yield a overall belief score. Judicial direction of

Table 1
Beliefs about resources

Level	Description of belief about resources
R1	The state lacks resources to spend on public education.
R2	The state should minimize all expenses and expenditures, including
	spending on education (Friedman, 1962).
R3	Because resources are limited, investment in schooling should balance
	available resources, return on investment, and other spending needs.
R4	Resources are practically unlimited. Lack of will and misappropriation
	causes shortages in school funding and student failure.

Table 2
Beliefs about school's role in society

Level	Description of the role of school in society
S1	Education is an individual/family responsibility.
S2	School must enable citizens to read, write, count and participate in the political process.
S3	Schools prepare workers for the economy, national defense, and etc.
S4	School must enable citizens to pursue personal fulfillment.
S5	Schools exist to reduce social inequity.
	Schools exist to reduce social inequity.

Table 3

Beliefs about children's entitlements

Level	Description of "entitlement"
E1	Children deserve what their families and circumstances provide.
E2	Children deserve a minimum opportunity.
E3	Children deserve equal resources from the state.
E4	Children deserve a generous opportunity.
E5	Children deserve equal outcomes.

resources toward the least educable will be classified as "P" (Progressive); equal distribution of resources will be classified "N" (Neutral), and direction of resources toward the most educable will be classified as "L" (Liberty).

Similarly, adequacy remedies can be described using a three-dimensional model describing the breadth of courses, the level of achievement, and the targeted student populations. The horizontal "X" axis describes the educator effort required to bring a theoretical student population to an equal level of learning based on their educability. The "Y" axis measures the level of learning demanded by the decree, and the "Z" axis measures the breadth of knowledge (classes, courses, subjects) ordered by the remedy. Measuring the approximate volume of educator effort aimed across the range of student educability results in a theoretical measure of resources ordered by the remedy. Similarly the shape or bias of the curve may be characterized as "progressive" (P) if it directs more

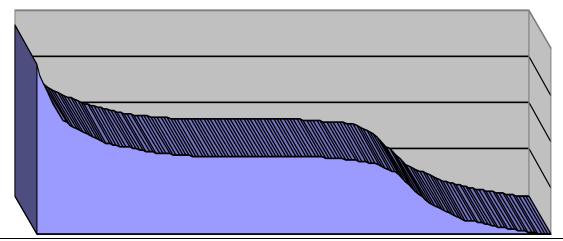


Figure 1: Basic adequacy model

resources toward the least educable, "neutral" (N) if it directs equal resources to all students, and favoring "liberty" (L) if it lets more resources to go to the most educable. Finally, statistical analysis may show the correlation between judicial beliefs and ordered remedies, hinting perhaps that judicial beliefs shape adequacy remedies.

Data

The data for this study are state high court rulings on the constitutionality of education systems from 1989 to 2003. Thro (1990) described this period as the "third wave" of education finance litigation in which high courts leaned more on the state constitution's education clause than on state or federal equal protection provisions (K. Alexander, 1991, p. 354).

By gauging judicial attitudes about resources, student entitlement and school's role in society, and by comparing that to the resulting adequacy remedy depicted in three dimensions, this paper hopes to reveal the link between judicial beliefs and the resulting

remedy. Tufte said "the task of the designer is to give visual access to the subtle and the difficult – that is, the revelation of the complex" (1983, p. 191). These belief scores and adequacy remedies can then be compared to determine if there is a link between the judges' beliefs and the adequacy remedies they order. By placing high court beliefs and rulings against a three-dimensional model of adequacy, this paper hopes to make explicit the implicit beliefs and adequacy models in the rulings.

Significance of the Study

This study investigates state high court decisions about the adequacy of education funding systems from 1989 to 2003. Looking backward, Tyack said, "I am persuaded that study of the law and education can clarify questions that puzzle historians of education as well as elucidating the legal system" (1982, p. 4). Looking forward, McCann said, "nearly all struggles in modern society will take place to a large extent on legally constituted terrain" (1996, p. 480). By examining court decisions with the theoretical model, this study hopes to illuminate the beliefs that shape the adequacy rulings, and the implications for education and society.

This study is significant because it uses a model specifically designed to describe adequacy in theory. Because little theoretical work has been done on adequacy, this model makes explicit assumptions and ideas that may lie below the surface of the dialogue on adequacy (Wise, 1983). By describing the high court adequacy decisions with the theoretical model this study may be project on the cave wall an image of the judges' "ideal" adequacy remedy (Plato, trans. 1942). By providing a theoretical template of adequacy, it may be able to systematically describe how high court adequacy

decisions vary, and by scaling judicial beliefs it may help explain why the adequacy remedies vary.

By putting the facets of adequacy in a single model this study may help us visualize what we want students to achieve, as well as some sense of the cost. If the potential costs of a model are clear, then policymakers can decide rationally what to exclude while still providing for an adequate education. Wise notes "Policymakers would prefer to have a rational or scientific basis for [decisions about adequacy]," because a "judgment about adequacy is a judgment about what a student needs," a concept which "has meaning only when a standard of reference also is defined" (1983, p. 305). This model combines a hypothetical student body with defined state goals. By making these assumptions tangible, this model may facilitate discussion within the scholarly, policy and legal communities about what adequacy really means.

After examining these beliefs and models society can ask if we share the courts' beliefs and if these are the adequacy remedies we would choose. If the courts' intentions are plain, perhaps a better dialogue may be opened about what we expect for our children and how we expect the educational system to fulfill those expectations. Informed public debate about spending on education and the purposes of education in shaping society's future could reassert the people's liberty to define and fund education for their children.

The results should contribute to the educational research literature by furthering the theoretical discussion about adequacy, and by analyzing judicial beliefs and high court adequacy rulings against a common template. This study may contribute to the political science literature by exploring the ways judicial attitudes shape court decisions.

The results should encourage discussions about society's vision of the future, goals for its children, concepts of justice and the roles of the courts and schools in meeting those ends.

Organization of the Study

Chapter 1 presented an introduction and overview of the study with relevant definitions. Chapter 2 reviews the relevant literature on adequacy and legal theory.

Chapter 3 describes the theoretical model and the methodology used to analyze the court cases. Chapter 4 presents the results of the study, while Chapter 5 contains the summary, conclusions, and recommendations.

CHAPTER II

REVIEW OF THE LITERATURE

The Courts and Educational Adequacy

Since Brown v. Board of Education, 347 U.S. 483 (1954) (Brown), "dispossessed groups have challenged through legislation and the courts what they perceived as an unequal and unjust system of public schools" (Tyack, 1982, p. 7). Equity lawsuits, and the adequacy lawsuits upon which this study focuses, are part of that on-going challenge. Many authors give credit to Arthur Wise as the intellectual father of equity litigation (1967), although Coons, Clune and Sugarman were influential as well (1970). The battleground over equity shifted from the federal courts to the state courts with the near simultaneous decisions of San Antonio School District v. Rodriguez, 411 U.S. 1 (1973) and Robinson v. Cahill, 306 A.2d 372, (NJ, 1973). Equity cases had mixed success in the state courts (Thro, 1990). Philosophically and practically, equity and adequacy arguments are related, but each has different virtues. Equity arguments tend "to take and hold the moral high ground in policy debates" (DeMitchell & Fossey, 1997, p. 135; Enrich, 1995). In reference to the *Washakie County v. Herschler*, 606 P.2d 310 (1980) decision in Wyoming, Verstegen and Whitney commented, "the court implicitly held that equity and adequacy could not be severed" (1997, p. 336). Adequacy suits spring from the same fountain as desegregation and equity litigation.

Many authors credit the Kentucky Supreme Court's *Rose v. the Council for Better Education*, 790 S.W.2d 186 (1991) decision with beginning the push in education

finance reform from equity to adequacy (*Adequacy and Education Finance*, 2004; K. Alexander, 1991; Minorini & Sugarman, 1999; Ritter & Lauver, 2003; Roellke, Green, & Zielewski, 2004; Thro, 1990; Verstegen, 1994, 1998). It is intuitive that a state would provide an adequate education for its children, and Guthrie and Rothstein explained that early education finance researchers "had 'adequate' as an assumed condition" (1999, p. 211). Nevertheless, the definition of an adequate education, how much that costs, and how that should be paid are subjects of debate.

Courts that ruled against state education finance systems often tasked the legislatures to change the finance systems, and the legislatures often turned to education specialists to devise an adequate education financing system. In New York the highest court appointed a panel which "recommended a staggering \$14 billion in additional operating funds over four years (a 45% increase) and an extra \$9.2 billion over five years to build new schools and fix the "glaring inadequacy" of the district's aging facilities (Kingsbury, 2005, p. 35). This review will outline education adequacy decisions from various states as discussed in the literature, and then discuss some of the expert's definitions and plans for providing adequate financing.

Educational adequacy today is primarily the end product of the evolution of legal thinking rather than educational thinking. Authors describe the gradual change in legal doctrines from separate but equal, through integration and equity to adequacy.

The doctrine of separate but equal was established by *Plessy v. Ferguson*, 163 U.S. 537 (1896), so that litigation until the 1950s aimed to "show that the segregated schooling provided for blacks was inferior to what was provided for whites." (Minorini & Sugarman, 1999, p. 176). *Brown v. Board of Education*, 347 U.S. 483 (1954) changed

that emphasis when the court declared: "in the field of public education 'separate but equal' has no place. Separate educational facilities are inherently unequal."

Brown (1954) and the Civil Rights Act of 1964 sparked an extended battle over integration that was partially successful, especially in the Southeastern United States. The battle for integration ultimately ended in frustration (Orfield & Eaton, 1996).

Decisions such as Milliken v. Bradley, 418 U.S. 717 (1974) limited the geographic reach of Brown (1954) by allowing predominantly white suburbs to retain autonomy from minority inner cities, and Oklahoma City v. Dowell, 111 S.Ct 630 (1991), that limited the temporal reach of Brown, since the court was unwilling to "condemn a school district, once governed by a board which intentionally discriminated, to judicial tutelage for the indefinite future" (Dowell, 1991).

Even before the integration battle ended, the "intellectual arguments for the school finance reform litigation movement were laid out in Arthur Wise's *Rich Schools*, *Poor Schools* (Wise, 1967) and *Private Wealth and Public Education* (Coons et al., 1970; Rebell, 2001; Ward, 1998, p. 12). Wise noted that while "it had long been recognized that there were disturbing inequities in public school finance, the suggestion that the issue might be justiciable was novel" (Wise, xi). Roellke, Green and Zielewski (2004) also credit Wise with initiating the "first wave" of school finance litigation, which focused on the federal Constitution's equal protection clause.

The problem "was that the existing school finance systems in most states clearly favored those communities that had more property tax wealth per pupil to finance their schools" (Minorini & Sugarman, 1999, p. 181). Lawyers such as Wise and Sugarman noted that the U. S. Supreme Court had "already expressed concern about wealth

discrimination" (Minorini & Sugarman, 1999, p. 181) in the right to vote, divorce, get welfare, or mount a criminal appeal, so the Supreme Court might include education as a fundamental right deserving protection from wealth discrimination under the 14th amendment (First & DeLuca, 2003; Ladd & Hansen, 1999; McMillan, 1998; Minorini & Sugarman, 1999). While this approach failed at the federal level when the Supreme Court rejected the status of education as a fundamental right under the U.S. constitution in *San Antonio Independent School District v. Rodriguez*, 411 U.S. 1 (1973) (Rebell & Metzler, 2002; "Rodriguez," 1973), equity cases were successful in the state courts based on state constitutional provisions for education and equal protection. Authors consider the turn to state courts the "second wave" of school finance litigation, initiated by the *Serrano* (1976) case in California and the *Robinson* (1973) case in New Jersey, and distinguished by the switch from the federal to state constitutional emphasis (Ladd & Hansen, 1999; McMillan, 1998; Moran, 1999; Rebell, 2001; Verstegen, 1994, 1998).

Minorini and Sugarman (1999) explain that equity was ultimately unsatisfactory to many advocates for five reasons. First, because some, principally urban, communities were saddled with high costs and large numbers of special needs students, equity was not enough. Also, some urban districts had more than average funding, and they might lose out because of equity, which was difficult to define anyhow (Hanushek, 1994; Roellke et al., 2004). Second, some advocates began to think curbing spending in rich districts to match that of poorer districts was difficult and fruitless. Wealthier districts in California found alternative ways to fund their schools in the wake of *Serrano*(1976) (Downes, 1992). Adequacy might provoke less political resistance from wealthier taxpayers, since it "offers the possibility of increasing the size of the pie for all" (Rebell, 2001, p. 231).

Third, California's property tax revolt made some advocates wonder if more might be at stake than equity by denying local communities the ability to raise money for their schools. Fourth, the publication of *A Nation at Risk* (1983) focused attention on improving the performance of the lowest students rather than equalizing performance overall (First & DeLuca, 2003). And finally, decisions like *Board of Oklahoma City v. Dowell* (1991) and *Missouri v. Jenkins*, 495 U.S. 33 (1990) indicated the federal courts were limiting their intervention in schools on the basis of segregation, (Minorini & Sugarman, 1999), while other decisions indicated the courts were willing to accept local control and variation in education quality (Roellke et al., 2004).

Authors mention other reasons for the shift to adequacy. Odden cites "the goals and demands of standards-based reform" (Odden, 2001, p. 85), as do Moran (1999) and Rebell (2001), while Verstegen credits "the requirements of the knowledge society and global economy" (1998, p. 51; Verstegen & Whitney, 1997, p. 330). Roellke et al. mention numerous legal points beyond those mentioned above that made equity difficult to litigate (2004). Ladd and Hansen mention adequacy as a potential cure for two theoretical weaknesses of equity; that is, equality of what kind of opportunity, and opportunity to which level of achievement (1999). Arguably the battle for inter-district equity in many states, like Florida, Rhode Island and Kentucky, has been won (Haselton & Keedy, 2002; Herrington & Weider, 2001; Mathis & Fleming, 2002; Picus, 2004); however, there may be potential for intra-district equity to improve student performance (Hill & McAdams, 2002; Roza & Hill, 2003) since educational reform efforts "increasingly focus on the school (rather than the district) as the basic unit in the education production process" (Ladd & Hansen, 1999, p. 99; Odden, 2000). Ironically,

the larger financing discrepancies that exist between states are not judiciable through the courts. The final irony is the suggestion that "in many ways the adequacy movement is a strategic retreat to the 'separate but equal' standard of *Plessy v. Ferguson* (1896), influenced partly by disillusionment with school desegregation and the rise of ethnic pride and multiculturalism" (Clune, 1994a; Orfield & Eaton, 1996, p. 366).

Adequacy Litigation

Adequacy became the alternative to equity in the effort to reform schools through the courts. "What is most distinctive about the adequacy approach is that, unlike the traditional school finance cases, it does not rest on the norm of equal treatment." "It is rather about spending what is needed" (Minorini & Sugarman, 1999, p. 188). Thus adequacy can be construed as a switch from the strategy used since *Brown* (1954) which called for equal treatment, to some unclear standard of sufficiency. With adequacy, unequal treatment is no longer offensive; in fact, it may be required. However, as a practical matter equity and adequacy remain closely linked.

The New Jersey Supreme Court ruling in *Robinson* was the first to refer to an adequacy standard: that of preparing students to become "citizens and competitors in the labor market" (*Robinson v. Cahill*, 62 N.J. 473, 303 A.2d 273 (1973) (*Robinson I*)).

Later Washington's Supreme Court declared the state constitution's education clause meant that education should "equip our children as citizens and as potential competitors in today's market as well as in the marketplace of ideas" (*Seattle School District v. State*, 585 P.2d 71 (1978)). Roellke et al. distinguish these cases as "second wave" because "second wave courts were not prescriptive in their mandates" (2004, p. 107). That

changed somewhat when West Virginia's Supreme Court listed seven elements of a thorough and efficient education (*Pauley v. Kelly*, 255 S.E.2d 859 (1979)), allowing a lower court to order the legislature and Department of Education to translate the seven elements of a thorough and efficient education into a "Master Plan for Education" (First & DeLuca, 2003; Minorini & Sugarman, 1999). Rebell refers to these "early" adequacy cases as "initial attempts" (2001, p. 234).

Although its remedy was similar to that ordered by the West Virginia court, scholars credit Kentucky's Supreme Court with explicitly establishing "educational adequacy as a distinct theory in school finance litigation" in the "seminal" *Rose* decision (Ladd & Hansen, 1999; McMillan, 1998; Minorini & Sugarman, 1999; Rebell, 2001; Roellke et al., 2004; Verstegen, 1994, 1998). The seven prescriptive capabilities requiring "sufficient" education cited in *Rose* and "based on the Cardinal Principles of Secondary Education published by the Commission on Reorganization of Secondary Schools of the NEA in 1918" (First & DeLuca, 2003, p. 205) set a precedent for courts in New Hampshire, Alabama, North Carolina and Massachusetts (Minorini & Sugarman, 1999). Roellke et al. note that starting in Kentucky, "third-wave courts have taken thorough and efficient claims to a new level and have mandated rather specific reform initiatives" (2004, p. 107).

Kentucky might also deserve credit for initiating the move toward adequacy because educational change has been clearer and stronger as a result of the Kentucky Supreme Court's order than it has in response to some other state high courts' orders.

McMillan considers *Rose* "as aspirational for adequacy theory proponents" because the "Kentucky state education clause does not even mention adequacy but only 'efficiency"

(1998, p. 1876). Schrag gives much of the credit for the success of *Rose* to the legal and political influence of Edward Prichard and Bert T. Combs (2002). Minorini and Sugarman say Kentucky was "politically primed to respond quickly and positively" (1999, p. 200), a sentiment echoed by Ladd and Hansen (1999). The court's action in striking down the entire educational system spurred Kentucky's political, business, union, and cultural factions to come together to create a new system, the Kentucky Education Reform Act (KERA), and its financial counterpart, Support Education Excellence in Kentucky (SEEK) (Schrag, 2002). In a similar vein, Rebell credits the seminal role of Kentucky in determining educational adequacy because "The *Rose* decision can, in essence, be viewed as the starting point in what has become a significant dialogue among the public, the courts, and the legislature on standards-based reform" (2001, p. 235; Fiss, 1979). Ward sees in litigation like *Rose* "a useful tool in the struggle for legislative attention and in the attempt to communicate to the electorate the need for equitable and adequate educational opportunities for all children" (Ward, 1998, p. 13). Fiss suspects "that the relationship between the branches in the constitutional domain ... is a more pluralistic or dialectical relationship" (Fiss, 1979, p. 15), so that courts not "have the *only* word or even the *last* word, but that they be allowed to speak and to do so with some authority" (p. 16, emphasis in original). Finally, Enrich views the *Rose* decision as a "goad" or "backstop," and part of an on-going process in which the courts engage "the legislative branch in a constructive collaboration" (1995, p. 177-178).

Subsequent adequacy cases have provided variations on the themes established in Kentucky. New Hampshire's *Claremont* case explained "A constitutionally adequate public education is not a static concept removed from the demands of an evolving

world," and that it is intended to prepare students for life in the 21st century. The court affirmed different levels of funding between schools and districts, also established by the SEEK formula (*Claremont School District v. Governor*, 138 N.H. 183, 635 A.2d 1375 (1993)). Subsequent rulings have confirmed the dynamic nature of adequacy. New Jersey's high court said "what was adequate in the past is inadequate today" and the Wyoming high court claimed, "The definition of a proper education is not static and necessarily will change with the times." Vermont, Massachusetts and others have made similar assertions (All cited in Verstegen, 1998).

Alabama's courts ordered sweeping change in the educational system; however, the legislature did not pass the bill before the governor balked at following the court's direction. Although Rebell claims "The emphasis on adequacy has involved the courts in a significant dialogue with state legislatures and state education departments," but that dialogue broke down in Alabama (Enrich, 1995; Rebell, 2001, p. 218; Scheingold, 1974). McMillan might use Alabama to explain the limits of the legitimacy of the courts to effect change, noting that in the long run "political branches, media, and others must determine what they can do or what is legitimate" (McMillan, 1998, p. 1889; Rosenberg, 1991). Reed's analysis drew similar conclusions about the efficacy of court-ordered school reform in Texas and New Jersey, concluding, "the success or failure of courts' efforts to improve the equity of school funding in primary and secondary education depends ultimately on the capacity of the legislature to withstand this heated political opposition" (1996).

In *Roosevelt Elementary School District Number 66 v. Bishop*, 179 Ariz. 233, 877 P.2d 806 (1994) (*Roosevelt*), the Arizona the court established adequacy as it applied to

school buildings (*Roosevelt*, 1994). The importance of adequate facilities was echoed in Ohio (*DeRolph v. State*, 78 Ohio St.3d 193, 677 N.E.2d 733 (1997) (*DeRolph I*)), New Jersey (*Abbott v. Burke*, 149 N.J. 145, 693 A.2d 417 (1997) (*Abbott IV*)), Wyoming (*Campbell County School District v. State*, 907 P.2d 1238 (1995) (*Campbell*)) and New York (*Campaign for Fiscal Equity, INC. v. State*, 295 A.D.2d 1, 744 N.Y.S.2d 130 (2002) (*CFE IV*)), and it may even be applauded by Eric Hanushek (1994). These cases involved numerous volleys between the court and the legislative and executive branches of government (Minorini & Sugarman, 1999).

In New York the definition of adequacy changed. In 1982 the *Board of Education of Levittown v. Nyquist* decision used "minimalist terms" to determine no "child in the state attended school in a district that did not provide an adequate education" (First & DeLuca, 2003, p. 13). In 1995 New York's highest court said the state must provide children "basic literacy, calculation, and verbal skills necessary to enable [them] to eventually function productively as civic participants" (*Campaign for Fiscal Equity, INC. v. State*, 86 N.Y.2d 307, 655 N.E.2d 661, 631 N.Y.S.2d 565 (1995) (*CFE I*)), which was reinforced at the appellate level in 2002 (cited in N. A. Alexander, 2004). But by 2002 the state was expected to provide its students with a high school education (*CFE IV*), thus demonstrating the dynamic nature of adequacy (Minorini & Sugarman, 1999).

Wyoming's high court was both less specific and more directive. It ordered, "The legislature must first design the best educational system by identifying the 'proper' educational package each Wyoming student is entitled to have," then cost and fund that package before any other state obligation (*Campbell I*, 1995). Thus in Wyoming an adequate education was the best that could be designed, and it was also the state's

primary fiscal responsibility. Wyoming rejected the ability of local districts to fund their schools beyond that provided by the state, since "historical analysis reveals local control is not a constitutionally recognized interest and cannot be the basis for disparity in equal educational opportunity" (Ladd & Hansen, 1999, p. 53; Minorini & Sugarman, 1999). This is contrary to Cubberley's admonition that the state "not reduce all to this minimum" (Cubberley, 1905), but it confirms the Montana court's observation that differential funding may "deny to poorer districts a significant level of local control, because they have fewer options due to fewer resources" (*Helena Elementary School District No. 1 v. State*, 236 Mont. 44, 769 P.2d 684 (1989) (*Helena*)). By reference, Texas also touted the primacy of education in the state's funding priority list, since it was "constitutionally imposed" (Verstegen, 1994, p. 245).

Like Wyoming, New Jersey's high court has also demanded the best education for plaintiff school districts. In a series of cases, New Jersey's high court ordered the state to provide plaintiff districts with funding equal to that of the richest districts in the state, enough to buy the most expensive whole-school reform, "Success for All." Thus poor children in New Jersey were to be equipped to compete with their wealthier peers, including consideration of their educational needs in providing vertical equity (First & DeLuca, 2003). The sentiment that all children should have what the richest children have was also expressed in Massachusetts and Ohio. Verstegen concludes, "What was adequate was largely determined by the education resources and learner outcomes evident in the best or highest spending districts/states" (1998, p. 55). This may be justified by the court's observation in Montana that "wealthier school districts are not funding frills..." (Helena, 1989).

In contrast to Kentucky, where the court struck down the entire educational system, New Jersey's "long and torturous" (*Abbott V*, 1998) education finance litigation provided judicial intervention for approximately 30 of the state's 551 districts (Ritter & Lauver, 2003). The initial litigation was *Robinson v. Cahill (Robinson*, 1973), which went through five iterations, and it was followed by *Abbott v. Burke (Abbott I*, 1983) which was on its ninth iteration (*Abbott IX*, 2002) at last count. Goertz and Edwards characterize it as "a story of how an activist court and a group of committed and tenacious plaintiff attorneys rewrote education finance policy in New Jersey" (Goertz & Edwards, 1999, p. 5), but the results are not beyond critique.

Much like other states, the initial *Robinson* filing claimed that funding disparities deprived students of their right to a thorough and efficient education as provided by the constitution, and the ruling for the plaintiffs resulted in new legislation, the Public School Education Act of 1975, which the court deemed "facially constitutional in its fifth decision" (Goertz & Edwards, 1999, p. 7). A subsequent filing on behalf of students from Camden, East Orange, Irvington and Jersey City resulted in the education finance system being declared unconstitutional again in 1990 because the absolute level of education and the educational programs were lower in poor urban districts than in wealthy suburban districts (Goertz & Edwards, 1999). The court concluded the plaintiff "Abbott" districts could not provide a thorough and efficient education, but it limited the remedy to 30 districts.

The legislature responded with the Quality Education Act (QEA), which increased spending by \$1800 per pupil but still left a \$1300 gap between rich and poor districts. The court rejected QEA, requiring substantial parity between rich and poor

districts "approximating 100 percent." The legislature took two years to craft its next plan, The Comprehensive Educational Improvement and Financing Act, which brought the plaintiffs back into court two weeks after it was signed. The court looked to see if the law established substantive standards for a thorough and efficient education, if it provided adequate resources, and if it met the needs or disadvantaged urban students. While it met the first test, the court determined it did not provide adequate funding or meet urban students' special needs (Goertz & Edwards, 1999). Ultimately the court ordered "a whole school reform package with high educational standards, full-day kindergarten, preschool for 3 and 4-year old children, a class size of 15 children, and a 100 percent state-funded facility upgrade program" (Ritter & Lauver, 2003, p. 575).

In New Jersey "these court decisions have not resulted in an equitable school funding system statewide" (Lauver, Ritter, & Goertz, 2001, p. 283; Ritter & Lauver, 2003). While the "Abbott" districts have come close to parity with wealthier districts, other poor districts have been left further behind and middle-wealth districts have had to increase their tax burden only to fall below average in spending. Both non-Abbott poor districts and middle-wealth districts sued (Ritter & Lauver, 2003).

The extended volleys between the courts and the legislature also played out in Ohio, although less extensively than in New Jersey. Concluding that "the foundation level reflects political and budgetary considerations at least as much as it reflects how much should be spent on K-12 public education," (*DeRolph I*, 1997) Ohio's Supreme Court declared the educational funding system unconstitutional. The legislature hired John Augenblick "to develop a base funding model" (First & DeLuca, 2003, p. 6). Augenblick's models essentially involved determining which districts were successfully

educating children, determining their level of funding and declaring that adequate. His models went through various iterations between the legislature and the courts. Ohio's citizens considered proposals for changing the system and rejected them. Finally the court declared the system constitutional in *DeRolph III* (2001) only to change its mind in *DeRolph IV* (2002) (First & DeLuca, 2003). Scheingold predicted the lack of resolution experienced in New Jersey and Ohio when he said "the direct deployment of legal rights in the implementation of public policy will not work very well, given any significant opposition" (1974, p. 117).

While Ohio's government wrangled over adequacy, Vermont's government responded with surprising quickness to an uncertain call for equity in *Brigham v. State*, 166 Vt. 246, 692 A.2d 384 (1997) (*Brigham*). Like Kentucky, Vermont's legislature was spring-loaded to execute change in the education system after years of "legislative gridlock that had prevented change" (Assistant Attorney General Yudien cited in Rebell & Metzler, 2002, p. 174), and the court's decision provided a trigger.

Rebell and Metzler explain that litigators in the *Brigham* (1997) case wanted to avoid questions of adequacy because adequacy was difficult to define and Vermont had a weak education clause and a strong equal protection (Common Benefits) clause. Based on Vermont's history and constitution, the Court treated education as a fundamental right in which citizens were entitled to effectively equal shares. Education had been a high political priority for years, and the newly-elected Democratic majority, using reform plans that had been refined for five years, acted on the Court's unanimous decision (Rebell & Metzler, 2002).

The result was a statewide property tax with caps to protect households with incomes under \$75,000. Most residents paid less tax, and ten times as many districts had increased per pupil resources as had decreased per pupil income. Unhappy wealthier districts and property owners fought the new "Act 60" fiercely, but to no avail (Rebell & Metzler, 2002). Mathis and Fleming note Vermont has "arguably the most equitable school funding system in the nation" (2002, p. 1). They also note improved test scores, with previously lower achieving students rising closer to their higher achieving peers, and "with the low-wealth towns registering the largest achievement gains" (Mathis & Fleming, 2002, p. 9). An interesting twist is that opponents of the Act 60 redistribution scheme appropriated \$160,000 for an adequacy study, hoping "that if an adequacy level could be defined and funded by the state, then all funds raised locally above this level would be retained locally and not subject to recapture" (Mathis & Fleming, 2002, p. 10).

Vermont has also joined Wyoming and Montana in striking down local disparities in funding, stating "nowhere does the constitution state that the revenue for education must be raised locally, that the source of the revenue must be property taxes" (*Brigham*, 1997). Moran (1999) also credits Vermont with examining student performance results in considering its education finance system, and ironically, explains that states can use their standards to defend themselves in adequacy suits, claiming that the standards help ensure adequacy.

Several state courts included outcomes as part of their adequacy decisions.

Texas' high court indicated efficiency "mandates education results" (*Edgewood Independent School District v. Kirby*, 777 S.W.2d 391 (1989) (*Edgewood I*). Tennessee's court declared "The General Assembly shall maintain and support a system of free public

schools that provides at least the opportunity to acquire general knowledge, develop the powers of reasoning and judgment and generally prepare students intellectually for a mature life" (*Tennessee Small School Systems v. McWherter*, 851 S.W.2d 139 (1993) (*McWherter*)). While the state maintained the differences in funding and teacher salaries do "not affect student performance," the court noted that students in poorer districts had lower test scores and were less likely to be in accredited schools. Consequently the court ordered equalization of funding and salaries. Like Tennessee, North Dakota's high court considered accreditation in its examination of adequacy, noting that students in accredited schools had higher test scores (*Bismarck Public School District #1 v. State*, 511 N.W.2d 247 (1994) (*Bismark*)). Like Tennessee and North Dakota, Montana considered accreditation, but there accreditation standards were considered "a minimum upon which a quality education can be built" (*Helena*, 1989).

While Clune indicated adequacy may be a retreat to *Plessy v. Ferguson* (1896), some litigators are taking adequacy back to *Brown* (1954). The Connecticut Supreme Court ruled the state had failed in its affirmative duty to provide an equal education to its students where some encountered de facto segregation (*Sheff v. O'Neill*, 238 Conn. 1, 678 A.2d 1267 (Conn., 1996) (*Sheff*)). Plaintiffs in Minnesota have tried a similar tactic (*N.A.A.C.P., Minneapolis Branch v. Metropolitan Council*, 125 F.3d 1171, C.A. 8, Minn (1997). Indeed, McMillan sees a fourth wave of school reform litigation previewed in the *Sheff* decision, although he believes its scope and impact will be limited by the unique clauses from Connecticut's constitution which supported the decision, as well as courts' individual concerns about their legitimacy and competency (1998).

Adequacy suits have also failed in the courts. The courts in Florida (*Coalition for Adequacy and Fairness in School Funding, Inc. v. Chiles*, 680 So.2d 400 (1996)

(*Chiles*)), Rhode Island (*City of Pawtucket v. Sundlun*, 662 A.2d 40 (1995) (*Sundlun*)), and Illinois (*Committee for Educational Rights v. Edgar*, 174 Ill.2d a, 672 N.E.2d 1178, 220 Ill.Dec. 166 (1996) (*Edgar*)) all deferred to the legislature to answer the question of how to fund an adequate education for students in their states. The Illinois court said, "Solutions to problems of educational quality should emerge from a spirited dialogue between the people of the State and their elected representatives" (*Edgar*, 1996). Not all courts agree on the extent of their legitimacy and competency in solving education finance questions (Ladd & Hansen, 1999; McMillan, 1998).

Florida is an interesting case where adequacy seems to be coming in the back door. In response to *Serrano v. Priest*, 557 P.2d 929 (Cal., 1976) Florida's legislature created a very flat education financing system that limited district discretionary funding to half a mil. This system survived challenges that claimed it created too much variation in funding (*Gindl v. Department of Education*, 396 S. 2d. 1105 Fla., 1979) and that it allowed too little variation (*Department of Education v. Glasser*, 622 So. 2d 944 Fla., 1993) as well as an adequacy challenge (*Chiles*, 1995). While the judge in Ohio suggested that adequacy might be more successful if the citizens changed the constitution's wording (cited by First & DeLuca, 2003), Florida's constitution was changed to say:

The education of children is a fundamental value of the people of the State of Florida. It is, therefore, a paramount duty of the state to make adequate provision for the education of all children residing within its borders. Adequate provision shall be made by law for a uniform, efficient, safe, secure, and high quality system of free public schools that allows students

to obtain a high quality education ... ("Florida Constitution," 1968, Article IX, 1998)

Specific terms in this new constitutional language may enable the judiciary to intrude more deeply into educational finance questions, specifically "fundamental value," "paramount duty" and two uses of the term "high quality." "[M]any believe the new constitutional language and the new standards for education may make Florida's educational funding program more vulnerable to litigation" (Herrington & Weider, 2001, p. 518). In fact Jon Mills, a member of the Constitutional Revision Commission, states, "By providing specific standards for adequacy, the Constitution Revision Commission has invited greater court supervision of the Legislature's role in education funding and has guaranteed that future litigation will determine whether the state currently meets its duty to make 'adequate provision' for public education (Mills & McLendon, 2000, p. 331). Another adequacy case will test the court's response to the new language. While it is hard to imagine pro-education voters objecting to changing the constitution based on a surface reading of the new language, it is harder to imagine that voters, no matter how adequately educated, fully understood the legal and political ramifications of the nuanced legal phrases the new article contains. It is reminiscent of signers of a "Compulsory Education" petition in Oregon in 1920 who did not realize they were supporting an act that would ban private schools (Tyack et al., 1987, p. 183).

Definitions of Adequacy

Within the definition of adequacy lay both the hope and threat of the adequacy movement. Advocates hoping to expand resources for education want a broad and high definition of an adequate education, while defenders of individual liberty hope to define

adequate as satisfactory to some more narrowly defined goal. This discrepancy has its roots in the economic and philosophic arguments about education as both a public and private good. Cubberley's statement, "The duty of the state is to secure for all as high a minimum of good instruction as is possible, but not to reduce all to this minimum" (Cubberley, 1905) (Addonizio, 2003; Clune, 1994b; First & DeLuca, 2003; Ward, 1987, 1998; Wise, 1983) applies, as does Milton Friedman's discussion of the liberty, neighborhood effects and paternalism behind state funded education (Friedman, 1962). However, the battle over adequacy has been fought mostly in the courts rather than in universities or legislatures, with decisions riding on judicial interpretations of constitutional education and equal protection clauses.

Webster's defines adequate as "1. equal to the requirement or occasion; sufficient; suitable" and "2. barely satisfactory; acceptable but not remarkable" ("Webster's New Universal Unabridged Dictionary," 1983). As explained in Chapter I, the definition of adequacy is unclear and a universally accepted definition of adequacy is unlikely to be developed or discovered. Nevertheless, the education finance literature is replete with references to adequacy, with many scholars quoting Cubberley as a starting point. Some core defining characteristics of adequacy have evolved in the literature and the courts.

In an early attempt to address the question of adequate financing of education, Chambers and Parrish said, "Adequate education refers to the provision of learning services sufficient to meet a goal" (1982, p. 7). Minorini and Sugarman say "equity" cases are about getting worse treatment than someone else" while adequacy cases "seem to be centrally about getting worse treatment than one is entitled to as determined by

reference to some absolute standard and not in comparison with others," or a "high-minimum quality education for all" (1999, p. 179).

Arthur Wise, the seminal thinker in school finance litigation, had profound and troubling thoughts about adequacy. "A judgment of adequacy is a judgment about what a student needs," and because of the lack of measurements and standards, that judgment "inevitably must be made on irrational grounds." So the fundamental question of adequacy is "who decides what is essential or useful for whom" (Wise, 1983, p. 305). To begin, "adequacy is the provision of that minimum educational opportunity necessary to (minimally) prepare students for adult roles" (Wise, 1983, p. 309). While that is a definition of adequate outcome, determining adequate levels of funding is more problematic. "Strictly speaking, total funds cannot be adequate (while inequity exists) unless one assumes that high-spending districts are wasting resources" (Wise, 1983, p. 311), or if some students are unprepared for adult roles that "may imply that current funding levels are inadequate" (p. 313). Finally Wise indicates adequacy is really old wine in new bottles in the sense that the "concept of adequacy – however defined – is really about the problems of the educationally disadvantaged" (p. 315).

Ladd and Hansen trace the philosophical roots of an adequate education through Strike (1998) to Rawls' *A Theory of Justice* (1993) and the concept of "primary goods" including "rights and liberties, powers and opportunities, income and wealth, and self respect" (1999, p. 103). From this they distill the concept of "qualitative adequacy," essentially how broad a range of learning is adequate, and "quantitative adequacy," or how much learning, learning to what ability level, is adequate (1999, p. 104). In contrast to others (like Chambers and Parrish) Ladd and Hansen believe "adequacy is exclusively

focused on schoolchildren and does not embrace taxpayers as objects of concern" (p. 102, Berne & Stiefel, 1979). While equity is more input-focused, adequacy is more output-focused. Citing Clune (1995) they believe adequacy as a concept applies especially to urban, poor districts and to high-poverty students. Although the measurements are unclear, adequacy may be considered criterion-referenced, adequate to some standard, while equity concerns were norm-referenced, better or worse than peers (Ladd & Hansen, 1999).

Alexander finds definitions of adequacy vary depending on the thinker's philosophy. Thus "adequacy takes on a different face if grounded in progressive versus humanistic classical philosophies" so that "progressive definitions often lead to processoriented strategies, whereas the classical liberal definition often translates into skills-based approaches" (N. A. Alexander, 2004, p. 83).

Parrish and Chambers' study *The Issue of Adequacy in the Financing of Public Education* (1982) is often cited as an early attempt to deal with the theoretical and practical problem of defining adequacy. While they maintained "Adequate education refers to the provision of learning services sufficient to meet a goal," they also included a caveat; "since there is no social consensus as to the specific outcomes that should result from public education and the technological relationships between educational resources and outcomes are not well understood, it is our contention that the issue of adequacy cannot be objectively resolved" (Chambers & Parrish, 1982, p. 7). Guthrie and Rothstein also linked services or inputs and goals, saying adequacy "is a notion of sufficiency, a per-pupil resource amount sufficient to achieve some performance objective" (1999, p. 214) requiring policy judgments which determine "(1) learning or performance levels to

be attained and (2) resource levels likely to permit schools to accomplish these learning purposes with students" (p. 215).

Parrish and Chambers believed "adequate levels of provision cannot be objectively determined, but are subjective public policy allocation decisions" (Chambers & Parrish, 1982, p. 7). Adequacy is inevitably the subjective result of society's decisions about resource allocation, with the amount of money society decides to allocate to education as opposed to prescriptions for senior citizens or roads or parks being adequate. Carnoy agrees that "adequacy is rooted in a social consensus" (1983, p. 287). Ward also says, "Important public issues in a democracy, such as the definition of adequacy, emerge from the public policy process" (Ward, 1991, p. 15), although his belief in the political process seems less sure when he says "elite groups will work very hard to protect their own privilege at the expense of the rest of society" (Ward, 1998, p. 19) and, "much of school finance policy today consists of struggles between those who want to guarantee each child access to an adequate education and those who want to perpetuate privilege in our society" (Ward, 1991, p. 14). Chambers and Parrish's "Resource-Cost Model" assumes state-specified educational services were the result of rational public decisionmaking, and they use computer modeling to adjust for differences in resource costs and student needs between districts (1982, p. 65).

Chambers and Parrish proposed a unique definition of adequacy tied to equity and society's overall goals for the education system. If society has established an educational system to reduce the disparities between the classes and increase the life chances of society's poorest citizens, then it should have an education system adequate to that task. "Thus one standard for appraising the adequacy of public education is the degree of

equity inherent in the system." "A system of public schooling that is grossly inequitable so as to retard the movement toward equal educational opportunity may be regarded as inadequate in meeting this societal requirement" (Chambers & Parrish, 1982, p. 10).

Carnoy and Ward echo this theme.

Carnoy provided six means of reviewing adequacy (Carnoy, 1983).

- (1) "Adequacy as a purely educational goal," in terms of the amount of schooling or knowledge children should have (p. 287).
- (2) "Adequacy as improved internal efficiency," in the sense of are the schools adequate to the task of training young people by effectively using resources efficiently? An inadequate school would waste resources and fail to educate its charges even though it had enough to do the job (p. 288). Furthermore, an adequate school would be adept at addressing the needs of its students, and efficient schools would add more knowledge to their students than less efficient schools. Sanders' work measuring pupil progress in Tennessee comes to mind (Sanders, 1998).
- (3) "Adequacy as internal efficiency equity" means judging the school in terms of equalizing outcomes. An efficient school makes "as equal as possible the value added to knowledge for all students" or "adequacy is the equalization of absolute outcomes at the end of the schooling process (schooling as equalizer)" (p. 291). Chambers and Parrish express a similar idea regarding society's goals for its schooling system.
- (4) "Adequacy as external efficiency: Social functioning requirements." This notion of adequacy can be "measured by some minimum requirements to function adequately in modern society" for example, being able to read and complete bureaucratic forms (p. 292).

- (5) "Adequacy as external efficiency: The job market" would measure the kind of jobs students obtained following graduation (p. 293). Kentucky high schools post this information on their web sites now, indicating how many students entered the military, got jobs, or entered higher education.
- (6) "Adequacy as external efficiency: Equity and equality considerations." Carnoy's final category assumes that the purpose of increasing adequacy in education is to have more equity in life-results among graduates. In this sense a more adequate education system would produce less variation among its graduates. An equitable system would ensure a higher rate of return for minority and poor students than Asian, white and richer students for their investment in education, so that over time the life chances between the groups became more similar (p. 294).

Ward views adequacy by Carnoy's notions of adequacy as measured by the job market and variation in life circumstances. Ward notes the importance of symbolic analysts mentioned by Robert Reich, as well as the shift in wealth in the last decades of the twentieth-century from the poor to the rich documented by Kevin Phillips. These two trends in the American economy lead Ward to conclude that an adequate education involves access to high quality instruction that provides all students the opportunity to be symbolic analysts (Ward, 1991), presumably slowing or reversing the trend toward greater disparity between rich and poor.

Clune, a pioneer in the equity movement, has a simple definition for adequacy.

"Program adequacy can be defined as (a) the cost of raising educational outcomes of poor children to the level of full functioning in society together with (b) the systems of finance, governance, organization, implementation, and educational practice needed to

guarantee that these high minimum outcomes actually occur" (1994a, p. 365). Clune echoes Chambers and Parrish in stating, "Adequacy means adequate for some purpose, typically student achievement," although he believes a "social consensus now seems to be developing around high minimum achievement as the common goal for educational adequacy" (1994b, p. 377). That minimum of "educational adequacy will eventually be defined as every student (other than the 2% or so truly disabled) scoring at least at the proficient level on new tests including higher-order thinking," and "as every student being qualified and certified for college entrance, for example, having taken the required courses and being able to pass a college entrance exam" (Clune, 1994b, p. 379). Having said that, Clune claims "I have come to believe that the state-centered standards movement is a big mistake ... the only standard for curriculum should be that it is high; otherwise, schools should have a wide range of options for curriculum choice" (p. 382, 1994b). Ultimately Clune offers Slavin's "Success for All" as an example of adequacy, the same model used by the New Jersey court in *Abbott*. Clune's feelings about school autonomy are out of step with the Arkansas Supreme Court's ruling which said, "No longer can the State operate on a 'hands-off' basis regarding how state money is spent in school districts and what the effect of that spending is. Nor can the State continue to leave adequacy and equity considerations regarding school expenditures solely to local decision-making" (Lake View School District No. 25 of Phillips County v. Huckabee, 91 S.W.3d 472 (2002) (*Lake View II*)).

Levin offered a thoughtful critique of Clune's definitions of adequacy. Among other things, he questioned the dedication to the "full functioning in society" standard because "What is shocking is how little we know about what types of educational

outcomes are necessary for workplace productivity" (H. M. Levin, 1994, p. 398). In essence, Levin supports Clune's basic ideas, but the courts are ordering legislatures to make changes when no one knows which changes will bring about which results. While Clune distinguished equity from adequacy by noting that adequacy considers inputs and outcomes, rather than just inputs, Levin contends no one knows how to broadly link inputs and outputs, regardless of the name of the program.

Hanushek criticizes the alleged link between inputs and outcomes most assertively. "Continual infusion of funds has not produced higher aggregate achievement." "There is no consistent relationship between the resources applied to schools and student performance." "The evidence is very clear that the major determinants of instructional expenditure – class size, education of the teachers, and experience of the teachers – are not systematically related to student achievement" (Hanushek, 1994, p. 464). Hanushek's conception of adequacy is minimal. "If a school district cannot provide safe and sanitary conditions, if it cannot provide adequate textbooks, and if it cannot provide qualified teachers for basic subjects, everyone would agree that the funding is inadequate" (1994, p. 466). Juday takes Hanushek's minimum one step further by asking questions involving numbers of textbooks per child, or children per teacher as important aspects of adequacy (cited in First & DeLuca, 2003). McUsic summarized, "Educators, social scientists, and courts have been unable to agree on the correlation between educational expenditures and the quality of education" (McUsic, 1991, p. 316).

While Hanushek does not see a consistent correlation between educational inputs and student performance, Odden maintains there is a relationship and it can be made

more efficient. Odden's definition of adequacy is whether the state formula "provides adequate revenues per pupil for districts and schools to deploy educational strategies that are successful in educating students to high performance standards" (Odden, 2000, p. 467). Imbedded in Odden's definition are three elements common to the discussions of adequacy: input (adequate revenues per pupil), process (educational strategies that are successful in educating students) and outputs (high performance standards). Odden's conception of adequacy involves costing out specific kinds of inputs and giving schools and teachers incentives to deploy those resources to improve student performance.

Alexander also discussed three elements of adequacy: "(a) adequacy of educational inputs, (b) adequacy in school processes, and (c) adequacy of educational outputs" (2004, p. 81). Verstegen also noted that judges have defined adequacy using input, process, or output criteria (1998).

The traditional discussion of equity is tied to the adequacy of educational inputs, especially the notion of vertical equity. Chambers and Parrish note the *Serrano* (1976) decision used a quantitative input measure of equity/adequacy: "It is the quality (or level) of the education in terms of expenditures relative to other districts in the state that is the relevant standard" (1982, p. 23). Verstegen mentions New Jersey as an example of input adequacy, because the court directed "substantial equivalence approximating 100 percent," (*Abbott III*, 1994, p. 60) in funding between rich and poor districts, and "parity in per pupil expenditures" between rich and poor districts (*Abbott IV*, 1997, p. 60). Thomas and Davis list a "Resource Model" that they say "is referred to as an 'input model'" (2001, p. 21); however, it sounds much like what Ladd and Hansen refer to as Professional Judgment (1999, p. 120).

Alexander divides inputs by quantity and quality. Quantitative input adequacy looks at the quantity of inputs and "evaluates school finance systems based on relative distribution" with "an assumed linkage between resources and outputs" (N. A. Alexander, 2004, pp. 86-87). The National Council on Education Finance determines "adequacy as a two-step process," beginning with a "rationally defensible base level of funding" and topped with "adjustments for different proportions of certain types of students" (NCES, 2004, p. 2). Quantitative input measures of adequacy are controversial, as noted above in the paragraph on Hanushek. Ward says "some oppose school finance reform because they argue that spending more money on the education of children in low spending districts will not make any difference in the quality of their education." On the other hand, quality also matters. Ward explains, "In his Texas research Ferguson found that better literacy skills among teachers, fewer larger classes, and more teachers with five or more years experience all were related to higher student test scores. He concluded that skilled teachers are the most critical of all schooling inputs" (Ward, 1998, p. 14).

Alexander puts the roots of study into adequacy of processes in sociology and works like *Keeping Track* (Oakes, 1985). "There are certain assumed linkages between processes and student performance, where certain pedagogical and curriculum approaches are considered to be more beneficial for the academic performance of students" (p. 87), so "an important first step for adequacy reformers is to document trends in the curriculum choices and performance standards of students" (N. A. Alexander, 2004, p. 91). Alexander finds the root of process adequacy in Gowin by saying "an 'educative event' can occur only if there are at least two partners in the process: the teacher who intervenes with meaningful materials and the learner who chooses to grasp

the meaning and learn them" (2004, p. 92). While this paper assumes perfect efficiency, "a more detailed discussion on the adequacy of the process, which speaks to the capacity of institutions to meet the standards set" has been largely missing from the discussion of adequacy (N. A. Alexander, 2004, p. 97).

Verstegen (1998) marks Montana and Wyoming as using a process definition of adequacy. She quotes the Montana court in saying, "While this opinion discusses spending disparities so far as pupils are concerned, we do not suggest that financial considerations of that type are the sole elements of a quality education or of equal educational opportunity" (*Helena*, 1989). Wyoming required the "best" educational system and the "proper" educational package for each student (Campbell, 1995).

The bottom line for researchers, policy makers and society is educational inputs and outputs are very controversial. Wise noted, "When the state assumes a duty, its citizens acquire a right," but "at some point, the state may have to deal with the idea that teaching can be effective when students do not learn much. The two phenomena may be irreconcilable" (Wise, 1983, p. 302). Chambers and Parrish said, "It cannot be assumed with confidence that any prescribed set or level of resources will result in a mandated set of outcomes" (1982, p. 25). Levin declared, "I cannot think of a single study that has defined and costed educational outcomes"

An accurate costing requires that we know the specific resources that are required to provide a particular result. Unfortunately we do not know with any degree of precision the impact of a specific set of resources on a specific set of students for a specific educational outcome. (1994, p. 399)

Thomas and Davis list a "Desired Results Model" they claim is "often called the output model" (2001, p. 20). However, it sounds more like the technique Augenblick

used to determine adequacy in Ohio that Ladd and Hansen call "Empirical Observation." (1999, p. 118).

Verstegen considers Kentucky and other states that defined pupil competencies as using output definitions of adequacy (1998). Part of the problem with adequate outcomes is their measurement. In reference to the *Robinson* and *Pauley* decisions, but also applicable to the *Rose* decision, Chambers and Parrish said, "A major problem with such output measures of adequacy in education is their measurement" (1982, p. 22). While courts may declare the education clauses of their constitutions entitle students to preparation for a full and happy life, a full and happy life is more likely the result of lifelong learning and continual adaptation rather than the product of a definable amount or type of education. Outcome measurement may be irrelevant if Alexander is right in saying "results neutrality will serve as the new standard by which plaintiffs take states to court" (p. 92), reflecting ideas discussed by Carnoy and Wise. On the contrary, Rebell denies that judges have set an output definition of adequacy, maintaining instead that the courts have called for opportunity to learn rather than specific learning results (2001).

Along with the theorists' ideas, adequacy has been defined in the courts. D. V. Thomas alleges the definition of adequate requires court interpretation:

What constitutes an adequate education is a complex problem. It requires judicial interpretation of the education clause in a state's constitution and appropriate action by the legislature when mandated by the court's decision. (Thomas & Davis, 2001, p. 7)

Rebell's review of court cases revealed four core constitutional concepts that define an adequate education, including

(1) prepare students to be citizens and economic participants in a democratic society; (2) relate to contemporary, not archaic educational

needs; (3) be pegged to a "more than minimal" level; and (4) focus on opportunity, rather than outcome. (Rebell, 2001, p. 239)

While Rebell sees opportunity rather than outcome as the focus of adequacy, writers like Wise claim "The failure to acquire the basic skills may be taken as prima facie evidence that the proper opportunity has not been provided" (Wise, 1983, p. 304).

In conclusion, Ladd and Hansen (1999) said

The meaning of adequacy is still unclear. Major questions remain open: is it a wide, high standard or a narrow, low standard? Does it focus attention and resources primarily on the disadvantaged or does it contribute to improving achievement for all students? What will it mean to extend the concept of adequacy as an equity standard to federal, school, and student-level policies? How will the courts or legislators determine if funding is adequate? (p. 132)

Implementing Adequacy

Spurred by court rulings and unhindered by lack of definition, educators have implemented different types of adequacy plans. Researchers have put these plans into four main categories, although exceptions are explained at the end of this section. Ladd and Hansen list these adequacy models as based on statistical analysis, empirical observation, professional judgment, and whole-school designs (1999).

Inference from outcomes by statistical analysis.

Although this approach started as a technique for determining differing costs of educational services across a state, it evolved into an approach "so that a specific service level (defined, for example, in terms of the percentage of students achieving various educational goals) can be specified and the cost of providing that service estimated for the district with average characteristics" (Ladd & Hansen, 1999, p. 115). "The

underlying philosophy of the advanced statistical model is that, with enough data about educational expenditures and student characteristics, statistical techniques should be able to isolate the effects of different types of inputs and arrive at a base cost of adequacy education" (NCES, 2004, p. 2). The statistical result is a cost function. "A cost function provides an estimate of the minimum amount of money necessary to achieve various educational performance goals given the characteristics of a school district and its student body, and the prices it must pay for inputs used to provide education" (Reschovsky & Imazeki, 2001, p. 379). Two of the more well-known applications of this technique were done by Duncombe and Yinger in New York and by Reschovsky and Imazeki in Wisconsin and Texas (Reschovsky & Imazeki, 2001, 2003).

Using this technique Reschovsky and Imazeki attempted to "determine the relationship between per-pupil education expenditures, student performance, and various characteristics of school districts and students" (2003, p. 2). Their results indicate that small and large districts are more expensive than medium-sized districts, and the same is true of schools. They found little difference in the expense of educating rural vs. non-rural students, in contrast to Mathis (2003) and the Texas state legislature, which gave extra money to rural districts. At the same time, education was properly funded through much of Wisconsin, although Milwaukee's students performed poorly despite high funding levels (Reschovsky & Imazeki, 2001).

Statistical analysis seems scientific and precise on the surface, "yet in reality, the precision implied by statistical modeling may be misleading because each of the definitions of data used in these equations, and rationales for their use, requires assumptions and judgments that are not necessarily more precise than those of

professionals operating without statistical models" (Guthrie & Rothstein, 1999, p. 222). Duncombe and Yinger's costs for New York City varied between 7 and 262 percent above average, depending on the assumptions, while Rescovsky and Imazeki truncated their results in Wisconsin because Milwaukee was such an outlier (Guthrie & Rothstein, 1999). The "black box" nature of statistical analysis may also make the results harder for legislators to understand and accept.

Statistical analysis is also called the "Econometric Model" (Thomas & Davis, 2001), the "Advanced Statistical Approach" (NCES, 2004), "Statistical Modeling (Ensuring all children the opportunity for an adequate education: A costing out primer, 2003) and "Economic Cost Function Approach" (Picus, 2003a).

Inference from outcomes by empirical observation.

This technique was developed by Augenblick, Alexander and Guthrie and later refined by John Augenblick in attempting to divine an adequate funding level for schools in Ohio following *DeRolph*. The technique's underlying assumption is that any district should be able to accomplish what some districts do accomplish (Augenblick, 1997). In essence, researchers identified a set of districts with enough pupils performing at desirable levels, examined how much they were spending per pupil, and determined that all students should be so equipped or funded. In practice, the criteria used were very controversial. Augenblick initially eliminated the top and bottom 5 percent of these districts, then eliminated the top and bottom 10 percent, then returned to 5 percent. The set of criteria for student performance, and whether they should be norm or criterion referenced was also controversial.

Ruggiero criticized Augenblick's procedure in Ohio, claiming the successful districts "are not representative of the other school districts in the state" (Ruggiero, 2001). Haveman used Ruggiero's technique to analyze Minnesota's education finance system. By comparing student test results in districts with similar characteristics ("benchmarking"), he concluded that Minnesota paid enough to provide its students an adequate education, although there were some distribution problems. Furthermore, he was unable to find a benchmark for Minneapolis/St. Paul (Haveman, 2004).

Cooper used a variation of the empirical observation technique in Illinois (Guthrie & Rothstein, 1999), and an "inverse variation of the model is proposed by the Council of Great City School Districts that bases the adequacy amount on the total per-pupil expenditures of the 10% highest achieving districts in the state" (*Ensuring all children the opportunity for an adequate education: A costing out primer*, 2003, p. 2).

While the logic is compelling, critics maintain that this technique takes too little notice of the difficulties faced by some districts (Ladd & Hansen, 1999; NCES, 2004). The focus on cognitive results omits other desirable school outcomes, and it excluded schools which spent extreme amounts for administration and pupil support (Guthrie & Rothstein, 1999). Finally, the approach assumes that variation in performance is correlated with variation in funding. This technique may be less useful in states like Kentucky, Indiana, Florida and Rhode Island that have relatively little variation in expenditure between districts.

The empirical observation technique is also called the "Desired Results Model" (Thomas & Davis, 2001), the "Successful Schools Approach," "Method" (*Ensuring all*

children the opportunity for an adequate education: A costing out primer, 2003; NCES, 2004), or "Model" (Griffith, 2001) and "Successful District Approach" (Picus, 2003a). Inference from Outcomes by Professional Judgment

The Professional Judgment model for determining adequacy was "developed by Jay Chambers and Thomas Parrish in proposals they made for funding adequate education systems in Illinois in 1992 and in Alaska two years later" (Ladd & Hansen, 1999, p. 121). The technique involves consulting with various education practitioners to find out what needs to be provided to educate children to a certain level, and then to cost that across the state. While Chambers and Parrish admonished their experts to "keep a balance between the resources they would like to see specified for each educational program and what they believed to be affordable" (Chambers and Parrish, 1994 quoted in Ladd & Hansen, 1999, p. 121), Guthrie et al. performed a similar study in Wyoming in response to the *Campbell* (1995) decision, but without a supposition of resource limitations. Guthrie et al. also relied on experts as well as practitioners and used simpler mathematical methods to total the bill (Guthrie & Rothstein, 1999).

As Guthrie and Rothstein explain, "We prefer the professional judgment approach, not because we believe it is more precise than statistical or inferential methods (it may not be more precise), but rather because its imprecision is more transparent" (1999, p. 231). Like other methods, the professional judgment method is unreliable, and different groups of experts will produce different results.

Thomas and Davis call the Professional Judgment model the "Resource Model."

In 2003 Picus et al. conducted a Professional Judgment Approach analysis to school finance for Kentucky. Toward that end they engaged experts six school level

panels, two district level panels, and a state level panel "to produce a comprehensive set of school resources for each of elementary, middle, and high schools" (Picus, 2003a, p. 15). In a sense this combined the methods used by Chambers and Parrish and Guthrie, because it lacked the "affordable" restraint Chambers and Parrish employed, and it lacked the non-practitioner professional judgment Guthrie employed. By determining the expense of the ingredients the professionals recommended, Picus et al. determined Kentucky would have to increase its education budget by \$1.57 billion, from \$3.956 billion to \$5.72 billion.

Whole-school Design.

Whole-school Design involves buying an "off the shelf" educational program, like "Success for All," "Modern Red Schoolhouse," and others, and incorporating it into the schools. These methods have not been extensively scrutinized by researchers (Guthrie & Rothstein, 1999; Ladd & Hansen, 1999).

The Whole-school Design approach might be changing. The Campaign for Fiscal Equity lists "The Effective Strategies Method" or "Expert Judgment Approach," which appears to rely on experts of some type to identify effective strategies and match them to schools, although they provide no citation. Guthrie says "it may now or soon be possible to specify adequate resource levels based on a distillation of national empirical research about effective schools and judgments of professional researchers regarding effective practices" (Guthrie & Rothstein, 1999, p. 230), and Ladd & Hansen make an identical comment. These comments sound like the "Effective Strategies Method" although that's not certain since Guthrie and Ladd were referring to Whole-School Designs. It is also not

clear how this technique differs from the Professional Judgment approach, described above and in the Campaign for Fiscal Equity literature (2003).

Picus (2003a) lists "The Evidence Based Approach" or "State-of-the-Art Approach," which sounds also like "The Effective Strategies Method" or "Expert Judgment Approach." This technique starts with experts who distill the best thinking involved in whole-school designs and other research into a list of requirements for adequate schools. They can then determine the costs of these requirements and the subsequent price of an adequate school system.

In 2003 Picus et al. conducted a State-of-the-Art Approach analysis for Kentucky. For a prototypical elementary school of 500 students they proposed a principal, 2.5 instructional facilitators, 29 teachers with classes of 15 (K-3) or 25 students, 6 art, music and PE teachers, a tutor for each 20% of the student body on free lunch, plus professional development and computer funding. All told their recommendations would entail raising Kentucky's \$3.9 billion dollar education budget by \$740 million.

Thomas and Davis also list a "Normative Data Model" for adequacy that uses either a national or representative sample of comparable state spending to determine "adequate" spending for the home state, although they caveat that this approach "is not applicable in the areas of facilities and transportation" (2001, p. 19). They also list an "Education Priority Model," in which "the state decides how much money the state can afford for education. Then it places the burden on local districts to provide adequacy" (2001, p. 22). These two models have elements of the Economic-Cost Model (Chambers & Parrish, 1982) discussed earlier, although Thomas and Davis' book is distinctive both for its combativeness and lack of citations.

Summary of Adequacy Literature

Regarding his 1994 overview of adequacy articles Clune wrote, "The single most important question to emerge from the articles is our lack of knowledge about the feasibility and methods of producing high minimum outcomes on a large scale among poor children" (1994, p. 367). Nearly 10 years later Addonizio wrote regarding his research into educational adequacy in Michigan, "this approach to adequacy rests implicitly on the notion of an educational production function, an elusive concept that remains controversial despite enormous research literature" (p. 481). Addonizio's examined two high-performing, high-achieving districts; but the higher performing district had more low-income children and lower per-pupil expenditures. He concluded, "The conceptual and technical challenges involved in defining and producing adequate educational outcomes are formidable" (Addonizio, 2003, p. 482).

Despite the admitted lack of useful knowledge about adequacy, some advocates lash out at the legislatures for not providing more money. First and DeLuca exclaim, "We have only the judiciary on which to depend to secure rationally and equitably the rights of all children to an adequate education" (First & DeLuca, 2003, p. 213), while Thomas and Davis agree "the vision of the justices far exceeds that of the legislators when it comes to defining an adequate education for all children" (2001, p. 16). In the same volume D. V. Thomas says legislatures lack the courage to raise taxes to finance adequacy (p. 7). In relation to the Ohio Supreme Court's ruling in *DeRolph*, Sweetland says, "When judgment is served, however, reform can project divergence between the interests of the state and those of the populace" (2002, p. 817). Sweetland is unclear how

to distinguish between the state and its populace; however, his observation is reminiscent of Glazer's comments in *Towards an Imperial Judiciary*:

And courts, through interpretation of the Constitution and the laws, now reach into the lives of the people, against the will of the people, deeper than they ever have in American history" (1975).

Glazer's comments are more applicable today than ever, since by dictating the education budget a judge dictates perhaps a third or more of the state budget. Perhaps what Sweetland sees is a divergence of interest between the populace and its judges. Chayes notes that in constitutional adjudication "courts may be called upon to act counter to the popular will as expressed in legislation" (1976, p. 1314).

Monk and Theobald reported on the surprising degree of consensus among Ohio stakeholders regarding school finance, indicating that perhaps the state and its populace were not at odds. Some of the goals were conflicting, but that necessitates dialogue to resolve those conflicts. While educational advocates might be pleased with the success they have enjoyed in the courts to promote adequacy, the effort to provide the best possible education for all children is a continual democratic struggle, not an episodic fight. That implies a continual, productive relationship between the citizens, the executive branch, the legislature, and educators. Monk and Theobald make the following recommendation regarding Ohio, but it is nationally applicable:

Moreover, it is in the area of where best to set the adequacy standards that disagreement appears to exist among Ohio policy makers and leaders of interest groups. These agreements appear to be quite genuine and appear to give rise to the feeling of impasse in the policy making process. The fact that we lack definitive and uncontroversial means of answering the fundamentally important question about where the adequacy target should be set makes compromise an advisable if not absolutely necessary solution (Monk & Theobald, 2001, p. 514).

This level of agreement is reminiscent of the situation in *Harper v. Hunt*, 624 So.2d 107, Ala. (1993). In Alabama, too, everyone agreed there was a problem. While litigation certainly made the discussion over education more visible, it is open to question whether it made the discussion more productive. If litigation is an invitation to dialogue (Scheingold, 1974, p. 36), it seems to give the litigators a megaphone with which to make their opinions heard, at the expense of others in the discussion.

Sandler and Schoenbrod are particularly suspicious of the kind of "dialogue" advocates like Michael Rebell claim they are opening:

Rebell calls his proposal [for the courts to bring students, parents, teachers, and administrators as well as representatives of civic, religious and business institutions together] "the community engagement dialogic model." Every state and city already has a model for giving everyone in the community a voice in a dialogue led by organizers. These models are established by state constitutions and city charters, which put elected officials in charge of leading the dialogue. Rebell's proposal amounts to replacing these constitutions and charters with an amorphous process structured by plaintiffs' attorneys and the rest of the controlling group. Rebell's proposal makes manifest what was implicit all along in government by decree – rejection of democratically accountable government (2003, p. 152).

Legal Theory

In order to prepare to study the relationship between judicial beliefs and adequacy rulings, this portion of the literature review will examine the legal theory on state constitutions, judicial activism, and the rationale of judicial decisions.

State constitutional criteria

Ely declared "the most important datum bearing on what was intended is the constitutional language itself" (1980, p. 16). It is intuitive that since adequacy decisions

in the third wave (Thro, 1990) of school finance reform are driven by state constitutional clauses, state constitutional educational clause wording is important in adequacy cases (Banks, 1991). "State constitutional provisions on public schooling, for example, often deliberately express what their authors understand to be common beliefs" (p. 3), and they "provided one kind of idealized framework" (Tyack, 1982, p.11) for mobilization and action. On the other hand

In the past, reformers often sought to bring about educational change by rewriting state constitutions, to create in effect a new social compact concerning public schools. Activist lawyers and judges in the post-*Brown* era sought instead to reconstruct the constitutional doctrine by which existing constitutions – both federal and state – were interpreted. (Tyack et al., 1987, p. 196)

State supreme courts are actively engaging education finance, interpreting the "plain meaning" (*Helena*, 1989) of phrases in state constitutions to direct the state legislatures to significantly change education finance arrangements; however, "Under a *Serrano II* analysis, the text of the constitution itself is to be accorded 'significant consideration'; this factor should not, however, be given determinative weight" (*Serrano II* cited in Thro, 1989, p. 1675).

In the wake of the U. S. Supreme Court's *Rodriguez* decision, state high court interpretations of state constitutions became the dominant form of school finance reform litigation. New Jersey's highest court did this in *Robinson v. Cahill* (1973) mere days after the U. S. Supreme Court rendered *Rodriguez*, effectively closing the door to education finance reform through the federal courts.. *Robinson* initiated decades of litigation based on the court's interpretation of the constitution's education clause (see Appendix A). Another pioneer was Kentucky's Supreme Court, which declared the entire state educational system unconstitutional in "all its parts and parcels" in the *Rose*

decision (1989). Section 183 of the Kentucky state constitution proclaims the state will "provide an efficient system of common schools throughout the Commonwealth." (see Appendix B).

A classification system for education clauses adopted by Thro (1989; 1993) and widely cited in the literature (Mills & McLendon, 2000) was developed independently by Grubb and Ratner (see Appendix B). "Specific education provisions fall into one of four basic groups." "Provisions of the first group contain only general education language," "provisions in the second group emphasize the quality of public education," while the third group contains "a stronger and more specific education mandate" and the fourth group mandates "the strongest commitment to education" (Ratner, 1985, pp. 815-816). Essentially the first "weak" (Grubb, 1974, p. 66) group "merely mandates a system of free public schools" (Thro, 1993, p. 23), while the subsequent groups demand levels of quality. The second group is characterized by terms such as "thorough and efficient," (Grubb, 1974, p. 66) establishing "some minimum standard of quality" (Thro, 1993, p. 23). The third group often includes a "purposive preamble" and requires the legislature to "adopt all suitable means" (Grubb, 1974, p. 68), thus creating a higher standard than that for Category II. Finally, the fourth group makes education "the paramount duty of the state" (Grubb, 1974, p. 69; Ratner, 1985, pp. 815-816), essentially making education "an important, if not the most important, duty of the state (Thro, 1993, p. 25). In the context of adequacy cases, Dworkin's comment that if "the plaintiff has a right against the defendant, then the defendant has a corresponding duty, and it is that duty, not some new duty created in court, that justifies the award against him" (1975, p. 1062) applies.

Certainly one can question these categorizations. For example, while Wyoming's constitution is classified as providing some provision for quality, the second level, the high court's observation that the constitution mentioned a "right" to education, as well as four descriptive terms (complete, uniform, thorough, efficient) may have resulted in it being treated as if it were the highest level. Similarly, Alabama's constitution carries the lowest, weakest classification, although the amended language cited by Mills and McClendon that asserts education is not a right was struck down by the Alabama high court (*ACE v. Hunt*, 624 So.2d 107, p. 147). Consequently, the high court treated the term "liberal" in its constitution much as other states treated "thorough" and "efficient," making its effect much like that of a Category II constitution. In fact, the Alabama court borrowed adequacy standards from Kentucky, a Category II constitution state.

Thro contends that "if, as is often the case, the historical analysis of the education clause and the examination of previous precedent and state statutes are inconclusive, then the language arguably becomes the decisive factor" (p. 22) in guiding court involvement, because "the language of the education clauses defines the duty of the state legislatures" (Banks, 1991; Thro, 1993, p. 23). For example, with Category II states "the court must ask whether [the thorough and efficient] quality standard has been met" (Thro, 1993, p. 28). In Category III and IV states "the court should focus not on a specific level of quality but on the depth of the commitment to the public schools" (Thro, 1993, p. 29). In the end litigants should be able to compare the quality of public education in their state with that in states with education clauses in their category and determine whether or not litigation will be successful. Thro finds it disturbing that high court decisions vary because "decisions by courts that interpret identically worded or nearly identically

worded provisions but that reach radically different results may thereby undermine the legitimacy of the state courts in the minds of the lay public" (Thro, 1989, p. 1660).

McUsic disagrees with Thro:

Other states' court opinions interpreting identical constitutional language provide no guidance as to what the clause means in a particular state. Although most state constitutional conventions did borrow language from other state constitutions, they seldom had any idea what the text meant in those other states. (McUsic, 1991, p. 308, footnote 3)

In *Brigham v. State* (1997) Vermont's high court agrees with McUsic, saying that "Although informative, all of these cases are of limited precedential value to this Court because each state's constitutional evolution is unique and therefore incapable of providing a stock answer to the specific issue before us" (p. 391).

McUsic offered an alternative scheme for classifying state constitution education provisions by analyzing their requirements for equality and minimum standards (1991). Regarding the provision for equality, four states' constitutions meet the highest standard of specifying equality of education: Montana, Louisiana, New Mexico and North Carolina. Lesser standards of equality according to McUsic, required state education systems to be uniform, efficient, or contained no equality standard. Additionally, McUsic categorized state educational provisions according to their support for some standard of education. By this measure, Illinois, Montana, Louisiana, and Washington filled the highest category with "constitutions specifying an explicit and significant standard" (McUsic, 1991, p. 334). The second category for standards for education in state constitutions is "less explicit standards," which includes many states requiring thorough and efficient systems. Next are "constitutions setting lower standards" such as "encouraging, promoting, or cherishing" education or providing for "adequate or

sufficient education" (McUsic, 1991, p. 336). The lowest constitutional standard for education provides for a "general" system or simply for the establishment and maintenance of a system of public schools.

Kern Alexander offered one other alternative for classifying state constitutional support for education. His three categories include those that "broadly affirm ... the value of education," those that require "the legislature to provide for a 'system' of public schools,' and those that include "one or more adjectives to define the kind of system required ... such as 'general and uniform,' 'efficient,' 'thorough and efficient,' 'adequate,' 'thorough,' and 'uniform'" (1991, p. 352-353).

Advocates in Florida, discontent with the Florida high court's refusal to intervene in school budgeting, changed the state constitution. In 1998 the voters revised article IX of the Florida Constitution to make education a "fundamental value" and "paramount duty of the State to make adequate provision for the education of all children residing in the state" ("Florida Constitution," 1968, amended 1998). "Attempts to modify the constitutional text, and so alter the playing field, have been rare" (Mills & McLendon, 2000, p. 347). Voters in Illinois and Nebraska rejected attempts to modify their constitutions.

Judicial activism.

Many education reformers have turned to the courts to attempt to change the public education system, "and the law has become a new force for social change in education as in society as a whole" (Tyack, 1982, p. 8). Scholars of this phenomenon have wondered if, how, and how much the courts can change the education system;

however, Tyack asserts, "The dialectic between statutory and court law shaped the development of public schooling in profound ways" (Tyack, 1982, p. 9). Other scholars have pondered the influences that cause jurists to rule one way or another. While a "full theory of state constitutional jurisprudence is beyond the scope" (Thro, 1989, p. 1660) of this paper, some discussion of legal theory is fundamental to its investigation.

Sunstein used four basic theories of judicial action - originalist (Bork, 1990), deference to the other branches (Thayer, 1893a), independent interpretive judgment (Dworkin, 1996), and protecting the political process (Ely, 1980) - to advocate a spectrum of possible judicial responses to cases. The spectrum spans from reasonlessness/silence to maximalism. Reasonlessness/silence are cases when the court does not rule or gives no reason for its ruling, while maximalism is a case when the court "establishes broad rules for the future" and "gives deep theoretical justifications for the outcomes" (Sunstein, 1996, p. 15). The middle path Sunstein recommends is minimalism, in which the judges "avoid broad rules and abstract theories, and attempt to focus their attention only on what is necessary to decide particular cases" (p. 14). Reasons for choosing different responses include decision costs, error costs, and the intent to allow "democratic processes room to adapt to future developments" and "to produce mutually advantageous compromises" (p. 19). The minimalist approach might be relevant to adequacy cases where the court lacks relevant information. On the other hand, courts should avoid taking the minimalist course when delay may be harmful or people may be treated unequally. "The case for minimalism is strongest when courts lack information that would justify a comprehensive ruling; when the need for planning is not especially insistent; when the decision cost of an incremental approach does not seem

high; and when minimalist judgments do not create a serious risk of unequal treatment" (Sunstein, 1996, p. 99). "Sunstein's deference is not designed to produce an optimal solution, but an effort to preserve the process by which society feels its way through an uncertain situation to an unknown outcome" (Rubin & Feeley, 2003, p. 625).

Although it is strongly advocated (Bork, 1990) and widely accepted as an appropriate means of constitutional interpretation, scholars see serious obstacles to interpreting constitutions according to the original writers' intentions (Ely, 1980; Segal & Spaeth, 2002; Shaman, 2001). This problem is more acute for state constitutions than the national Constitution. In addition to the problems of interpreting the Constitution, state constitutions are changed more often than the federal Constitution; often the language is carried from one version to the next without being changed, so that "it is not clear which set of framer's intentions should guide the court" (Thro, 1989, p. 1659). Should judges attend to the intent of the original writers or of the subsequent adopters? Complicating the problem further is that often "state constitutional provisions were borrowed from the charters of other states" so "the intention of the framers may be nothing more than a decision to borrow" (Thro, 1989, p. 1659). Judges may often update constitutional requirements to modern expectations. Thro cites the New Jersey high court, which noted in *Robinson* that "today a system of public education which did not offer high school education would hardly be thorough and efficient" (Thro, 1989, p. 1659).

In the late 19th century James Thayer moved slightly away from the framers' intentions as guidance for judicial decisions. Thayer found the roots of judicial review in the English Crown nullifying colonial legislative acts and was reluctant to allow judges too much leeway in striking down legislative acts (Thayer, 1893a). Rather than assert a

judge's opinion about principle in doubtful constitutional matters, Thayer maintained the court "can only disregard the Act when those who have the right to make laws have not merely made a mistake, but have made a very clear one – so clear that it is not open to rational question" (Thayer, 1893b, p. 144). In fact, "the judicial function is merely that of fixing the outside border of reasonable legislative action, the boundary beyond which the taxing power, the power of eminent domain, police power, and legislative power in general, cannot go without violating the prohibitions of the constitution or crossing the line of its grants" (p. 148). Thayer concludes that ultimately

the safe and permanent road towards reform is that of impressing upon our people a far stronger sense than they have of the great range of possible harm and evil that our system leaves open, and must leave open, to the legislatures, and of the clear limits of judicial power; so that responsibility may be brought sharply home where it belongs. Under no system can the power of the courts go far to save a people from ruin; our chief protection lies elsewhere. (Thayer, 1893b, p. 156)

In contrast to Sunstein or Thayer's restraint, Dworkin encourages heroic judges to act boldly when hard cases present a choice between "policy," which "advances or protects some collective goal of the community as a whole," and "principle," which "respects or secures some individual or group right" (Dworkin, 1975, p. 1059). In this contest "an argument of principle fixes on some interest alleged to be of such a character as to make irrelevant the fine discriminations of any argument of policy that might oppose it" (p. 1062), and "judges must make fresh judgments about the rights of the parties who come before them" (p. 1063). The New Jersey Supreme Court used this idea in *Robinson* when it said, "Ultimately, a court must weigh the nature of the restraint or the denial [of a right] against the apparent public justification, and decide whether the State action is arbitrary" (cited in Thro, 1989, p. 1678). Ultimately, "judicial decisions

must be taken to be justified by arguments of principle rather than arguments of policy" (p. 1093) and if the judge believes "quite apart from any argument of consistency, that a particular statute or decision was wrong because unfair, within the community's own concept of fairness, then that belief is sufficient to distinguish that decision and make it vulnerable" (p. 1102).

When a judge decides to overrule a law he need not be constrained by precedent. He "uses his own judgment to determine what legal rights the parties before him have, and when that judgment is made nothing remains to submit to either his own or the public's convictions" (p. 1104). Even though both judges and legislatures are constrained by the constitution, the judge may decide "that the community's morality is inconsistent on [an] issue: its constitutional morality, which is the justification that must be given for its constitution as interpreted by its judges, condemns its discrete judgment" (p. 1104), and the judge may decide this because his "personal convictions have become the most reliable guide he has to institutional morality" (p. 1107). In the end, principle, rights and community morality are "not some sum or combination or function of the competing claims of its members; it is rather" the judge's "own sense of what the community's morality provides" (Dworkin, 1996, p. 1107). McUsic observed this same phenomenon when she noted, "moreover, state judges may ignore historical evidence, believing that the original intent or understanding of the clause is inappropriate in the context of modern conditions and values" (McUsic, 1991, p. 308, footnote 3). Why is the judge's opinion superior to that of the citizens' and their elected leaders? Dworkin says

There is no reason to credit any other particular group with better facilities of moral argument; or, if there is, then it is the process of selecting judges, not the techniques of judging that they are asked to use, that must be changed (Dworkin, 1975, p. 1109).

Thayer would have cringed at Dworkin's judge confidently asserting the primacy of his opinion in matters "of political conviction about which reasonable men disagree" (Dworkin, 1975, p. 1102), while Spaeth and Teger would have savaged the flimsy covering of "reasonable men disagree," instead asserting "reasonable men always differ over questions that reach the Supreme Court ..." (1990).

While Dworkin saw assertive judges furthering rights and principles, Ely sees assertive judges ensuring the legislative process is representative of all constituencies, thus saving democracy from the tyranny of the majority (1980; Scheingold, 1974). While Sunstein placed Ely further from the originalist position than Dworkin, Ely would place himself between the originalist and Dworkin's Herculean judge. He says "on my more expansive days, therefore, I am tempted to claim that the mode of review developed here represents the ultimate interpretivism" (Ely, 1980, p. 87). To the extent that "politics is the art of preventing people from taking part in affairs that properly concern them" (Valery, 1943), Ely believes the courts' role is to protect the process that enables people to participate and be represented, rather than to uphold any particular values.

In a representative democracy value determinations are to be made by our elected representatives, and if in fact most of us disapprove we can vote them out of office. Malfunction occurs when the process is undeserving of trust, when (1) the ins are choking off the channels of political change to ensure that they will stay in and the outs will stay out, or (2) though no one is actually denied a voice or a vote, representatives beholden to an effective majority are systematically disadvantaging some minority out of simple hostility or a prejudiced refusal to recognize commonalities of interest, and thereby denying that minority the protection afforded other groups by a representative system. (Ely, 1980, p. 103)

It is in the second case that judges can exercise considerable discretion. In any case where a minority (however defined) gets less than others through the political process,

the courts can intervene. Their assertion would be that if the process had worked properly the result would have been different. Scheingold says, "the Constitution provides principled legal standards for judging political action and thus can serve as a counterpoise to the incessant pulling and hauling among entrenched interests" (1974, p. 25). Ely's assumption is that a properly functioning representative democracy will represent the interests of all citizens equally. The radical implications of this standard for judicial intervention are enormous. Since one of the purposes of the political process is to decide who gets what, when and how (Lasswell, 1936), and the inevitable result of that process is that some will get more and some will get less. Following this line of logic, "whichever group happens to lose the political struggle or fails to command the attention of the legislature or executive is – by that fact alone – a discrete and insular minority" (Fiss, 1979, p. 8) needing protection. Scheingold predicted this problem:

How is the judge to decide which minorities are to be favored by law? And if special treatment is justified, how much of it – and under what circumstances? If judges are left to answer these questions in whichever way they choose their discretionary powers are increased enormously and so too are the opportunities for abuse of judicial authority. (1974, p. 56)

Thus, the opportunities for the court to intervene in the legislative process are limited only by the calendar and the judges' whim, not the theory. Ely expands the court's traditional role into that of political powerbroker (Scheingold, 1974).

Ely's theory applies to education finance and adequacy. Considering a situation in which wealthier districts can spend at their liberty, Enrich said, "one practical result is that those with the option of living in such more-than-adequate districts – a group that is likely to include a disproportionate share of those who shape state law and policy – have little direct stake in the content of the standard of adequacy at the same time that they are

sure to bear a substantial part of its costs" (1995, p. 181). Alexander said "possibly the most important conclusion that can be drawn from the Kentucky decision is that state legislatures in most circumstances are unlikely to provide equal educational opportunities without judicial intervention" (1991, p. 343), because of "the obvious restrictive influence of the affluent and insular factions living in the state's wealthy school districts who shape educational policy to their own designs" (1991, p. 346). Minton studied voter behavior in New Jersey with the assumption that legislators would be more responsive to their peers, upper- and upper-middle class voters. "Political assessments of this kind cause legislators to constrain the range of policy options they deem feasible" for fear of voter backlash, which could have been up to four or five percent in some wealthier districts in New Jersey (Mintrom, 1993). Swenson noted that inability or unwillingness to reform the educational system "usually occurs because the potential policy action is unpopular with the public and a serious consideration would jeopardize political careers" (2000, p. 1155). In other words, policy-makers are responsive to their wealthy peers and neighbors and heedless of the longer-term implications of inadequately educating all students. Ely would advocate judicial intervention to protect the interests of the voters and non-voters the policy-makers ignore.

Using the courts to accomplish policy goals takes various forms. Scheingold saw court assertions of rights as a political tool. Essentially a court declaration of a right does not of itself change peoples' lives, but litigation "provides access to the substantial political power of the courts" (Scheingold, 1974, p. 85).

The politics of rights, in other words, points towards a conception of rights as political resources. The further implication is that the value of rights resides less in the political power that backs them than in their close

association with social justice in the minds of Americans. (Scheingold, 1974, p. 84)

Court-declared rights are important symbols that provide leverage in the political process because we are a people of laws who respond to declarations of rights. Litigants can take the declared right into the political process, and use it to influence the political process to provide them with more power and resources.

Abram Chayes contrasted traditional notions of law with "public law litigation" in "The Role of the Judge in Public Law Litigation," (1976, p. 1284), "the most widely cited explanation and defense of court supervision of state and local governments" (Sandler & Schoenbrod, 2003, p. 114). While traditional law involved individual parties resolving past disputes through single judgments, public law involves "sprawling and amorphous" parties resolving questions of public policy through "complex forms of on-going relief" (Chayes, 1976, p. 1284; Scheingold, 1974, p. 17). The end result is that "relief is not a terminal, compensatory transfer, but an effort to devise a program to contain future consequences in a way that accommodates the range of interests involved" (Chayes, 1976, p. 1295).

Chayes saw public law litigation changing the nature of lawsuits by using the constitution to compel government action rather than restrain it (1976, p. 1295).

Constitutional restraints separating powers between branches are also weakened. Judges gather facts in a process that "begins to look like the traditional description of legislation" (1976, p. 1297). Public law litigation "prolongs and deepens, rather than terminates, the court's involvement with the dispute" (1976. p. 1298) until "the trial judge has passed beyond even the role of legislator and has become a policy planner and manager" (Chayes, 1976, p. 1302), functions traditionally associated with the executive branch.

Because "judges would often be better than elected officials at resolving policy disputes and would produce better outcomes," "[the] good results justify arguably antidemocratic means" (Sandler & Schoenbrod, 2003, p. 116).

As judges intrude on roles traditionally filled by the executive and legislative branches, judges presides over an exclusive political and policy environment. "In such a system, enforcement and application of law is necessarily implementation of regulatory policy. Litigation inevitably becomes an explicitly political forum and the court a visible arm of the political process" (Chayes, 1976, p. 1304). Chayes sees a political dialogue with the courts as full partners, since "judicial participation is not by way of sweeping and immutable statements of *the* law, but in the form of a continuous and rather tentative dialogue with other political elements" (1976, p. 1316; Notes, 1977; Scheingold, 1974). Brown says "what the cases represent is not so much a judicial resolution of a problem, but rather one step in an ongoing approach to a multi-dimensional social question" (Brown, 1994, p. 546) or "the development of a new form of public law litigation: the dialogic as opposed to the managerial model" (p. 566). Scheingold, Rebell, Ward, Sandler and Schoenbrod also mentioned this dialogue. Alternatively, Brown speculates, judges may be protecting themselves from a potentially hostile legislature (p. 554).

With specific reference to education finance litigation, Justice Woodall relied extensively on Chayes to show that education finance litigation was public law litigation (*James v. Alabama Coalition for Equity et al.*, 836 So.2d 813 (2002) (Woodall concurring). The court dismissed the case and withdrew from the controversy.

Owen Fiss furthered Chayes' ideas about the nature of law and litigation, and Ely's ideas about court protection of losers in the democratic process, so that the judges

become an integral and necessary part of modern government. For Fiss, "adjudication is the social process by which judges give meaning to our public values," and in contrast to the traditional adversarial court action pitting individual against individual, "the structural suit is one in which a judge, confronting a state bureaucracy over values of constitutional dimension, undertakes to restructure the organization to eliminate a threat to those values posed by the present institutional arrangements" (Fiss, 1979, p. 2). Because a judge is independent, required to listen to litigants and engage in a dialogue in which he is accountable for his decisions, Fiss believes judges are able to give reasons for decisions that "transcend the personal, transient beliefs of the judge or the body politic as to what is right or just or what should be done" and transform "personal beliefs into values that are worthy of the status 'constitutional'" (1979, p. 13). Through structural litigation Fiss believes judges will find "a social condition that threatens important constitutional values and the organizational dynamic that creates and perpetuates that condition" (1979, p. 18). In the battle between the helpless citizens and the bureaucracy, the judge heroically identifies the Constitution's true values and demands "nothing less than the reorganization of an ongoing institution, so as to remove the threat it poses to constitutional values." To maintain his independence, the judge will hire special masters to administer his orders and ensure compliance in a "long term supervisory relationship... between the judge and the institution" (1979, p. 28).

Fiss imagines a world in which judicial giants slay the giants of bureaucracy and hierarchy (1979, p. 44). This sentiment is reminiscent of Judge Skelly Wright, who said, "our duty, in short, is to see that important legislative purposes, heralded in the halls of Congress, are not lost or misdirected in the vast hallways of the federal bureaucracy"

(1971, quoted in Sandler & Schoenbrod, 2003, p. 19). But the judge's legitimacy depends upon dialogue and independence. Fiss says dialogue is not threatened because of "the obligation of the judge to confront grievances he would otherwise prefer to ignore, to listen to the broadest possible range of persons and interests, to assume individual responsibility for the decision, and to justify the decision" (1979, p. 45). However, judges do avoid grievances they prefer to ignore (Brenner & Krol, 1990; Spaeth & Rathjen, 1990). For example, the New Hampshire high court declined Claremont School District's "invitation to determine whether the definition adopted [by the legislature] is facially unconstitutional" *Claremont v. Governor* (Motion for Extension of Deadlines), (143 N.H. at 159-160, 725 A2d 648 cited in *Claremont III*, p. 748). Also court rules dictate that only certain persons are allowed to speak, judges are significantly less accountable for their decisions than their peers in the other branches, and it is highly questionable whether the justifications of their decisions are meaningful (discussed below). Fiss himself concedes that the very process of and desire to make judges' perceptions of public values efficacious "threatens the judge's independence and the integrity of the judicial enterprise as a whole" (1979, p. 53). Nevertheless Fiss maintains the judge "among all the agencies of government is in the best position to discover the true meaning of our constitutional values, but at the same time, he is deeply constrained, indeed sometimes even compromised, by his desire – his wholly admirable desire – to give that meaning a reality" (1979, p. 58). Regarding education finance in light of Fiss' ideas, Kentucky's Rose (1989) decision "portended a more assertive role for the judiciary as the oracle of interpretation for state constitutional mandates and as a permanent overseer of legislative responsiveness" (K. Alexander, 1991, p. 344).

Gerald Rosenberg (1982) provided a useful dichotomy for describing the ability of courts to create the kind of structural reform Fiss wanted. He presented two views of the court: the Constrained Court view and the Dynamic Court view. Those who subscribe to the Constrained Court view believe that since the courts have power of neither the sword nor the purse they "can do little more than point out how actions have fallen short of constitutional or legislative requirements and hope that appropriate action is taken" (p. 3). Believers in the Dynamic Court see the courts "as powerful, vigorous, and potent proponents of change" (p. 3). Through his examination of civil rights, abortion and women's rights, he determined that courts could be ineffective if they lacked political support or faced serious resistance from the legislative and executive branches of government; however, they were not constrained by lack of legal precedent. Depending on certain conditions, Rosenberg sees some truth in both views of the court, but worries about the "implications of seeking significant social reform through the courts for political participation, mobilization and reform" (Rosenberg, 1991).

Wirt, Mitchell and Marshall raise a different but relevant dichotomy. They detect "two streams of influence from constituents' values:" a broad reflection of widespread citizen concern they labeled "breadth stimulus," and the narrow interests of organized groups they labeled "intensive stimulus" (1986, p. 11). While the legislature's effectiveness in responding to the breadth stimulus is debatable, and the legislature's response to intensive stimulus is controversial, clearly the courts respond to the intensive stimulus of narrow interest groups at the expense of other, broader citizen concerns. This has important implications for the shift in education policy-making power from the legislature to the courts, or from the people to special interest groups. "Democracy by

decree, in the end, privileges those groups and interests that have the tight organizations and sophistication needed to get Congress to pass a federal statute that creates rights, and then to follow up with litigation leading to a decree enforcing that right" (Sandler & Schoenbrod, 2003, p. 158).

Handler (1978) used a theoretical model to examine structural reform litigation.

Like Ely and Fiss, he postulated that the modern bureaucratic state does not properly serve the interests of the less powerful. Handler described modern governments along a continuum from pluralism to corporatism, with pluralism being an ideal type of democracy and corporatism being government run by special interests. He wondered if social-reform groups could swing the balance of power equilibrium from corporatism toward pluralism through litigation and the courts. Their ability to do this depended upon

(a) the characteristics of social-reform groups; (b) the distribution of the benefits and costs of activity by social-reform groups; (c) the nature of the bureaucratic contingency confronting the social-reform group; (d) characteristics of judicial remedies; and (e) characteristics of the law reformers. (Handler, 1978, p. 5)

Within this list, the distribution of costs and benefits was particularly important, because it drove the transformation of social-reform groups from being broad-based and non-hierarchical to being leader-centered. He conceived three results from structural reform litigation: direct results, the change of public policy; indirect results, leverage, legitimacy, and the opportunity to be heard; and an increase in pluralism (Handler, 1978, p. 37-39).

Handler concludes that "social-reform groups find it difficult to obtain tangible results directly from law-reform activity" (p. 209), and it is "difficult to pin down, either theoretically or empirically, what precisely the indirect effects are" (1978, p. 222). Scheingold explains the lack of direct results by saying, "the fact remains that access to

the material benefits of politics has invariably been associated with a degree of mobilization and with effective organization" (1974, p. 208). Most interesting is, in contrast to the theories of Chayes and Fiss, social-reform groups do not increase pluralism. To the extent that they depend upon centralized funding, they tend to "evolve" (p. 225) into a "hierarchical group, supported by the state, and, to a large extent, explicitly or implicitly controlled by the state" (p. 229), so that ultimately "decision making will not have been democratized a great deal" (p. 231, Scheingold, 1974, p. 34). When all is said and done, structural reform litigation "will not disturb the basic political and economic organization of modern American society" (Handler, 1978, p. 233).

One fundamental question that adequacy cases raise, and it is applicable in other cases against the government as well, is "whether public policy should be made by courts" (Rubin & Feeley, 2003, p. 619). While this question was debatable to Chayes and Fiss, by 2003 Rubin and Feeley declare that "policy making is a standard and legitimate function of modern courts" (2003, p. 617). Rubin and Feeley trace the development of legal philosophy through formalism, legal realism and legal process to new legal process. While legal process claimed that the courts could address certain issues because they had special competence, it fell victim to critics who noted that judges were political actors, just like those in the other branches of government. The new legal process school encouraged courts to make public policy "only when they possess some identifiable institutional advantage" (Rubin & Feeley, 2003, p. 625), which could be watered down to some kind of institutional or other competence, especially assuming "that judges are public-oriented decision makers" (p. 630, Dayton, 1996) and the other branches have failed to act (Banks, 1991; Swenson, 2000). Chayes also maintains that

courts have institutional advantages over the other branches (pp. 1309-1311), and that "the growth of judicial power has been, in large part, a function of the failure of other agencies to respond to groups that have been able to mobilize considerable political resources and energy" (1976, p. 1313).

In the end, judges are similar to leaders in the other branches of government in status and background (Rubin & Feeley, 2003, p. 640; Scheingold, 1974). Brown believes the court and the legislature "are close working partners in the ongoing giveand-take of state government and politics" (1994, p. 555). They often proceed cautiously, pragmatically and incrementally. They, like the legislative and executive branches, are insulated from public opinion. They often rely on experts and special assistants as they administer programs they control. "Ultimately the success of judges as policy makers" depends on whether "their policies nest within a larger set of policies" and "fit within a larger accepted whole" (Rubin & Feeley, 2003, p. 664). In sum, Rubin and Feeley see judges as policy makers with very similar motivations and limitations as legislators and bureaucrats, and see little reason why they shouldn't make policy when they believe they should. Ely echoes this notion saying, "since judges tend generally to be drawn from roughly the same ranks as legislators, the heart of the argument here is that moral judgments are sounder if made dispassionately, and that because of their comparative insulation judges are more likely so to make them" (1980, p. 57).

While Rubin and Feeley view judicial policy-making as a necessary and positive development, Sandler and Schoenbrod take a decidedly different view, maintaining institutional reform litigation has "proved much less successful than its proponents admit, undermining the claim that people will be underserved without it" (Handler, 1978; 2003,

p. 9). While they agree "institutional reform litigation promises to protect the powerless by making politicians cede some of their power to apolitical judges and public interest lawyers who will be guided by experts concerned with doing the right thing rather than the politically opportune thing" (p. 4), in reality "decrees negotiated by plaintiffs' and defendants' attorneys" erode the responsibility, "constitutional and statutory powers of elected officials" (Handler, 1978) in favor of "plaintiffs' attorneys, various courtappointed functionaries, and lower-echelon officials" they call "the controlling group" (Handler, 1978; Sandler & Schoenbrod, 2003, p. 6; van Geel, 1982). They trace the root of the problem to Congress, which passed legislation declaring "soft," "aspirational" rights enforceable in court without giving state or local governments the means to address these rights (Handler, 1978, p. 226). Consequently "private, nongovernmental public interest law firms" were able to "steamroll statehouses and municipal councils throughout the land" (Sandler & Schoenbrod, 2003, p. 26). While the "basic premise of democracy by decree is that government can be made more compassionate only if judges impose their will on elected officials" (p. 33), in reality "democracy by decree gives the controlling group preemptive power over how much money and power to put at its own disposal" (Sandler & Schoenbrod, 2003, p. 156). Handler predicted this is the result (1978, p. 228).

Sandler and Schoenbrod use a special education case in New York City, *Jose P. v. Ambach*, No. 79 Civ (E.D.N.Y. Feb. 1979), and the subsequent activity featuring Michael Rebell, as their principal example. "With the advantage of the quarter century since Chayes wrote," Sandler and Schoenbrod supplemented Chayes' views on institutional litigation as follows:

- State and local governments are the targets of litigation, and they consent to decrees rather than fight them.
- The judge is a passive supervisor. Higher federal courts and agencies charged with enforcing statutes rarely play a role.
- The main actor, the controlling group, rules through long-term plans. It operates without boundaries, prefers to work informally and privately, and makes up the law as it goes along. (Scheingold, 1974, p. 34)
- Plaintiffs' attorneys have the de facto power to veto modifications in the long-term plan, and tend to advance their vision of the public interest, often at the expense of some of their clients. (Handler, 1978, p. 224; Scheingold, 1974, p. 210)
- Plaintiffs attorneys and the trial judge are the only constants everyone else changes.
- Members of the public harmed by the decree are often denied a full voice in the litigation.
- There is potentially no end. (2003, p. 117-138)

While Rebell maintains that the situation for special education in New York is better than it otherwise might have been as a result of his intervention regarding *Jose P*. (cited by Sandler & Schoenbrod, 2003, p. 90), that is actually impossible to know.

Leland DeGrasse ruled, "The most serious evidence of [the New York City Board of Education's] inefficient spending concerns special education" (*CFE II*, 2001, p. 537), but he comes short of laying the blame at Rebell's feet. Rebell was litigating before him.

New York's high court concluded that "The available evidence-based conclusions are that overreferral (sic) to special education costs City schools somewhere between tens of millions and \$335 million" (*CFE IV*, 2003). Sandler and Schoenbrod warn, "the failure of such competent people in pursuit of such a needed objective should compel attention on whether we should continue to rely so readily on courts to manage the complex institutions of state and local governments" (2003, p. 97). They conclude:

Society has conducted a long-running experiment with democracy by decree. It is time for a reevaluation. What needs reevaluation is not the values that underlie our best intentions. What needs reevaluation is our continuing reliance on courts, judges, and lawyers to do the work that in a

representative democracy should properly be done by legislatures, representatives, and the people. (Sandler & Schoenbrod, 2003, p. 226)

Having discussed legal theory in broad terms, this paper will now focus more specifically on theories and techniques for explaining judicial decisions.

Explaining Judicial Decisions in Education Finance Cases

"Analysis of Supreme Court decision making in the American democratic setting is perennial" (Notes, 1977, p. 508). Scholars have categorized various theories on the influences behind judicial decision making. These categories include "case facts and legal rules," external influences such as the "other governmental branches, the economy and social trends," "institutional features" such as term length and selection method, and "personality characteristics or political values of the state or its jurists," (Banks, 1991; Dayton, 1996; Lundberg, 2000, p. 1101; Swenson, 2000). The ability of these factors to predict whether judges would declare state education finance systems unconstitutional was mixed.

Case facts and legal rules, such as the strength of the state constitution's education provision, variance in or level of per pupil spending, and the level of teacher salaries were usually insignificant predictors (Banks, 1991; Lundberg, 2000, p. 1101; Swenson, 2000; van Geel, 1982). Swenson (2000) found low per pupil spending predicted state high courts declaring education finance systems unconstitutional, although Lundberg did not find that result. Lundberg found that the state's education clause did not predict an outcome, but in states where the court had ruled against the education finance system the strength of the education clause was a factor.

That case facts or the strength of the constitution were not significant predictors of the results of education finance cases might cause one to pause before asserting that judges are simply interpreters of the law, balancing facts, statutes and precedents. Segal and Spaeth (2002) offer an extensive critique of the legal model for explaining judicial decisions through textual interpretation, precedence, or framer/legislative intent. In reference to the plain meaning they discuss rights to travel and privacy, which the Supreme Court upholds with strict scrutiny even though neither is found in the constitution. On the other hand, they cite examples of limits on the First Amendment where the court contradicts itself, and they quote Justice Scalia in saying, "we have understood the Eleventh Amendment to stand not so much for what it says ..." (p. 59, quoting Blatchford v. Native Village of Noatak, 501 U.S. 775, 779 (1991)). Precedent is no less slippery, since "precedents lie on both sides of most every controversy" (p. 77). Framer or legislative intent is least dependable. First, it is impossible to know why people voted as they did. Second, constitutional and statutory language might be deliberately vague as the result of a compromise in drafting the document. Third, assuming that framer or legislative intent exists, advocates are often able to find plausible evidence from both sides of an argument to explain why they believed their position reflects framer/legislative intent. To summarize they quote Judge Richard Posner (The New York Times, September 26, 1999, p. A13):

There is a tremendous amount of sheer hypocrisy in judicial opinion writing. Judges have a terrible anxiety about being thought to base their opinions on guesses, on their personal views. To allay that anxiety, they rely on the apparatus of precedent and history, much of it extremely phony. (Segal & Spaeth, 2002, p. 85)

That the constitutional language is not predicative of court rulings in education finance cases is a common conclusion. Banks declared the "lack of any discernible relationship between the strength of commitment to education in the state constitution and the success rate of school finance challenges makes it clear that the outcome of these cases does not depend on the interpretation of the constitution involved" (1991, p. 154), a conclusion supported by Lundberg and Swenson. Thro observed in regard to education finance cases that "there appears to be no coherent pattern of litigation results" (Thro, 1994, p. 617), and "regardless of when the case was brought, the state constitutional provision relied upon, or the wording of the state constitutional provision, the outcomes were totally unpredictable" (Thro, 1990, p. 231-232). Enrich said that although court opinions cited a variety of sources - "constitutional history, expert opinion and testimony, dictionary definitions, the thinking of other courts" - "it remains unclear how any of these can truly ground the crucial step from generic constitutional language to specific substantive criteria" (1995, p. 175). Dayton, Dupre and Kiracofe summarize that many scholars studying education finance have determined that "variations in the decisions" in these cases are not consistent with "the direction of the variations in the law and facts" (2005, p. 1). Specifically, "there is no clear evidence establishing that the strength of the language in a state's education clause has any correlation with the actual outcome of the cases" (Dayton et al., 2004; Dayton et al., 2005, p. 6). In fact Alexander declares, "the Kentucky case seems to indicate that virtually any constitutional provision for education suffices to establish the court's right to apply strict scrutiny to legislation in securing equal educational opportunity" (1991, p. 351). This seems to be consistent with scholarship showing justices are not "significantly influenced by arguments over text or

intent" (Segal & Howard, The Systematic Study of Stare Decisis, paper presented at the American Political Science Association, Washington, D.C. (2002) cited in Segal & Spaeth, 2002).

Since legal factors seem to be weak variables for explaining judicial decisions in education finance cases, perhaps other external factors matter. External factors that Lundberg found predictive in school finance cases included a traditional state political culture and high per capita income, and a rural environment (Lundberg, 2000). Swenson found the state's political orientation was predictive (2000; Wirt et al., 1986). Banks found "frustration with continual legislative inaction is implicit in virtually every case" where plaintiffs succeed in challenging the school finance system (1991, p. 155; Handler, 1978; van Geel, 1982). Swenson's (2000) analysis reached the opposite conclusion. She found judicial activism in light of prior legislative action on education finance reform "perhaps the most surprising, and disturbing, of all" (2000, p. 1160). Regarding the influence of political factors, Dayton, Dupre and Kiracofe note an Alabama trial court judge who campaigned for a seat on the Alabama Supreme Court based on his orders to the governor and legislature to "fix the problem" (p. 4), and "the Supreme Court of Ohio's eleventh hour decision terminating the *DeRolph* litigation in December, just weeks before two Republicans were to be seated on the court" (2004, p. 13).

In an analysis of economic factors predicting judicial decisions, Dayton et al. examined the Index of Consumer Sentiment, assuming "state high court judges would be more inclined to declare a state funding system unconstitutional when there was a positive trend and sentiment about the national economy" (2005, p. 10). Their results indicated some correlation between positive economic indicators and education finance

systems being declared unconstitutional. On the other hand, when they wrote state economies were doing poorly and plaintiffs in education finance cases were succeeding.

One final external factor is the race of the litigants. Ryan noted

In sum, predominantly minority districts have won only three of twelve (25%) school finance challenges in which they were plaintiffs. Predominantly white districts, by contrast, have won eleven of fifteen cases (73%)... (1999, p. 455)

Ryan speculates that "There may indeed be alternative explanations as to why urban minority districts almost never win school finance cases, while rural and suburban white districts win such cases more often than not" (1999, p. 457). Indeed, the impact of race, economics, politics and perhaps other external factors deserve exploration in relation to school finance cases.

Lundberg's analysis of institutional factors, such as length of judicial terms or method of selection, indicated they did not predict the outcomes of educational finance cases. Although she hypothesized that courts composed predominantly of Democrats would be more likely to overturn educational finance systems, her study revealed judges' political parties did not predict the case results (Lundberg, 2000). Swenson reached a similar conclusion (2000).

To summarize, researchers have found that external factors are significant predictors of judicial behavior in education finance cases. None of the literature reviewed indicates that case facts and legal rules, institutional features and judicial personality characteristics or political values are significant predictors of the outcomes of education finance cases. "The state courts' erratic application of the various methodologies suggests that they are being less than candid when they point to the individual characteristics of their state constitutions to justify their decisions" (Banks,

1991, p. 154), and "the likelihood that a state scheme of school finance will be declared unconstitutional depends almost solely on the whimsy of the state supreme court justices themselves" (Swenson, 2000, p. 1161).

Judicial Attitudes

The attitudinal model "holds that the Supreme Court decides disputes in light of the facts of the case vis-à-vis the ideological attitudes and values of the justices" (Segal & Spaeth, 2002, p. 86). Schubert put it more directly: "The Supreme Court's major structural differences, in so far as these reflect differences in voting behavior, are a direct result of the relative strength from time to time of representation among the justices of three major ideological perspectives: liberalism, economic conservatism, and political conservatism" (Schubert, 1974, p. 13, emphasis added). Neuborne marked the importance of "a series of psychological and attitudinal characteristics," including judicial values, that shape judicial decisions (Neuborne, 1977, p. 1124). According to some legal theories, "in interpreting this [constitutional] language the Court is forced to make a value judgment among several alternatives suggested by the particular constitutional provision" (Notes, 1977, p. 510). Evidence of ideological influence below the Supreme Court level has been identified. For example, appointees of Democratic presidents decide more often in favor of environmentalists in National Environmental Policy Act cases, while appointees of Republican presidents decide more often in favor of developers (Austin, Carter, Klein, & Schang, 2005). With specific reference to school finance litigation, Brown says, "the reformist, institutional litigation which has become so important in the federal courts presents three novel elements: an acceptance of the 'public

action' in which citizens challenge the legality of government conduct; a view of the judicial role in which articulation of public values becomes as important as dispute resolution; and an increasingly managerial role for trial courts at the remedial stage" (Brown, 1994, p. 559, emphasis added). Although other examinations of jurists' political persuasion (Lundberg, 2000; Swenson, 2000) failed to explain their decisions, this study goes further in trying to use attitudinal models of judicial ideology to explain judicial decisions in state high court adequacy decisions.

Dworkin explained that judges' decisions might be a reflection of personal values. In addition to indicating that lawyers and judges "reflect the general moral attitudes of their time" (p. 1074) and that judgments about statutes and precedents will "reflect [the judge's] own intellectual and philosophical convictions," (p. 1096) he says

Lawyers believe that when judges make new law their decisions are constrained by legal traditions but are nevertheless personal and original. Novel decisions, it is said, reflect a judge's own political morality, but also reflect the morality that is embedded in the traditions of the common law, which might well be different. (1975, p. 1063)

Regarding his own idea explaining how and why judges must make decisions based on their own best informed opinion, Dworkin explains, "the thesis presents, not some novel information about what judges do, but a new way of describing what we all know they do" (1975, p. 1067). Indeed Ely confirms, "I think we shall sense in many cases that although the judge or commentator in question may be talking in terms of some 'objective,' non-personal method of identification, what he is really likely to be 'discovering,' whether or not he is fully aware of it, are his own values" (1980, p. 44; Scheingold, 1974, p. 89). Discussing a similar thesis, a Note from the Rutgers Camden Law Review discusses how "the Court's authoritative statement of 'what the law is' [can

be] arrived at by intuitive judgment or derived from a recognizable social consensus" (Notes, 1977, p. 513).

There is evidence within the history of educational finance litigation that supports the idea that judge's ideas and values can be large determinants of the plain meaning of constitutional education clauses. Montana's high court unanimously upheld the state's education financing system in *Woodahl v. Straub*, 520 P.2d 776 (1974), only to reach the opposite conclusion 15 years later (*Helena*, 1989). "Since the challenged foundation program was no less effective in 1989 than it was in 1972, one is forced to conclude that the substantial turnover in the membership of the court was a primary factor in the reversal" (Thro, 1990, p. 235). "The opposite outcomes in the two cases may be attributed to changing financial realities, the demonstrated ineffectiveness of a system that was still relatively new in 1974, and the replacement of all but one of the justices on the court" (Thro, 1989, p. 1665, footnote 114). A similar pattern emerged in Washington. The court upheld the finance system in 1974 in *Northshore School District No. 417 v. Kinnear*, 530 P.2d 178 (1974) but rejected four years later in *Seattle School Dist. v. State of Washington*, 585 P.2d 71 (1978). Thro explains

the best explanation appears to be that one justice of the *Kinnear* majority of six switched his vote in *Seattle School Dist*. And four justices were replaced between the two decisions. Three of the four old justices were in the *Kinnear* majority, and three of the replacements were in the *Seattle School Dist*. majority. Thus *Seattle School Dist*. appears more a product of the swings of politics than of an independent analysis of the state education clause. (Thro, 1989, p. 1669, footnote 138)

Courts also noticed that changes in the court's membership rather than changes in the constitution or the statutes result in an education finance system being declared unconstitutional. Arizona's Vice Chief Justice Moeller explained

in *Shofstall*, this court, in a unanimous opinion, held that our school financing scheme did not violate the equal protection clause of our state constitution. We still have the same constitution. We still have school districts and property taxes. Indeed, we have a much more 'general and uniform' public school system today considering the various equalization statutes passed by the legislature since 1973. With the exception of greater equalization, *the only thing that has changed since the* Shofstall *decision in 1973 is the personnel of this court*. That is an insufficient reason to change a constitutional ruling. (*Roosevelt*, 1994, p. 826-827, emphasis added).

"One of [Kentucky Chief Justice] Stephens' initial concerns with the *Rose* case was the composition of the court itself. He knew that a change in the composition of the court might have a significant impact on the resolution of the case" (Day, 2003, p. 209). Segal and Spaeth summarized the idea when they said

Assertions that judicial decisions are objectively dispassionate and impartial are obviously belied by the fact that different courts and different judges do not decide the same question or issue the same way, to say nothing of the fact that appellate court decisions – particularly, those of the United States Supreme Court – typically contain dissenting votes. So, too, a single personnel change may fundamentally alter the course of constitutional law. (Segal & Spaeth, 2002)

These cases indicate that the persons on the court have at least some influence on the outcome of the case, so that the values and beliefs held by those persons might be reflected in the outcomes. Thomas and Davis attribute adequacy rulings to judicial opinion, stating, "these various court decisions make it clear that the vision of the justices far exceeds that of legislators when it comes to defining an adequate education for all children" (2001, p. 16). Sandler and Schoenbrod attribute the provision of special education preventative services in wake of the *Jose P*. decree to the policy preferences of Judge Nickerson and Special Master Frankel rather than requirements of the law (2003, p. 65-66). Wirt et al. observed "human action is purposive, that is, value-motivated, and so the actions involved in policy making can reveal latent values" (1986, p. 14). They

used "interview transcripts, case reports, and an influence scale" (Wirt et al., 1986, p. 14) to discern the educational values of policy elites in six states. Judges, too, are policy elites, and something might be learned from subjecting them to similar scrutiny.

Political scientists who subscribe to attitudinal modeling maintain that judges use the language of the court, with its emphasis on plain meaning, precedent, and intent, as a screen while they pursue their individual preferences. According to Smith, "judges see it to their advantage to appear restrained even as they promote their own policy preferences" (1994, p. 12). Also since *Bush v. Gore*, 517 U.S. 559 (1996) "everyone not totally disconnected from reality now recognizes that 'judges make law,'" and they use legal rationale "only to rationalize the Court's decisions and to cloak the reality of the Court's decision-making process" (Dershowitz, 2001; Dworkin, 2002; Klarman, 2001; L. Levin, 2001; Segal & Spaeth, 2002, p. 10, 53; Sunstein & Epstein, 2001; Taylor, 2001). Fiss says, "it is easier for judges, even unwittingly, to enact into law their own preferences in the name of having discovered the true meaning, say, of equality or liberty" (Fiss, 1979, p. 11).

Herman Pritchett began the study of judicial attitudes as determinates of judicial rulings in the Roosevelt Supreme Courts. He began with the idea that

no one doubts that many judicial determinations are made on some basis other than the application of settled rules to the facts, or that justices of the United States Supreme Court, in deciding controversial cases involving important issues of public policy, are influenced by biases and philosophies of government, by "inarticulate major premises," which to a large degree predetermine the positions they will take on a given question. Private attitudes, in other words, become public law. (Pritchett, 1941, p. 890)

In order to address the question of why justices, "working with an identical set of facts, and with roughly comparable training in the law" come to such different conclusions

(Pritchett, 1941, p. 890), he examined cases in which the justices' split decisions revealed that they voted in blocks, and that these blocks could be defined along a conservative-liberal, or left-wing-right-wing continuum that resulted "from differences of opinion as to desirable public policy" (Pritchett, 1941, p. 895). His study emphasized "the influence of personal attitudes in the making of judicial decisions and the interpretation of the law" (Pritchett, 1941, p. 898).

Political scientists have categorized studies of the influence of judicial attitudes on their decisions. Fair listed four major categories: small group theory, social background analysis, survey research and cumulative scaling (1967, p. 449), while Spaeth added Role Theory (Spaeth, 1990). Small group analysis looks at the leadership and followership among the court members in unanimous decisions, among the majority, and among the dissenters (Brenner & Spaeth, 1990; Spaeth & Altfeld, 1990). Background analysis assumes that social backgrounds result in attitudes that end in votes on certain issues. Tate explored the importance of background characteristics in U.S. Supreme Court justices, claiming his regression models "explain 47% to 51% of the variance in the civil rights and liberties and economics voting behavior of the 46 Supreme Court justices serving the more than seven decades from 1916 to 1988" (Tate, 1981; Tate & Handberg, 1991, p. 477). Spaeth claims that "psychological predispositions rooted in social background characteristics do not explain the dissenting votes of any of the justices who sat on the Warren or Burger Courts with the possible exceptions of Justices Blackmun and Stevens" (Spaeth, 1990, p. 153). In reference to education, Wirt, Mitchell and Marshall also considered "the effects of elites' personal qualities (status, partisanship, and ideologies) upon their preferences for program approaches" (1986, p.

4). Fair describes survey research as "potentially the most fruitful" (1967, p. 450) approach; however, it's hard to imagine justices providing completely honest answers to a survey in a politically charged environment. Finally he describes cumulative scaling, a technique of correlating justices and their votes on individual cases, as a means for determining the attitudes of justices on issues. This is a more sophisticated technique than that used by Pritchett, and Fair says the technique "could account for over 91% of the split decisions of the United States Supreme Court in recent years, [but]could account for only about 36% of the non-unanimous cases" in the Pennsylvania Supreme Court (Fair, 1967, p. 458). While the Supreme Court is by far the more intensely studied, it is important that attitudinal analysis techniques have been used on state courts as well (Dolbeare, 1967). Finally, Rhode and Spaeth examined William Rehnquist's behavior both before and after becoming chief justice, and they determined the new role did not appreciably change his voting (Rhode & Spaeth, 1990).

Recently Segal and Spaeth broke analysis of judicial attitudes into two major categories: attitudinal and rational choice models (2002). The attitudinal model was further sub-categorized by the influence of influential groups of thinkers: the Legal realists, behavioralists, psychologists, and economists. Economists have some influence on the Rational Choice model, since, "the rational choice paradigm represents an attempt to apply and adapt the theories and methods of economics to the entire range of human political and social interactions" (Segal & Spaeth, 2002, p. 97). The essential difference between the economic model and the rational choice model is that the economic model recognizes that "decisions are the consequence of three factors: goals, rules and situations" (Spaeth & Rohde, 1976, p. xv), while in the rational choice model judges

"attempt to maximize their satisfaction" (Segal & Spaeth, 2002, p. 98). A sub-type of rational choice model Segal and Spaeth mention is the Markist Separation-of-Powers model, which defines the courts range of action according to the ability of the House of Representatives and the Senate to contain them.

There are several contrasts between the preceding studies and this study. The models discussed above often depend on statistical analysis of "a small political elite who play a critical policy-making role" (Schubert, 1974, p. x). That is they analyze the U. S. Supreme Court using statistics. The U. S. Supreme Court operates under one set of rules, and it applies those rules to a broad range of topics, i.e. the Court's docket. In contrast, this study is attempting to examine the decisions of the high courts in various states, clearly a broader group than members of the U. S. Supreme Court. Each state high court operates under slightly varying rules (K. Alexander, 1991; Grubb, 1974; McUsic, 1991; Ratner, 1985), not the single set of rules that guides the U. S. Supreme Court. This study addresses a single topic, the adequacy of education finance systems, rather than the broad range of topics covered in other studies. Because this study will examine essentially the same decision being made by various jurists just one time, statistical analysis as used in many of the political science studies is inappropriate. Fortunately, political scientists have also examined judicial attitudes using document analysis.

Danelski, Segal and Cover, Dayton, et al., and Smith offer examples of document analyses relevant to this study. Supreme Court scholar Sidney Ulmer stated, "Each judge being unique, each opinion reflects, to some extent, the particular attributes of the writer – his conception of the law, his previous positions, his facility with language and concepts, and so on" (Ulmer, 1970, p. 51). To confirm results shown by statistical

analysis of voting patterns, Danelski recommended "content analysis of personal documents, speeches, autobiographies, articles and books" (Danelski, 1966, p. 724). The analysis of judicial dissents might be of particular value because "the assumption in the lone-dissent analysis was that generally a justice does not dissent by himself unless he is expressing some intensely held value" (Danelski, 1966, p. 728). Although the lives and opinions of Supreme Court justices are more public than those of state high court justices, the ability to use public statements to discern private beliefs is relevant. Segal and Cover's study analyzed Supreme Court justices' editorial statements in four leading newspapers from before they were nominated. By classifying each statement as liberal, moderate, or conservative, they developed a scale of beliefs for each future nominee. These scales were correlated with justices' votes on civil liberties cases by .80 (Segal & Cover, 1989). In a specific example of using documents to classify beliefs, Segal and Spaeth note that Sandra Day O'Connor's opinions in abortion cases reflect beliefs she expressed as a state legislator (Scheingold, 1974; Segal & Spaeth, 2002, p. 291-293). More recently in reference to Bush judicial nominee Janice Rogers Brown, Steve Barnett said, "You can't believe what a judge says in speeches won't creep into her views on issues before the court" (cited by Gilgoff, 2005). Smith used textual analysis to rank court opinions according to their suggested direction and strength of recommendation, creating a scale of eight "types" of increasing power, and these rankings provided some indication of legislative response to the court orders (1994). Dayton, et al. also examined judicial opinions to see if economic conditions influenced their decisions (2005, p. 3). Regarding their analysis Rubin and Feely declared, "it may not be possible to reconstruct the mental process of the federal judges who decided the prison reform cases, but the

language and substance of their opinions suggest that this is exactly the way they thought" (2003, p. 633). Although it is controversial and subjective, "given the impossibility of surveying the justices themselves ... content analysis has its place" (Segal & Spaeth, 2002, p. 322). Indeed a textual analysis may add to the bank of knowledge, since "analytical methods provide different ways of asking questions and thus produce different understandings of a social phenomenon" (Wirt et al., 1986, p. 3).

Scholars have used different scales of judicial values in the past. Danelski used the concept of value spaces. These three-dimensional constructs describe the range of justices' values on certain topics, based on the intensity, congruency and cognitive completeness of their ideas. Danelski's theory is that decisions that fall within these value spaces will be decided predictably, based on the justice's predilections and beliefs. He believes that movement of a judge's beliefs within the value space may indicate the possibility of a changing opinion and "the likelihood of important policy changes in that area" (Danelski, 1966, p. 731). Schubert created scales to measure Supreme Court justices' attitudes on numerous topics; however, his scales of economic liberalism (Escale) and political liberalism (C-scale) proved to be the most powerful and telling (Schubert, 1965, 1974). A justice's position on any given issue could often be explained by matching the Justice's position on the E or C scales to the range of possible opinions on that issue - civil rights for example (Segal & Spaeth, 2002, p. 90). In a like manner, this study examines the results of adequacy cases in light of scaled judicial beliefs.

Spaeth used a similar theory in examining U. S. Supreme Court cases, linking sets of cases in which justices' attitudes would be manifested. "The theory on which the model is based assumes that sets of these cases that form around similar objects and

situations will correlate with one another to form issue areas (e.g., criminal procedure, First Amendment freedoms, judicial power, federalism) in which an interrelated set of attitudes – that is, a value – will explain the justices' behavior (e.g., freedom, equality, national supremacy, libertarianism)" (Segal & Spaeth, 2002, p. 91). Although somewhat different from Schubert's technique, Segal and Spaeth were able to glean judicial beliefs from their rulings in various cases. Scales are not foolproof, so caution must be taken to avoid "errors in classification by analysts" (Spaeth & Peterson, 1990, p. 178).

Values in Education

"We know that all policy is rooted in values and that politics is a contest among adherents of clashing values" (Wirt et al., 1986, p. 4). There is a universe of values that apply to the education of our children, but which to use for this study? Among those considered was Guthrie's conception of the dynamic tension among equality, efficiency and liberty in educational decision making (Guthrie, 2004. Fiss, 1979 and Verstegen, 1990 also mention the tension between liberty and equality). Essentially any decisions about education finance must balance these three elements. Increasing equality often means depriving the wealthy of the liberty to use their resources, and it may decrease efficiency. Increasing efficiency could mean decreasing equality and liberty, or one might believe that increasing liberty, perhaps through vouchers, will also increase efficiency through market mechanisms. Increasing liberty might decrease equality, and it might also decrease efficiency, if consumers use liberty to make poor choices. Spaeth and Rohde encountered an equivalent challenge in scaling freedom, equality and "New Dealism" in their analysis of Supreme Court opinions (Spaeth & Rohde, 1976, p. 142).

An individual's positive or negative response to these values would vary along the political spectrum, but not necessarily in an intuitive or predictable manner.

Wirt, Mitchell and Marshall conceived of similarly interrelated values – efficiency, equity, quality and choice (1986). They conceived these values as reflecting other root values. The root value for efficiency was that "those who exercise public authority must be held responsible for its use." The root value for equity was "the worth of every person in society and the responsibility of the total society to realize that worth." The root value of quality was "the crucial importance of education for a citizen's life chances and self-fulfillment," and the root value for choice was "popular sovereignty." They noticed that "these values are clearly not hierarchical, but rather may be conceptualized as dimensions along which some values reinforce but others are opposed" (Wirt et al., 1986, p. 7), and also that the preeminence of these values in society came at different historic points and are reflected in different state cultures.

Levin found similar values as the result of "the general differences in perspective between libertarians or economic liberals with their reliance on the marketplace and political liberals with their reliance on government," as well as between "valuing public versus private outcomes of education" (2002, p. 163). As a result he found four values in tension: freedom of choice, productive efficiency, equity, and social cohesion. Although freedom of choice, efficiency, and equity are arguably the same as liberty, efficiency and equity, the unique value here is social cohesion. Social cohesion "incorporates a major public purpose of schooling in a democratic society, the provision of a common educational experience that will orient all students to grow to adulthood as full participants in the social, political, and economic institutions of our society" (H. M.

Levin, 2002, p. 163). Levin links social cohesion with Friedman's (1962) "neighborhood effects or social benefits of education" (p. 163), while Belfield gave examples of social cohesion that included "the public benefits that are generated," such as social norms, voice, communitarian values, integration, and support of public education (Belfield, 2004, p. 13).

Rossmiller saw three major issues in education finance cases: equal protection, constitutional provisions for education, and educational need. He believed the state's interest in promoting local control of education, arguably a guardian of choice, efficiency and liberty, that be overwhelmed if the courts decided education was a fundamental interest which raised the level of court scrutiny. If the court employed strict scrutiny to protect fundamental rights, arguably increasing equity and equality, then state actions might be overturned even if they were rational. Overall he concludes, "litigation has been neither the expressway to school finance reform, nor has it been a cul-de-sac" (Rossmiller, 1986, p. 202), rather it is a road back to the legislature and executive where presumably these values can be negotiated democratically. In retrospect, Sandler and Schoenbrod (2003) would say Rossmiller was mistaken about the return to the legislature and executive for discussion of those competing values.

In a second analysis Wirt et al. described the values of elites in the policy process. They claim they operated to "maximize their individual values" including "political advancement, constituency satisfaction, following party ideology, penalizing out-groups or deviant game players, and so on" (1986, p. 16). These values manifest in central questions including "who has the right and responsibility to initiate policy," "what policy ideas are deemed unacceptable," "what policy-mobilizing activities are deemed

appropriate," and "what are the special conditions of the state that actors believe shape their policy making?" (Handler, 1978; 1986, p. 17). Clearly the answers to these questions have changed through education finance adequacy cases. The answers to these questions confirm Ward's suspicion that, "rather than seeking to empower the powerless, [school finance reform] tried to shift power from one elite to another" (Handler, 1978; Sandler & Schoenbrod, 2003; Ward, 1990, p. 245).

Berne and Stiefel created the most appropriate equivalent measures of value and education finance (Berne & Stiefel, 1979), and they were quite explicit about the value judgments involved in distributing educational resources according to the answers to the questions who, what, how, and how much. Their measures of "who? The group of choice" (p. 15) distinguished between students and taxpayers as objects of concern; however, this study is focused solely on students, so this measure does not fit this study. Their next question of "what? The choice of an object to be distributed" is important theoretically. In adequacy cases judges were mostly concerned with distributing inputs, with an eye toward outputs and perhaps long term outcomes. Consequently, this study focuses primarily on inputs, with the assumption the education production function works as discussed above. Their question, "how? The choice of an equity principle" (p. 17), is the one most closely related to this study; however, the theoretical student distribution in this model is both related to and distinct from their vertical equity and effects of discrimination categories. The theoretical distribution of students according to their educability is concerned with their ability to transform education inputs into levels of achievement - really an efficiency and equity question. If a handicap or discrimination affects their ability to learn, then it is incorporated into their position on the educability

curve. Finally, Berne and Stiefel's discussion of "how much? The choice of a numerical summary measure" (p. 18), is a concise discussion of various ways of measuring equity. These are useful tools, but they were not useful for this paper.

The values discussed above by various authors inform but do not shape the values used in this paper. Were Berne and Stiefel's questions to be translated for this study, then "who" would deal with educability, and the distribution of resources according to students' ability to learn. "What" would deal with the breadth of coursework, so the question addresses the variety of inputs. Finally, "how much?" would be the level of achievement students are expected to reach. In sum, Berne and Stiefel's work is brilliant and important, but not directly applicable to this study.

This study uses a set of beliefs about resources, school's role in society, and student entitlements to explain a set of remedies, the ordered breadth, height and distribution of educational resources.

CHAPTER III

METHODOLOGY

Introduction

There are four contemporary methods of measuring the adequacy of a state's educational system: complex statistical analysis, expert opinion, model districts or schools, and whole school reform models. While these methods attempt to define adequacy based on how states are currently spending money, the following model is conceptual and not based on how any specific state defines adequacy. The following is an alternative theoretical attempt to describe an adequate educational system using a three-dimensional model. Tufte said, "what is to be sought in designs for the display of information is the clear portrayal of complexity" (1983, p. 191). Ladd and Hansen (1999) described two of the dimensions as qualitative and quantitative adequacy, and before them Arthur Wise hinted at two other dimensions: goals (quantitative adequacy) and student need (later described as educator effort). Wise said.

there are, then, two intersecting dimensions necessary to a determination of adequacy. First, the goal(s) against which needs are to be measured must be articulated; these may be the same for all students or different for different groups or individuals. Second, the source of the criteria for needs assessment must be determined and legitimized; the source may be the state, the service deliverers or the client. This determination goes to the root questions about the purpose of education in a democratic society and about the role of the state, of professionals, and of consumers – parents and children – in shaping education. (Wise, 1983, p. 306)

Using this model, the study hopes to demonstrate simply the complex concept of adequacy as defined in judicial decisions and its relationship to judicial beliefs. It

assumes there is a positive relationship between educator effort and student performance and that educator effort is applied with perfect efficiency.

Description of the Model

The first dimension – educability and educator effort

Imagine all the children entering school in the year 2005. They will be of many different sizes, shapes, and colors. They will come from various backgrounds, with different family situations, different socio-economic status, and different ideas and feelings about education. Before you would be arrayed a rainbow of humanity encompassing the entire spectrum of potential.

Imagine all these children could be evaluated according to their educability. That is, we could rate the amount of educator effort it would take to impart a definable level of knowledge, a skill or an attitude (KSA) to that child. Other terms we might use are trainability, or aptitude. In the past children along this spectrum might have been described as mentally quick or slow, sharp or dull. Some children could learn any particular skill quickly and easily, with very little effort from educators. Others would have a lot of difficulty grasping the idea or mastering the skill, and the amount of educator effort needed to help these children grasp a certain idea would be much higher than for the more adept children. If we placed all these children on a scale according to their educability, they would likely fall into a normal distribution. On the far right side of the scale would be a few of the most educable children who master the skill with little effort from educators. In the middle would be the majority of children who, with greater

or lesser effort from educators, will be able to master the skill. Finally on the far left side of the scale would be children who require large amounts of educator effort to grasp a KSA as well as a few children who, regardless of how much effort is expended by an educator on their behalf, will not be able to master the skill (see Figure 2).

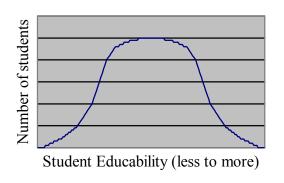


Figure 2: Educability of students displayed as a normal curve

If we assume that the state provided each child with exactly the same educational resources, then we can expect that a chart of student performance would duplicate the normal curve of student educability. That is, a small number of the more educable students would learn more given the same level of educator effort, the mass of average students would learn somewhat more or less than average amount, while the less educable students, given the same amount of educator effort, would learn less.

If we were to graph student need such that providing for that need would ensure that every child would be able to meet the same level of proficiency at a specific KSA, we could take the normal curve describing student educability and twist it about its middle. Now the curve descends sharply from some high point along the vertical left axis, levels out around the middle, and then descends slowly to the bottom, horizontal

axis. This curve theoretically describes what is needed to ensure every child reaches a level of proficiency at a task. Wise expressed this idea as follows:

If it is assumed that the state's purpose in providing public education is to ensure that the populace will attain certain kinds of capabilities, such as reading and computational skills, then the state's responsibility may be seen as providing extra resources to those who have not attained the specified levels of capability. The goal for all students is uniform, and needs are measured according to a deficit model. The need is the difference between the state-defined goal and the student's level of attainment. Adequacy is achieved when the need is met (Wise, 1983, p. 306).

This is also a graph of the amount of educator effort required to bring each student to the same level of skill. Thus the least educable children require the most effort to educate, while the most educable children will require little effort to educate. At the extreme right end of the graph will be children who have already mastered a skill, and thus require no educator effort to educate. At the extreme left side of the graph will be children who cannot master the skill regardless of how much educator effort is expended. Clune (1994) and Levin (1994) use an estimate of about 2% "truly disabled," while DeMitchell and Fossey estimate 12 percent of children are in special education; however, this will vary with the knowledge, skill or attitude. This graph of student need or educator effort is the first dimension of the model (see Figure 3).

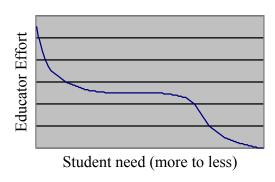


Figure 3: Educator effort required to enable all children to achieve equally

As an example, imagine this group of children entering first grade on their first day, and the goal for the year is to teach them to read "Dick and Jane." Some will already know how to read, and thus it will need no educator effort for them to master the skill. They would be on the far right side of the distribution. The majority of children will need more or less help learning to read. The educator will help some learn their letters, others to master phonics, and others to put all of this together to read. Some will not learn to read before they finish first grade. Those who do not learn to read would be on the far left side of the distribution.

Educator effort refers to the resources needed to bring a student to a given level of proficiency in a given KSA. Educator effort could be expressed in a variety of units. For example, using an adequate elementary school model advocated by Odden (2001; Picus, 2003b), a school of 500 children would have approximately 30 educators overseeing them (1 principal, 24 teachers, 1 instructional facilitator, 2 tutors, 2 outreach/student support) for a student/educator ratio of 16.7/1. A 180-day year with six hours of student contact each day results in 10.8 educator days per student, or 64.8 hours per student. For simplicity's sake, if the average salary and benefits were \$50,000 for each educator, then each educator day costs about \$278, yielding about \$3000 worth of educator effort for each student each year or \$4.29 for each hour of student contact time. Using this or similar conversions, educator effort could be expressed in days, hours, or dollars per student. This assumes a clean, safe environment, transportation and enough instructional materials (Hanushek, 1994). Wise echoes the link between adequacy and resources when he contrasts adequacy to the "usual" way of budgeting (incremental increases) (Winans, 2002) with adequacy.

The concept of financing adequate education implies a budget that is driven by costing the delivery of adequate education. In other words, an adequate educational opportunity must first be defined and operationalized; only then can the cost be determined. (Wise, 1983, p. 314)

The National Education Association (NEA) echoed this sentiment when it accused state legislators of "drafting tough standards without inquiring what it really costs for teachers and education support professionals to implement them" (Winans, 2002, p. 1).

These measurements can be adapted to individual student situations. If the average student in a school received about \$3000 worth of educator effort, a student who needed twice as much educator effort to reach a given level of proficiency (in the form of smaller class size, tutoring, counseling, etc.) would cost about \$6000. That could also be expressed as approximately 21.6 days or 129 hours of educator effort. This is obviously done at the simplest level. Schools have limited resources. Any student who requires twice the educator effort to reach a level of proficiency denies that resource to other students in the school. By the same token, students who require half the average educator effort to become proficient in a KSA free that resource to be used for other students.

Assuming the normal distribution of educability, if equal educator effort were expended on all students then the resulting achievement would represent the inverse of the educator effort curve. The least educable, least efficient at learning, will produce the lowest return of KSAs for each unit of educator effort. On the other hand, the most educable students, the most efficient learners, would create more KSAs than their less educable peers. This would result in inequity in student achievement, with the most educable achieving more than the least educable (See Figure 4).

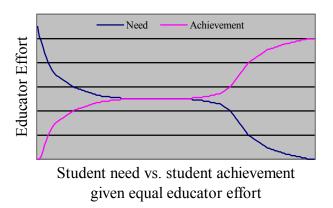


Figure 4: Need vs. achievement given equal educator effort

To summarize the discussion of the first dimension of the model, student educability, Wise said,

assuming uniform performance standards, it is surely the case that different students will require different amounts of time and resources to attain them. Different amounts of time and resources cost different amounts of money. Obviously, the higher the standards are set, the greater will be the disparity in time and resources required to bring all students to the standards. (Wise, 1983, p. 313)

The second dimension – qualitative adequacy.

Society expects educators to impart a breadth of knowledge, skills and attitudes to its children. This breadth makes the second dimension of the model. Ladd and Hansen call this the "adequacy of what" and refer to it as "qualitative adequacy" (Ladd & Hansen, 1999, p. 104). Traditionally this range contained the "three R's," i.e. reading, writing and arithmetic; however, contemporary court orders have expanded this range.

The breadth of education is controversial. The Illinois court opined

one might say that a student instructed in reading, writing, geography, English grammar and arithmetic had received a common school education, while another might insist that history, natural philosophy and algebra should be included. It would thus be almost impossible to find two

persons who would in all respects agree in regard to what constituted a common school education. (*Richards v. Raymond*, 92 III. 612 (1879) cited in *Edgar*, 1996, p. 1190)

The *Abbott II* court observed "there is no standard of the breadth of curriculum that must be offered" (1990, p. 374). The Kentucky Supreme Court ordered that educators impart seven basic competencies to Kentucky's school children in *Rose v. Council for Better Education* (1989). Other courts have expressed similar sentiments, indicating that an adequate education goes beyond the basics with the intent of making students capable of competing with their peers in a global, information age economy. These competencies could include knowledge of a foreign language, computer skills, vocational skills, art and music appreciation, etc. (see Figure 5).

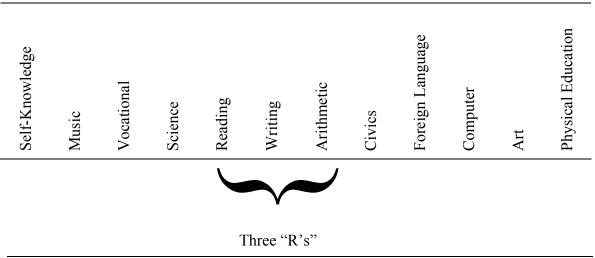


Figure 5: Breadth of knowledge or "Qualitative Adequacy"

The second dimension is smallest when it includes the fewest skills. If schools were only expected to teach the three R's, then the dimension would be small. On the other hand, were this dimension to include all the domains of human learning, it could be extraordinarily large. Wise starts with the minimal definition of adequacy, "the provision

of that minimum educational opportunity necessary to minimally" prepare students for adult roles" (Wise, 1983, p. 309), which combines the minimal definition of the second and third dimensions of adequacy.

The third dimension – quantitative adequacy.

In all areas of human endeavor there are levels of ability or achievement.

Reading ability ranges from recognizing letters and sounding out "Dick and Jane" to understanding complicated legal opinions or enjoying James Joyce. Writing ability ranges from making one's mark to intricate technical writing or creating the great American novel. Mathematical ability ranges from simple sums to differential equations and Boolean algebra. Many areas of expertise have similar scales of ability. Ladd and Hansen refer to this as "quantitative adequacy" or the question of "how much" (1999, p. 104) (see Figure 6).

Level of difficulty	Reading	Mathematics
Highest	Shakespeare/Joyce Mark Twain Treasure Island Junie B. Jones Dr. Seuss Dick & Jane	Differential Equations Algebra Word Problems Fractions Multiply Add/subtract
Lowest	Sound letters	Count

Figure 6: Levels of ability or "quantitative adequacy"

Adequacy is linked to accountability, but accountability has real meaning only when a student body is paired with the breadth of skills and the level of skills the state

desires for its students (Winans, 2002, p. 4). The *Abbott II* court searched for a "broad-gauged standard of performance" (1990, p. 374).

Volume of Educator Effort

Joining these three dimensions together describes a volume of effort required to educate a group of children to specific ability level over a range of skills. The volume of effort equates to the cost of educating children to the desired level of ability over the desired range of knowledge, skills and attitudes (see Figure 7).

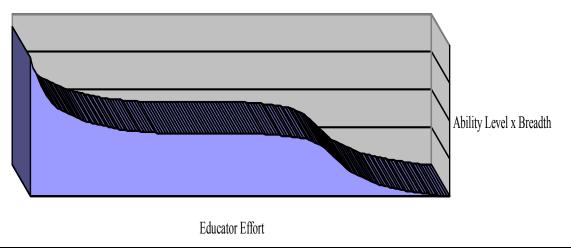


Figure 7: The three-dimensional model of adequacy

Manipulating the Model's Qualitative and Quantitative Dimensions

The volume of effort can be most easily manipulated over two dimensions: the breadth of abilities or qualitative dimension and the level of ability or quantitative dimension. Manipulating quantitative adequacy is simply demonstrated. For example, a basic minimum education might include reading, writing and arithmetic at the sixth grade

level. People with this level of education would be able to read most newspapers and training material, correspond with their political representatives, complete job applications, and manage their personal and small business finances. A lesser volume of effort would be required if the state were to decide a minimum basic education merely required the ability to add and subtract, read rudimentary materials and sign one's name. A greater volume of effort would be required if all its citizens had to be able to use geometry, appreciate classical literature, or compose poetry. For these changes one simply raises or lowers the horizontal line describing the level of ability (see Figure 8).

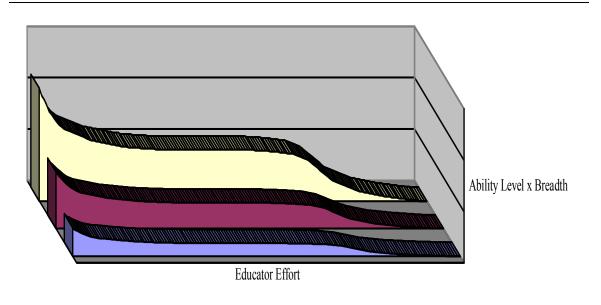


Figure 8: Educator effort - three levels of ability or quantitative adequacy

Manipulating the qualitative adequacy is similarly easily demonstrated. While a core education has traditionally consisted of reading, writing, and arithmetic, there is an inclination in the courts to expand that definition (*Abbott IV*, 1997, *CFE IV*, 2003, *Rose*, 1989). As a greater breadth of requirements is added, the volume of effort expands

accordingly. If competency in a foreign language, computer skills, interpersonal and self-awareness skills, vocational skills, swimming and art appreciation are added, then the breadth and the associated volume of effort expand accordingly. For these changes, one simply moves the vertical line describing the breadth of ability (see Figures 9 and 10).

The theoretical concept of qualitative and quantitative adequacy, breadth and height of education, has purchase in the real world. The Connecticut high court said

the financing system discriminates against pupils in Canton because the *breadth and quality* of the education they receive is to a substantial degree *narrower and lower* than that which pupils receive in comparable towns with larger tax bases and greater ability to finance education; that that *narrower breadth and lower quality* of education is a result of the state's

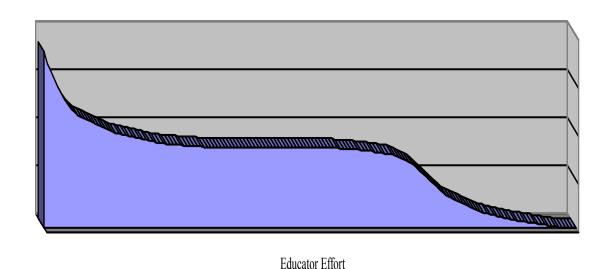


Figure 3: Minimal breadth of skills or qualitative adequacy

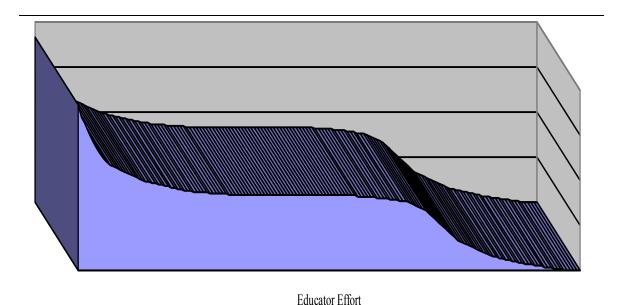


Figure 10: Maximum breadth of skills or qualitative adequacy

delegation of its responsibilities without regard to Canton's financial capabilities; (*Horton v. Meskill*, 1977, p. 370, emphasis added)the education they receive is to a substantial degree *narrower and lower in quality* than that which pupils receive in comparable towns with a larger tax base. (*Id.*, p. 373, emphasis added)

Manipulating the qualitative and quantitative adequacy affects the students on the extreme ends of the educability curve in different ways. Raising the level or breadth of quantitative or qualitative adequacy will decrease the numbers of students who require little or no effort to reach those goals and increase the numbers of those who require large amounts of effort or may never reach the goal. For example, assume swimming was an ability all educated American should have, and the ability to swim from the middle of the pool to the side was the quantitative threshold. Some children at the right side of the normal distribution would be able to swim to the side of the pool before entering school, while others at the extreme left side of the distribution, perhaps due to a severe mental, physical or emotional handicap, would not be able to swim to the side of the pool

regardless of how much educator effort were expended on their behalf. Between would be children who would require many hours of educator effort to overcome their fear of the water, allow them to breathe properly and doggy paddle to the side, as well as children who would take to the water "like ducks" with very little educator effort (see Figure 11).

Now assume the 200 meter individual medley (a combination of 50 meters each of freestyle, backstroke, breaststroke and butterfly) were the standard all students were expected to achieve. This involves raising the level of ability, quantitative adequacy, from reaching the edge of the pool to 200 meters. It also expands the breadth, qualitative adequacy, from doggy paddle to four different, difficult strokes. A significantly larger volume of educator effort would be required to bring children to this level of proficiency. At the same time, a larger number of children at the left side of the distribution would not be able to meet the standard regardless of the volume of educator effort expended on

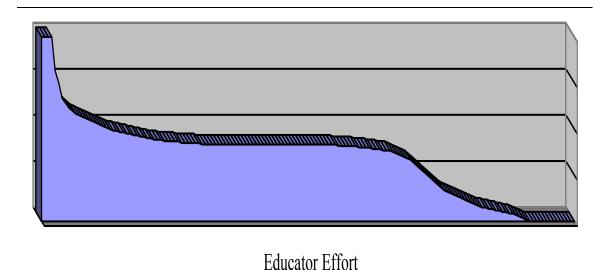


Figure 11: Model of minimal adequacy in swimming

their behalf, and a smaller number of children would require no educator effort to meet the standard. The bottom line is conceptually simple: as a wider variety of KSAs become entitlements (qualitative adequacy) more educator effort and associated expense is required. Similarly, as the level of desired proficiency increases (quantitative adequacy) educator effort and associated expense increase (see Figure 12).

Manipulating these two dimensions has genuine applicability in court cases and legislatures because it helps relate the goal to the costs. Assume for a moment that the average student requires 10 years of educator effort to reach proficiency in reading, writing, and arithmetic, with educator effort totaling \$3000 per student per year, and that

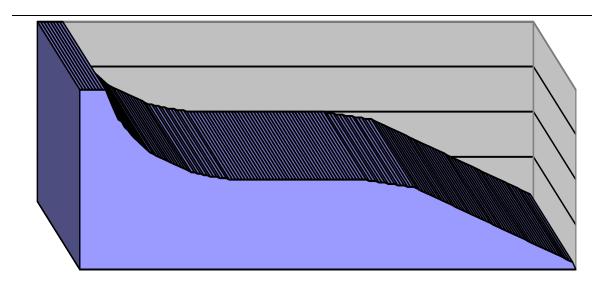


Figure 12: Model of maximum adequacy in swimming

effort is equally split between the three goals, or \$1000 per subject. Assume also that the court imposed a fourth and fifth goal, for example civics and science, each requiring an equivalent amount of educator effort. Done simply, that implies an increase in educator

effort from \$3000 to \$5000 per student per year. Even assuming some overlap, that studying civics will improve students' reading skill and that studying science will improve students' arithmetic, filling the expanded breadth of qualitative adequacy requires a substantial increase in educator effort and funding. Similarly, to declare that a skill level equivalent to a high school education rather than an eighth grade education is the quantitative definition of adequacy implies an additional \$12000 in educator effort per student (four years of education at \$3000 per year), plus facilities and transportation.

Discussion of the Educability Dimension

Begin by assuming the state requires all students to achieve an equal, modest level and range of ability in its educational system. With varying degrees of effort, more for the least educable and less for the more educable, schools can help most students reach this level of proficiency (see Figure 13).

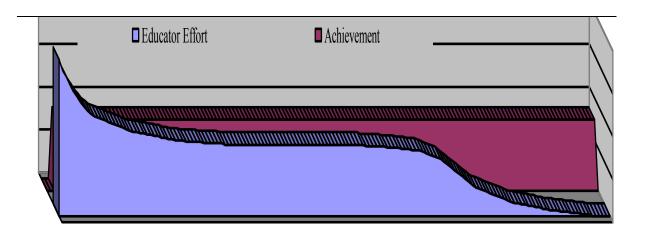


Figure 13: Model of educator effort and student achievement

Beginning at the extreme left side of the educability distribution curve, some children will not be able to acquire certain KSAs regardless of how much educator effort is expended on them. Clune and Levin estimate that due to severe mental, emotional or physical handicap, approximately two percent of children will not be able to reach even rudimentary levels of proficiency in basic skills, while DeMitchell and Fossey estimate 12 percent of children are in special education. Kentucky allows ½ to 1 percent of its students, "those students with the most significant cognitive disabilities," to take alternative assessments (Kearns, Kleinert, & Kennedy, 1999). Many laws and programs provide for these children, and they will not be included in this model of adequacy. Instead, this paper focuses on the most-educable 95% of students.

At the extreme right side of the educability curve, some children might achieve state mandated levels of achievement with little or no educator effort. Much of the educator effort expended on these children enables them to go beyond adequate. For the purposes of this model, assume this is the top 5% of students.

Most students are between the extremes within a wide range of educability. Some students will achieve the modest level of accomplishment across the range of abilities with little educator effort. Other students will require significantly greater educator effort resources to achieve the same modest level of achievement. If a specific level of accomplishment is the entitlement, then any student who fails to achieve the mandated level of accomplishment is entitled to more and more educator effort. "The failure to acquire the basic skills may be taken as prima facie evidence that the proper opportunity has not been provided" (Wise, 1983, p. 304).

Together these three dimensions constitute a model of adequacy that encompasses the goals of education for the state's students. One's conception of the breadth, height, and distribution of educator effort across the student population is likely a result of values. Judicial decisions about adequacy might also be the result of judicial values. The next section of this paper will discuss some values and beliefs in education.

Judicial Values and Beliefs in Education

That beliefs can be analyzed and graded is controversial.

Belief systems are tricky things to deal with. It is one thing to agree that cultures tend to perpetuate themselves by inculcating patterns of values and favorable perceptions of social institutions, but quite another to specify with any degree of confidence the contours of that belief system (Scheingold, 1974, p. 39).

Beyond the simple problems of expression and interpretation, there are methodological issues involving imputing beliefs to authors from a miniscule sample of writing.

Using court cases to discern the values judges are expressing is not new or unique. Daniel R. Hodgdon "argued that in fact court decisions revealed a governing social philosophy that lawyers and school officials needed to recognize" (Hodgdon, 1933, cited in Tyack, 1982, p. 44). "legal case digests can be a useful historical source in studying the relationship of law and society" and "all in all, we are convinced that the type of research strategy we describe in this appendix highlights the historical value of legal case digests and suggests new ways of studying historical patterns in the relationship of law and society" (Benavot, Blackmore, Harbeck, & Looper, 1981, p. 52). Surveys of court cases also exist in the literature. Thro's 1989 study set out to "survey and examine the responses of the twenty-four state supreme courts that have confronted

state constitutional-based public school finance reform cases" (Thro, 1989). In reality, discerning judicial values from their dicta in cases is similar to what judges claim to do in discerning framer, legislator, or jurist values from historical documents.

Scholars have examined judicial attitudes with some success in the past, and "research on judicial behavior indicates the unmistakable impact of personal policy" preferences on judicial decisions" (Scheingold, 1974, p. 87). For example, Smith used textual analysis to rank court opinions according to their suggested direction and strength of recommendation, creating a scale of eight "types" of increasing power; these rankings provided some indication of legislative response to the court orders (1994). Smith did not include dissenting opinions, which this study includes to help illustrate the central thesis. Danelski examined the speeches of Justices Brandeis and Butler before their appointments to the Supreme Court for indications of their support or opposition to laissez faire economic policies. The results of this content analysis correlated with later judicial votes in economic cases (Danelski, 1966). Segal and Cover trained three graduate students to read and code comments from Supreme Court justices that appeared in the nation's leading newspapers. By dividing the number of liberal, neutral and conservative paragraphs in these writings by the total number of paragraphs, they created a minus one to plus one scale of political bias, resulting in "a correlation of .80 between values and votes" in civil liberties cases (Segal & Cover, 1989). Dayton, Dupre, and Kiracofe also examined judicial opinions to see if economic conditions influenced their decisions (2005, p. 3). Finally, when Banks examined court opinions he found, "the clearest evidence of judicial frustration is the language of the various state court opinions" (1991, p. 157).

Judicial beliefs will be examined through three lenses: beliefs about children's entitlements, beliefs about the role of schools in society, and beliefs about resources. Many have argued that there is no rational relationship between how the state funds education and its goals, but that education is merely the result of what is politically feasible. How much effort can the state afford to expend educating its citizens (Monk & Theobald, 2001)? Most states have faced the question of what their constitutions require; however, this involves judicial interpretation of a phrase, sentence or clause. A rational state might ask what type of educated citizenry is in the state's long-term interest, or what are the parents' desires for their children, or what is the most the state can do to educate its citizens considering the totality of its obligations. These three lenses can help rationally consider our beliefs about education and link our beliefs to how we expend educational resources.

Earlier researchers on judicial beliefs have used different scales. Schubert's scales of political and economic liberalism are good examples. Schubert also scaled judicial attitudes on other scales; for example, anti-business, pro-union, political equality, political freedom, religious freedom, fair procedure, and right to privacy (Schubert, 1965). In a sense, the scales this study uses might be subsets of larger measures of political or economic liberalism, which may be reflected in personal characteristics or party affiliation as used by Lundberg (2000).

These broader measures will not be used in this study. First, politicians from all points in the political spectrum advocate better schools, although they might not necessarily agree on the means to the end; thus party affiliation might not be indicative of a judge's beliefs about schools. Furthermore, persons along different points of the

political/economic liberalism scales also could support better schools, although an economic conservative might want better schools to have a cheaper, higher quality work force and an economic liberal might want better schools to reduce inequality in wealth or income. Finally, because of the breadth of the study and the limited resources of the author, it was undesirable to try to find independent confirmation of the political and economic views of every judge in every court, or to model every court according to Schubert's technique, even if that was possible. In fact, Fair's experiment indicated that the variety of cases state high courts handle made statistical analyses like those done on the Supreme Court less sure (1967). Thus, although these scales might have been useful tools for Schubert's analyses, for theoretical reasons they were too blunt for this analysis.

More discreet alternative scales also were considered and rejected, especially Guthrie's conception of the dynamic tension among equality, efficiency and liberty in educational decision making (Guthrie, 2004. Fiss, 1979, and Verstegen, 1990, also mention the tension between liberty and equality). While Guthrie is undoubtedly correct in asserting that any decisions about education finance must balance these three elements, scaling them was conceptually difficult and attempting to identify where individuals stand on these issues from their writing might be very difficult. For example, few modern Americans would speak against increasing equality, efficiency or liberty, but few are clear about what they mean when they advocate increasing those things or the cost of doing so. In education finance, increasing equality often means depriving the wealthy of the liberty to use their resources, but few politicians would state their agenda so plainly, and it is unimaginable that an American judge would use that justification. Spaeth and Rohde encountered an equivalent challenge in scaling "freedom," "equality" and "New

Dealism" in their analysis of Supreme Court opinions (Spaeth & Rohde, 1976, p. 142). An individual's positive or negative response to these values would vary along the political spectrum, but not necessarily in an intuitive or predictable manner.

Guthrie's conceptualization also had practical limitations for this paper. The dynamic tension in Guthrie's model comes from describing a zero-sum contest in which the area in the equality-efficiency-liberty triangle remains somewhat constant, while the length of the individual legs grows or shrinks. No single leg can grow without a corresponding shrinkage in one or both of the other legs. This was not useful for this study, which attempts to show how increases in certain judicial beliefs result in increases in the size of the adequacy remedy. Ultimately I was unable to conceive how to scale these three beliefs usefully, to imagine their ability to effectively discern levels of judicial beliefs, or to see how they could demonstrate the relationship between judicial beliefs and adequacy remedies.

Fortunately, beliefs about resources, school's role in society, and children's entitlement to education can be placed on scales. These scales might help us understand our beliefs and why we make certain decisions about education and educational resources. Beliefs about children's entitlements address the question of what society owes its children and what it expects for them. The range can be envisioned as reaching from laissez faire to children as wards of the state. Beliefs about the role of schools in society address what society expects its schools to accomplish. These beliefs range from society having no stake in schools and schooling to schools as an active instrument of social policy. Our beliefs about public resources are much like the range of beliefs about personal resources. Some people are misers, and some are spendthrifts.

Beliefs about children's entitlement to education might be scaled as in Table 4.

The state has no role in educating them in belief E1, and it assumes a minimal role in educating children, perhaps with a negative purpose, like reducing ignorance or vice, in

Table 4

Beliefs about children's levels of entitlement

Level	Description of "entitlement"
E1	Children deserve what their families and circumstances provide.
E2	Children deserve a minimum opportunity.
E3	Children deserve equal resources from the state.
E4	Children deserve a generous opportunity.
E5	Children deserve equal outcomes.

Table 5
Beliefs about school's role in society

Level	Description of the role of school in society	
S1	Education is an individual/family responsibility.	
S2	School must enable citizens to read, write, count and participate in the	
	political process.	
S3	School prepares workers for the economy, national defense, etc.	
S4	School must enable citizens to pursue personal fulfillment.	
S5	School exists to reduce social inequity.	

E2. Children are either autonomous individuals or parts of their families, and what becomes of them is not a state concern. In belief E3 the state provides equally for all children, regardless of their need. E4 pushes the students' entitlement further, requiring the state to provide abundantly for all students, probably with some positive purpose. Finally, with belief E5 the state is an active participant in the race of life, attempting to ensure the children of the wealthy do not enter adulthood with more advantages than the children of the poor. Next are ideas about the role of school in society (Table 5). As in belief E1, the state has little or no role in S1. The state takes on increasingly higher roles in S2-S5, acquiring responsibility for more and more desirable results of education in its citizens. The state takes on a small role in S2. S2 may be illustrated by Thomas and Davis quote a state legislator who declared, "I'm satisfied with current levels of achievement" in a state where high school graduates were reading at the 4th grade level (2001, p. 15). In S3 the state takes an active role in educating its citizens, but with a definable, somewhat self-serving end (good citizenship, supporting the economy, national defense, etc.).

As expensive as public education may be, the cost to society of not educating people is much higher. The detrimental effect of illiteracy on employment, on military capability, and on the size of welfare and relief roles is strong evidence of the costliness of permitting people to remain uneducated. (Burrup, Brimley, & Garfield, 1993, p. 59)

S4 represents a higher level of commitment because it is open ended. What does it mean to enable a someone to be personally fulfilled? What amount and kind of education furthers that end? Presumably if a student is uncompetitive in the marketplace or is unhappy in her life, then the state has failed in its obligation to educate her. It is also more focused on creating value for the individual, while S3 creates value that is shared

between the individual and the community. Finally S5 creates the most state intervention, intervening between what students and parents might do otherwise to manipulate who wins and loses the game of life.

Alongside what children deserve and why society provides schooling are beliefs about society's resources (Table 6). Belief R1 essentially claims there are no resources available for public education. Belief R2 attempts to maximize individual initiative and opportunity by minimizing state interference in people's lives. Belief R3 recognizes that schools are only one investment states make in their futures, and that investments in transportation, communication, safety, environmental quality and et cetera also benefit the people of the state. Belief R4 looks at society's wealth and the wealth of many individuals and sees misappropriation. Belief R4 speculates the reason students are not

Table 6

Beliefs about resources

Description of belief about resources	
The state lacks resources to spend on public education.	
The state should minimize all expenses and expenditures, including	
spending on education (Friedman, 1962).	
Because resources are limited, investment in schooling should balance	
available resources, return on investment, and other spending needs.	
Resources are practically unlimited; Lack of will and misappropriation	
causes shortages in school funding and student failure.	

properly schooled is because society has wasted resources on defense, roads, prisons, or conspicuous consumption.

How Values Interact with the Model

Using these lenses we can picture how different values would be reflected in the three dimensional model. Each different value and combination of values will result in a different way of deploying resources with different results according to the model.

To begin, different beliefs about school's role in society will result in different models (Table 7).

In addition to different beliefs about school's role in society, different beliefs about student entitlements also will shape the model (Table 8).

Finally beliefs about resources will also shape the model (Table 9).

Table 7

Impact of beliefs about school's role in society on the 3-D model

Level	Description of "role"	Impact on 3-D model
S1	Education is an	Acting fully on this belief would minimize or eliminate
	individual/family responsibility	public schooling and the model.
S2	School must enable citizens to	Narrow breadth and low quantitative adequacy; however, it
	read, write, count and vote	would include students from the entire educability curve. It
		also implies that good citizenship requires a certain level of
		knowledge and ability (Rebell, 2001).
S3	School exists to support	The most educable students would receive the broadest
	economic growth, etc.	qualitative and highest quantitative levels of education
		because they would give society the most KSAs for each unit
		of educator effort. Less educable students would get smaller
		qualitative and quantitative levels of education.
S4	School must enable citizens to	Very broad qualitative dimension, and perhaps also a very
	pursue personal fulfillment	high quantitative level. How much public education is
		needed to ensure students are fulfilled? One might ask,
		perhaps while writing a dissertation, if education past a
		certain level decreases personal fulfillment.
S5	School exists to reduce social	Qualitative and quantitative dimensions much like S3 or S4,
	inequity	since students must have the knowledge to become
		economically successful. The educator effort curve would be
		strongly biased toward the least educable students.

Table 8

Impact of beliefs about student entitlements on the 3-D model

Level	Description of entitlement	Impact on 3-D model
E1	Children deserve what their	No public education system.
	families/circumstances provide.	
E2	Children deserve a minimum	A short, narrow model, perhaps with educator effort
	opportunity.	distributed by influence and chance.
E3	Children deserve equal	Equal educator effort expended on each student, although the
	resources from the state.	breadth and height of the model are hard to predict. The
		likely result would be the inverse of the educator effort curve,
		with the least educable students acquiring the fewest KSAs,
		and the most educable students acquiring the most KSAs.
E4	Children deserve a generous	This model will be larger than E2 and probably biased more
	opportunity.	toward the least educable.
E5	Children deserve equal	Assumes that the race of life should not begin until
	outcomes.	graduation, and therefore, educator effort should be expended
		so that all children are equally educated at the end of school.
		Educator effort may be highly biased toward the least
		educable, perhaps directing educator effort as depicted in
		Figure 3. Imagine Harrison Bergeron (Vonnegut, 1961).

Table 9

Impact of beliefs about resources on the 3-D model

Level	Description of resource belief	Impact on 3-D model
R1	The state lacks resources to	This results in no public education system.
	spend on public education.	
R2	The state should minimize all	This results in small qualitative and quantitative dimensions.
	expenses and expenditures,	
	including spending on education	
	(Friedman, 1962).	
R3	Because resources are limited,	This view reflects the importance of an educated citizenry,
	investment in schooling should	but also understands the importance of other social
	balance available resources,	investments and the importance of the consent of the
	return on investment, and other	governed. The resulting model may have moderate
	spending needs.	qualitative and quantitative dimensions. Educator effort may
		be biased toward the most educable since they provide the
		most KSAs for each dollar of education spending.
R4	Resources are practically	This view emphasizes education as the states primary
	unlimited; Lack of will and	function and spending priority. It may assume investment in
	misappropriation causes	education will cure other societal ills. The result will be the
	shortages in school funding and	largest qualitative and quantitative dimensions with educator
	student failure.	effort curve biased toward the least educable.

Scoring

The theoretical volume of each model can be calculated. Although these numbers have no concrete meaning, they are useful for comparing models. The models also can be characterized as progressive, neutral or supporting liberty. In a progressive model, the state provides more resources to the least educable so there is less discrepancy between the least and most educable at graduation. In a neutral model the state provides equal resources to all students. In liberty model, the state allows the wealthy to join together and spend freely for their children's education.

Belief scores are the product of entitlement beliefs, school role beliefs, and resource beliefs:

Belief Score =
$$E * S * R$$
 (1)

Input scores attempt to model the educational resources the courts directed towards the schools. This is the product of the theoretical breadth multiplied by the theoretical level multiplied by 130, the number of units in the models. If the judges allowed wealthier districts to spend more, 10 was added to the units in the last quintile. If the judges ordered compensation for low educability, 10 was added to the units in the first quintile. If the judges ordered equal outputs for the least educable, then inputs were added to simulate the educability curve to raise the least educable to the mean.

KSA scores are calculated by multiplying the theoretical breadth of the model by theoretical student achievement levels for 130 student units.

KSA score = Σ (breadth*level of achievement of a hypothetical student body) (2)

A base model was designed with a mean level of achievement of 50 and student achievement ranging from 0 to 100. Subsequent models were based on the base model.

The first and last quintiles were adjusted to account for judges allowing the wealthy to spend more or insisting on compensation or equality for the least educable.

Sample

The sample is state high court rulings since 1989 regarding the state education and education finance systems (Mills & McLendon, 2000, p. 402). Thro maintains these cases are different from their predecessors because (1) "the plaintiffs have argued that all children are entitled to an education of at least a certain quality," (2) these decisions have been based "on the education clauses of individual states' constitutions," and (3) "the courts have been more sweeping in their pronouncements and their willingness to take control of the financing of education" (Thro, 1994p. 603-604). These differences are important for this study since the model requires a court definition of a certain quality of education and the decision must be of sufficient magnitude to attempt to reshape education in the state. For the study to tie judicial values to adequacy remedies, the court must decide that the state "education clause does impose a standard of quality" and then define "exactly what that quality standard means" (Thro, 1994, p. 607).

Collection of Data

Cases were drawn from Westlaw Campus. Cases were used rather than other sources because they are "readily available to researchers" and they provide "a large volume of data that can be reasonably used for comparisons among the states" (Smith, 1994, p. 28). According to Smith,

Opinions are official pronouncements of the courts. They are the conventional way a court communicates not only its decisions, but the

rationale for arriving at them, and its attitudes in general, about the issues involved. Opinions are understood to contain both "holdings," authoritative statements of what the law is in the case, and "dicta," the court's non-binding observations about and reflections on matters related to the case. Courts use both holdings and dicta to communicate their policy views to the legislature. (Smith, 1994, p. 28)

Description of the Sample

Table 10 Cases examined

State Case AL Coalition for Equity, Inc. v. Hunt, 624 So.2d 107 (1993) Ex parte James, 836 so.2d 913 (2002) AZRoosevelt Elementary School District v. Bishop, 179 Ariz. 233, 877 P.2d 806 (1994); Hull v. Albrecht, 950 P.2d 1141 (1997) AR Dupree v. Alma School District No. 20, 651 S.W.2d 90 (1984); Lake View School District v. Huckabee, 10 S.W.3d 892 (2000); 91 S.W.3d 472 (2002) CTSheff v. O'Neil, 678 A.2d 1267 (1996) FL Coalition for Adequacy and Fairness in School Funding v. Chiles, 680 So.2d 400 (1996) ID Idaho Schools for Equal Educational Opportunity v. Evans, 850 P.2d 724 (1993); Idaho Schools for Equal Educational Opportunity v. Idaho State Board of Education, 976 P.2d 913 (1998) ILCommittee for Education Rights v. Edgar, 672 N.E.2d 1178 (1996) KYRose v. Council for Better Education, 790 S.W.2d 186 (1989)

State	Case
ME	School Administrative District No. 1 v. Commissioner, 659 A.2d 854 (1994)
MA	McDuffy v. Secretary, 615 N.E.2d 616 (1993)
MN	Skeen v. State, 505 N.W.2d 299 (1993)
MO	Committee for Educational Equality v. State, 878 S.W.2d 446 (1994)
MT	Helena Elementary School District Number 1 v. State, 236 Mont. 44, 769 P.2d
	684 (1989); 236 Mont. 44, 784 P.2d 412 (1990)
NE	Gould v. Orr, 506 N.W.2d 349 (1993)
NH	Claremont School District v. Governor, 138 N.H. 183, 635 A.2d 1375 (1993);
	703 A.2d 1353 (1997); 794 A.2d 744 (2002)
NJ	Robinson v. Cahill, 303 A.2d 273 (1973)
	Abbott v. Burke, 495 A.2d 376 (1985); 575 A.2d 359 (1990)
NY	Levittown School District v. Nyquist, 439 N.E.2d 359 (1982); Campaign for
	Fiscal Equity v. State, 655 N.E.2d 661 (1995); 719 N.Y.S.2d 475 (2001); 744
	N.Y.S.2d 130 (2002); N.Y.Slip. Op. 15615 (2003)
NC	Leandro v. State, 488 S.E. 249 (1997)
ND	Bismark Public School District v. State, 511 N.W.2d 247 (1994)
ОН	DeRolph v. State, 677 N.E.2d 733 (1997); 728 N.E.2d 993 (2000); 754 N.E.2d
	1184 (2001); 786 N.E.2d 60 (20030
OR	Coalition for Equitable School Funding v. State, 811 P.2d 116 (1991)
PA	Marrero v. Commonwealth, 709 A.2d 956 (1998)
RI	City of Pawtucket v. Sundlun, 662 A.2d 40 (1995)

Table 10 (Continued)

State	Case	
SC	Abbeville County School District v. State, 515 S.E.2d 535 (1999)	
TN	Tennessee Small Schools v. McWherter, 851 S.W.2d 139 (1993)	
TX	Edgewood Independent School District v. Kirby, 777 S.W.2d 391 (1989); 804	
	S.W.2d 491 (1991); 826 S.W.2d 489 (1992); 893 S.W.2d 450 (1995)	
VT	Brigham v. State, 692 A.2d 384 (1997)	
VA	Scott v. Commonwealth, 443 S.E.2d 138 (1994)	
WI	Kukor v. Grover, 436 N.W.2d 568 (1989); Vincent v. Voight, 614 N.W.2d 388	
	(2000)	
WY	Campbell County School District v. State, 907 P.2d 1238 (1995); State v	
	Campbell County School District, 32 P.3d. 325 (2001)	

Extracted from Mills and McLendon, 2000 and NSBA, 2004

CHAPTER IV

RESULTS OF THE STUDY

This chapter is divided between cases that yielded models and those that did not. The initial modeled cases include a table with value scores and model dimensions, a graph of the adequacy model, and a brief discussion of the case. Later cases include the table, a discussion of the case and a reference to an earlier case's graph. Since many of the adequacy remedies are similar in shape if not in size, repeating similar graphs was unnecessary. The cases are then compared on a summary table and graph.

Cases that did not yield adequacy models are also examined in this section.

While they do not show the link between judicial beliefs and adequacy remedies, some bolster the hypothesis that judicial values are important to the results of education finance cases. These differences in values show up most starkly in concurring and dissenting opinions.

Rose v. Council for Better Education, (Ky., 1989) (Rose).

Four of six justices joined in Kentucky's *Rose* (1989) decision, but four justices filed separate opinions. Of the separate opinions, one concurring opinion urged the court to act more strongly to force the legislature's hand (Gant, p. 216), and one dissenting opinion argued there was no justiciable case and the plaintiffs really wanted a political declaration on a policy question (Leibson, p. 223). The majority opinion, Wintersheimer's concurring opinion and Vance's dissenting opinion described theoretical models of adequacy and are reviewed here.

The majority opinion reflected the belief that resources could not be better spent than on education, and that it was misappropriation or under-taxation that led to education being inadequately funded (R4). The majority opinion expressed the belief that all children are entitled to equal resources from the state, although it would not restrain localities from generating money for their school system (E3), demonstrating an "liberty" bias. Finally the majority opinion expressed the belief that the state educated its children so they could compete in the regional market for work and education (S3).

The resulting model reflects the court's beliefs. The breadth of skills the court defined, although vague, clearly exceeded the minimum (qualitative adequacy). The level of skill was also beyond minimum, enabling students to compete favorably (quantitative adequacy). Finally the court specified both equal resources for all students and freedom of local funding. State neutrality in educational resources for students has

Table 11

Rose Majority opinion matrix

Category	Justices' opinion
State funding	"same opportunity and access to an adequate education" (p. 211)
Local funding	[In no way does the requirement for equal opportunity limit local school entities]
	"authority to supplement the state system" (p. 211)
Educability – L	Equal funding for all students allowing wealthy the liberty to spend more
Breadth – 6	six skill sets (p. 212)
Level – 5	"sufficient"
	Compete regionally (p. 212)
Belief Set	R4 – "No tax proceeds have a more important [purpose] than those for education
	The importance of [schools] cannot be overemphasized or overstated" (p. 211)
	E3 – "Equality is the key word here." (p. 211)
	S3 – "sufficient levels of academic or vocational skills to enable public school students
	to compete favorably with their counterparts in surrounding states, in academics or in
	the job market" (pp. 211-212)

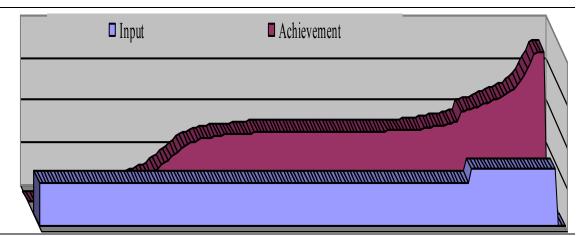


Figure 14: Rose Majority model – Belief score 36; Input score 4,940; KSA score 40,632L

the likely result that the least educable children will acquire the fewest KSAs and the most educable children will acquire the most KSAs. Because of the provision for local funding, and with the assumption that wealthier districts have a larger portion of more educable children and more disposable income, the model contains a bump for the more educable children. This bump assumes they will acquire even more KSAs because of local funding. The bottom line is the *Rose* majority opinion had the highest belief score, and the highest theoretical KSA and input scores, with a bias toward liberty. Although Vance and Wintersheimer came down on opposite sides of the decision, they reflected similar beliefs in their separate opinions. Both emphasized the role of families in education and the primacy of equal resources from the state, so the score split the scale at E2. Both emphasized the state's responsibility to provide a minimum education rather than an adequate education (S2). While Vance did not indicate a belief on resources (defaulted to R3), Wintersheimer showed an appreciation for the difficult job the legislature must perform and the danger of demanding more education than could reasonably be delivered (R3). Each had equal belief scores, and the difference in their KSA and input scores was their difference of opinion about local funding. Wintersheimer's provision for local funding biased his model toward "liberty," while Vance's insistence on equality gave his model a neutral bias.

Table 12

Rose, Wintersheimer concur matrix

Subject	Justices' opinion
State funding	"educational opportunity should be equal for all" (p. 219)
Local funding	"The total independence and authority of local school districts to supplement any state
	effort should be carefully preserved" (p. 219)
Educability – L	Equal funding for all students allowing wealthy the liberty to spend more
Breadth - 3	"constitutional responsibility of providing a minimum level of opportunity" (p. 219)
Level – 3	"Our concern should be primarily focused on the [schools] at the primary level" (p. 219)
Belief Set	R3 – "too much emphasis has been placed on the role of the legislature in the entire
	educational framework" (p. 218)
	E2 – "primary responsibility for the education of children is with the parents" (p. 218);
	education is not a fundamental right (p. 219); "lack of scholastic success is not just the
	fault of the system" (p. 219)
	S2 – "Our concern should be primarily focused on the [schools] at the primary level";
	"constitutional responsibility of providing a minimum level of opportunity" (p. 219)

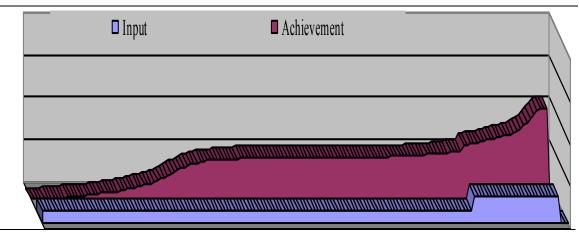


Figure 15: Rose Wintersheimer model – Belief score 12; Input score 1,664; KSA score 12,190L

Table 13

Rose Vance dissent matrix

Category	Justice's decision
State funding	"substantial equality of educational opportunity" (p. 221)
Local funding	Allows no district supplemental funding (p. 221)
Educability – N	Strict equal funding for all students
Breadth - 3	Minimal – majority's goals are vague and unsupported by the constitution (p. 223).
	Only basic educational necessities are required (p. 221)
Level – 3	Minimal – "I can find no such requirement as to the level of funding." Delegates
	discussed including the word "adequate" but did not include it (p. 221).
Belief Set	R3 – Default – no view expressed
	E2 – "provide substantially equal educational opportunity" (p. 220)
	S2 – "'adequate' did not make it into the [constitution]" (p. 221)

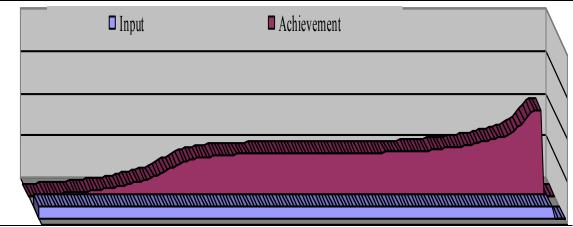


Figure 16: Rose Vance dissent model – Belief score 12; Input score 1170; KSA score 11,862N

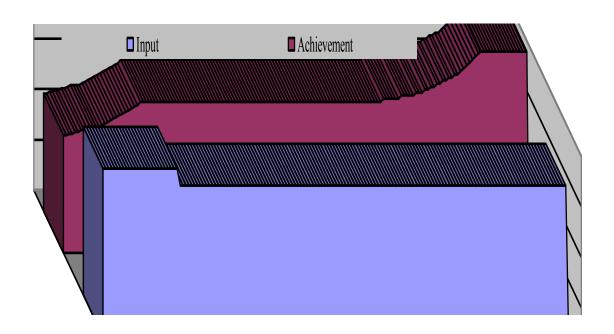


Figure 17: *Campbell I* theoretical model – Belief score 100; Input score 9,721; KSA score 152,712P

Campbell County School District v. State (Wyo., 1995).

The decision in *Campbell v. State* (1995) (*Campbell I*) followed the case of *Washakie County Dist. No. One v. Herschler* (1980), in which the Wyoming high court declared the state education finance system unconstitutional. *Washakie* looked closely at the distribution of education dollars, called for rough "equality of dollar input" and eliminating "the evil" of disparate spending (*Id.*, p. 334). The *Campbell I* decision extended *Washakie* "beyond a wealth-based disparity to other types of causes of disparities" (*Campbell I*, p. 1266).

The court made its beliefs plain. In asserting "all other financial considerations must yield until education is funded" (*Id.*, p. 1279) the court declared its belief that resources were plentiful and that it was misappropriation that kept schools from having enough resources (R4). In insisting upon a "level playing field" (*Id.*, p. 1270) and borrowing Superintendent Jack Iversen's belief that "there doesn't have to be losers in the system" (*Id.*, p. 1278) the court showed the belief that students are entitled to some level of guaranteed success if not equal outcomes. This declaration is not as clear, focused or strident as that in *Abbott II* (1990, discussed below), and consequently it is scored E4.5. Finally, in observing "Our children's readiness to learn is impacted by social ills, learning deficiencies" (*Campbell I*, p.1278), and assigning to schools the role of ameliorating personal and social ills as well as learning deficiencies, the court was acknowledging its belief in the school's ability to reduce social inequality (*Id.*, p. 1278). Here, too, the call is less emphatic than that in *Abbott II*, so it rates S4.5.

The resulting adequacy remedy reflects the court's beliefs. By insisting the education finance system reduce disparities, including personal and social ills as well as

Table 14

Campbell I opinion matrix

Category	Justices' opinion
State funding	"review any legislative school financing reform with strict scrutiny to determine whether
	the evil of financial disparity, from whatever unjustifiable cause, has been exorcized
	from the Wyoming educational system" (p. 1266)
Local funding	"Historical analysis reveals local control is not a constitutionally recognized interest and
	cannot be the basis for disparity in equal educational opportunity" (p. 1270)
Educability - P	"[A] finance system which distributes dollars without regard for the need to level the
	playing field does not provide an equal opportunity for a quality education" (p. 1270)
Breadth – 10	The right to education "must be construed broadly" (p. 1258); "the best educational
	system" (p. 1279)
Level – 9	"Educational success must be defined as graduating from high school equipped for a role
	as a citizen, participant in the political system and competitor both intellectually and
	economically" (p. 1278); "Entry into the University of Wyoming" (p. 1279)
Belief Set	R4 – "Supporting opportunity for complete, proper, quality education is legislature's
	paramount priority; competing priorities not of constitutional magnitude are secondary,
	and legislature may not yield to them unless constitutionally sufficient provision is made
	for elementary and secondary education" (p. 1279); "lack of financial resources will not
	be an acceptable reason for failure to provide the best educational system. All other
	financial considerations must yield until education is funded" (p. 1279)
	E4.5 – "There doesn't have to be losers in the system' is definitive of the meaning of
	equal educational opportunity to a proper education" (p. 1278)
	S4.5 – "the role of education in reducing social problems pressures those same schools
	to respond" (p. 1253); "Children with an impaired readiness to learn do not have the
	same equal opportunity for a quality education as do those children not impacted by
	personal or social ills simply because they do not have the same starting point" (p. 1278)

learning deficiencies so that the education system would produce no "losers" and rejecting local control, the order directs educational resources towards the least educable, giving it a strong progressive/anti-liberty bias. The court-expressed goal is that all students should be prepared to enter higher education (*Campbell I*, p. 1279), thus raising the level of learning, and its insistence on the "best" educational system "broadly construed" indicates a wider breadth of learning for Wyoming students.

The model features large inputs for the least educable in an effort to prepare them for the University of Wyoming. The model does not remove resources from the most educable, so they are still able to create more KSAs than their less educable peers.

It is interesting to note that in *State of Wyoming v. Campbell County School District* (2001) (*Campbell III*, which deals primarily with capital construction projects)

Chief Justice Lehman's 11-page opinion spends six pages explaining why he is a strict constructionist, including quotes from Robert Bork and Antonin Scalia. Ironically he also quotes a "Note" from *Harvard Law Review*, "Unfulfilled Promises: School Finance Remedies and State Courts," which argues courts must act more assertively in school finance cases because the "disproportionate influence of property-rich districts and collective action problems lead to underrepresentation of the school finance plaintiff's interests in the political process" (1991, p. 1073). This is Ely's central argument (cited in the article), although he is on the other end of the constitutional construction spectrum from Bork. Justice Doggett noted a similar problem in Texas where, as his colleagues defined it, "their own conduct is an example of conservativism and restraint, even if, as in this case, it ignores precedent, the rules, and the Constitution" (*Edgewood II*, p. 506).

Alabama Coalition for Equity, et al. v. Hunt (Ala., 1993) (Hunt).

The *Hunt* (1993) case is peculiar to read because everyone agreed that education in Alabama was deficient. The court noted, "Interestingly, Governor Hunt himself has said that Alabama public schools need more money" (*Hunt*, p. 141), and [Governor Hunt] concedes the inequity and inadequacy of educational opportunity in Alabama's public schools to a large extent" (*Id.*, p. 144).

Dr. Martha Barton, assistant state superintendent of schools for instructional services, indicated that such [resource] disparities are evident among schools within the same system but on opposite sides of the tracks.... Dr. Anita Buckley-Commander, Governor Hunt's education advisor, admitted that intra-system disparities existed among the schools she viewed. (*Hunt*, p. 123-124)

Alabama Justice Woodall explained why "the parties were not averse to one another."

The history of the realignment of parties in this case is as follows. Originally, Governor Guy Hunt was a defendant, along with State Director of Finance Robin Swift, Lieutenant Governor James Folsom, Jr., Speaker of the House of Representatives James Clark, State Superintendent of Education Wayne Teague, and the members of the Alabama State board of Education. Later, all the defendants except Governor Hunt and his finance director were realigned as plaintiffs. Why? Because those defendants agreed with the position advanced by ACE. (*James v. Coalition for Equity et al.*, 2002, p. 869, Woodall concurring).

The issue for state officials was that the court was "not the forum to solve the educational woes of this state" (*Id.*, p. 144). Nevertheless, the justices confirmed what the defendants conceded; education in Alabama was not equitable or adequate.

In reaching this conclusion, judicial beliefs seem apparent. The justices acknowledge Governor Hunt's claim that it is the lack of money statewide that prevents more from being spent on education, and although they quote Mobile's superintendent in asserting that education will create wealth, they also note earlier constitutional language

Table 15

Alabama Coalition for Equity (ACE) v. Hunt opinion matrix

Category	Justices' opinion
State funding	"upon all alike, without reference to their condition" (p. 150)
Local funding	"operate upon, and in favor of, all children equally without special local privileges to
	any" (p. 151); "too often in Alabama local control has actually been synonymous with
	local discrimination" (p. 160); "equitable and adequate educational opportunities shall
	be provided to all schoolchildren regardless of the wealth of the communities in which
	the schoolchildren reside" (p. 166)
Educability – N	"the public schools must be free and open to all schoolchildren on equal terms" (p. 165)
Breadth – 7	7 skill sets plus guidance (p. 166)
Level – 6	[Providing] children with a minimally adequate education is the only kind of system that
	conforms with a liberal reading of the constitutional text" (p. 154); "sufficient" (p. 166);
	Compete nationally and internationally (p. 166)
Belief Set	R3 – Quoted Alabama's 1875 constitution in saying "condition of the treasury and
	resources of the state may justify" (p. 152)
	E3 – "free and open to all schoolchildren on equal terms" (p. 165)
	S3 – "If you are anxious for the prosperity of your people, then you will lose no time in
	giving them a 'liberal' education. Intelligence is a great money maker. If you wish to
	make Alabama grow in wealth and progress, you must have general intelligence and
	skilled labor" [quoting Supt. John O. Turner, December 30, 1896] (p. 153)

allowing education funding based on the overall condition of the treasury. Although the justices say "the governor's assertion that the state cannot afford better schools is doubtful, at best; as a matter of law, it is no defense to a claim of constitutional infringement because individual rights do not obtain *only* when the state believes that it can afford them" (*Id.*, p. 139, emphasis in original), they stop short of asserting that the

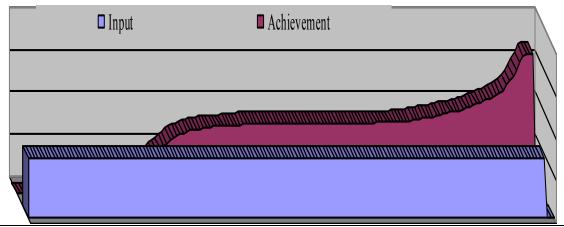


Figure 18: ACE v. Hunt theoretical model—Belief score 18; Input score 7,800; KSA score 46,130N

NOTE: Because the models are theoretical, charts of the first several cases were presented. Latter cases will either refer to previous similar charts or will present a new chart if required.

state must put every other consideration aside in favor of education. They embraced a balanced view of resources (R3).

Because of Alabama's racist history and the resulting discrepancy in funding for black schools and white schools, the justices are concerned with equalizing funding rather than equalizing outcomes. Despite Governor Hunt's argument that the word "equal" was struck from the constitutional language between 1901 and 1975, the justices observe that all parties agree "equal" was stricken from the constitution for racial reasons, apparently to avoid any explicit requirement for equal treatment of the races other than for school terms of equal duration" (*Id.*, p. 150). The court noted that unequal treatment did not extend to whites in 1901, and the court said it should not extend across races in 1993. Although the justices maintained appropriate treatment for special education (*Id.*, p. 166), their intent otherwise was for equal funding for all children (E3).

The lack of funding for schools and lack of money in the state were linked in the justices' minds. The quotes the justices chose reflect a pragmatic view of schools as elements in developing the economy and the hope that a developing economy will allow greater funding for schools. Thus their belief on the role of schools in society was S3.

To define an adequate education in Alabama, the justices explained "this Court is not empowered to determine whether the Alabama education system is sufficient to meet standards or achieve purposes that the Court might itself prefer." It then went on to compare education in Alabama to standards set by the Southern Association and the Alabama Education Improvement Act. Ironically, it then borrowed the phrases from *Rose* (1990) and added mathematics and guidance, including the "sufficient" level to define adequacy. The level is one higher than *Rose*, since the demand was for national and international competitiveness, not regional (6). The breadth was expanded to 7 to include the demand for mathematics, with the assumption that "sufficient support and guidance so that every student feels a sense of self-worth" (*Id.*, p. 166) requires less educational effort than another skill. Because they were unwilling to allow local discretionary funding of education, the resulting model is shaped very much like the Vance dissent model above, but it is larger than the Vance model.

DeRolph v. State (Ohio, 1997) (DeRolph I).

Another case in which there was little or no disagreement between the plaintiffs and defendants was *DeRolph v. Ohio* (1997). Appellate Judge Reader noted that "there were few facts in dispute" and "if there was ever a case in where the parties acted more in concert than this one, I haven't seen it" (*DeRolph I*, p. 195). In the end a collection of

advocacy groups (ACLU, associations of school administrators, school boards, public school employees, the Ohio Federation of Teachers, 37 lawmakers, et al.) and their nominal opponents (the State Superintendent of Public Instruction and State Department of Education) (Niskanen, 1994), formed an iron triangle (Adams, 1982) with the courts in an effort to force change upon the Ohio General Assembly and the citizens of Ohio. Sandler and Schoenbrod noticed that "lower-level officials from the agency being sued who chafe at ordinary bureaucratic restrictions gain valuable purchase on policy and budgets," and "commissioners and other heads of departments keep the budgetary advantages that can come from being subject to a decree" (2003, p. 131, also Handler, 1978, pp. 15, 34). Not just bureaucrats but also perhaps "locally elected officials have seen the advantage of [education finance] litigation" (van Geel, 1982, p. 74), and in fact the *DeRolph* litigation included state legislators as plaintiffs. This iron triangle forms because "Plaintiffs' and defendants' representatives, although opponents in the courtroom, have a mutual interest in building up the budget and power of the government agency that is the target of the lawsuit" (Sandler & Schoenbrod, 2003, p. 156). Despite the alignment of advocates for change in Ohio's educational funding system, the majority opinion provided "minimal guidance in developing a constitutional. school financing system" (Moyer dissent, p. 268), and thus it is also difficult to model. Much of the testimony and evidence involved facilities problems, and the remedy is genuinely specific only about the basics (Hanushek, 1994, p. 466).

In accepting this case involving "questions of public or great general interest" (*DeRolph I*, p. 198), it's reasonable to believe the justices in the *DeRolph I* opinion were concerned about equality and adequacy. However, their belief scores are relatively low.

Table 16

DeRolph I majority opinion matrix

Category	Justice's decision
State funding	"The responsibility for maintaining a thorough and efficient school system falls upon
	the state" (p. 210)
Local funding	"We recognize that disparities between school districts will always exist."; "in no
	way should our decision be construed as imposing spending ceilings on more affluent
	school districts. School districts are still free to augment their programs if they
	choose to do so." (p. 211)
Educability – L	Although there is considerable discussion of adequate inputs, there is little discussion
	of student need as a determinant of adequate input. Lack of tutors for failing students
	is mentioned (p. 209) as well as the cut-off of "additional distributions which increase
	according to the concentration of [Aid to Dependent Children] pupils" at 20% of the
	population (p. 200), but the legislature is not instructed to change these conditions.
Breadth - 3	Minimal – "A thorough and efficient system of common schools includes facilities in
	good repair and the supplies, materials, and funds necessary to maintain these
	facilities in a safe manner, in compliance with all local, state, and federal mandates."
	(p. 213)
Level – 3	Minimal – "A thorough and efficient system of common schools includes facilities in
	good repair and the supplies, materials, and funds necessary to maintain these
	facilities in a safe manner, in compliance with all local, state, and federal mandates."
	(p. 213)

DeRolph I majority opinion matrix

Table 16 (continued)

Category	Justice's decision
Belief Set	R3 – "Because of its importance, education should be placed high in the state's
	budgetary priorities." (p. 213) Douglas' concurrence indicated a reformed
	educational system "should include mandates for cost cutting (additional money is not
	the only answer) and cost containment with clear accountability." (p. 214)
	E2 – "[educational opportunity] requires, at the very least, that all of Ohio's children
	attend schools which are safe and conducive to learning" (p. 220); "this case does not
	seek equality of education throughout Ohio, but rather seeks a quality education for
	every single child in Ohio"; "education need not be equal or substantially equal in all
	districts." (Resnick, concur, p. 260)
	S2 – "educated adequately so they are able to participate fully in society" (p. 745);
	"We recognize that money alone is not the panacea that will transform Ohio's school
	system into a model of excellencea student's success depends upon numerous
	factors besides money" (p. 221)

They showed an appreciation that education was not the state's only priority, but an important priority, earning an R3. While they believed schools were important, schools were just one influence in a child's development, and certainly not solely responsible for a child's complete development, garnering an S2. And while the case involved student's constitutional entitlement to an education, in the end the justices ordered little more than clean, safe, comfortable facilities and adequate supplies. The majority, concurring, and dissenting opinions all affirmed the intent was not to provide equal education, and certainly not more education to the less educable for level outcomes, thus scoring E2.

Regarding equity, the court allowed for disparities in funding between districts.

Resnick's concurring opinion states "there must be a threshold amount of funding provided by the state which affords each district in Ohio the ability to meet certain standardized requirements...[but]districts may provide for their students above and beyond the state's responsibility" (*Id.*, p. 260-261). Justice Pfeifer disagreed, explaining the current statutes "do not adequately smooth out the unconscionable funding inequities that exist between school districts in this state" (*Id.*, p. 262).

Because the court order essentially required that the General Assembly rework the funding system and provide adequate facilities and supplies for all Ohio students (*Id.*, p. 213) it would be possible to build a model with minimal inputs (2x2 according to the models discussed) for a potential input score of 520. This would result in a model essentially like the Vance Dissent Model, but smaller. Considering that the court knew Ohio had one of the better funded systems in the country ("ranked eleventh among the fifty states in per-pupil educational spending" (*Id.*, p. 787)) which already compensated for students in need, even if imperfectly, it is unlikely the court intended for the legislature to build a system of sanitary facilities with minimal purpose. Consequently the model is 3 x 3 with provision for extra funding for wealthy districts, similar to Wintersheimer above (Figure 15).

Despite their specific words, the majority wanted to expand an already well-funded system. In the model's defense, dissenting Chief Justice Moyer said the "majority opinion provides the General Assembly with minimal guidance in developing a constitutional school financing system" (*Id.*, p. 785), and it is "difficult to imagine the creation of any funding system that would pass constitutional muster" (*Id.*, p. 791).

The dissenting justices in the *DeRolph I* case did not offer an alternative definition of adequacy. They note "the agreement among the parties to this case that all plaintiff school districts have met the minimum standards set by the State Department of Education" (*Id.*, p. 266) and anything beyond that is a political question, not a constitutional one. They favorably note decisions from Illinois and Rhode Island that adequacy is either indefinable or "inherently [a question] of policy involving philosophical and practical considerations that call for the exercise of legislative and administrative discretion" (*Id.*, p. 269, citing *Committee for Educational Rights v. Edgar*, (1996) and *Pawtucket v. Sundlun*, (1995)). They maintain students are not entitled to equal education or an education of any specific level of quality (E2), and "success in education is not solely the responsibility of the providers of public education. Students themselves, their families, and their local communities bear their own responsibility, inside and outside the classroom" (S2), and the dissenters said that no party to the suit had addressed prudent fiscal management (R3).

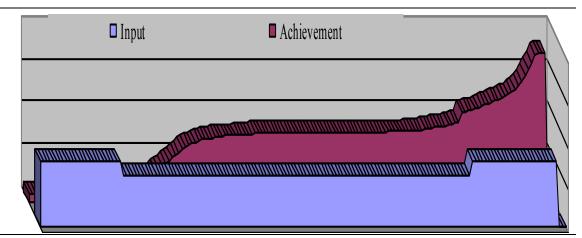


Figure 19: DeRolph II theoretical model – Belief score 42; Input score 6,126; KSA score 41,202N

Table 17

DeRolph II majority opinion matrix

Category	Justices' decision
State funding	The "state is responsible for funding an adequate education for all primary and
	secondary students who attend public schools" (p. 1031). "The basic aid formula has
	structural deficiencies and may not in fact reflect the amount required per pupil to
	provide an adequate education" (p. 1021).
Local funding	"The state's failure to specifically address the school-funding system's overreliance
	on local property taxes is of paramount concern as we evaluate the state's attempts to
	craft a thorough and efficient system of funding" (p. 1015).
Educability – N	" and a commitment to provide extra resources and support to students and schools
	who start out furthest from the goal line" (p. 1019).
Breadth – 6	"We are still a long way from the goal of providing sufficient computers to allow a
	high quality education in this computer age" so that "students nearing graduation will
	be computer-literate" (p. 1020-1021).
Level – 6	Resnick favorably quoted an Achieve, Inc. report calling for "rigorous academic
	standards, challenging assessments" (p. 1019), while Pfeifer's concurrence says "this
	case is not about high standards. It is about a constitutionally required foundation of
	basic educational opportunity. The difficulty lies not in building that foundation, but
	in sustaining a democracy without it" (p. 1029).

Belief Set

R4 – "These budgetary and political concerns must yield, however, when compliance with a constitutional mandate is at issue" (p. 1000).

E3.5 – "Even if the system were very generously funded, [] it might not be thorough and efficient." "If students have access to the latest technology but cannot take advantage of it, then our state has failed them. If students have the most up-to-date textbooks but cannot comprehend the material in those books, then our state has failed them" (p. 1001). The majority "suggests that student success is yet another criterion" of a thorough and efficient system (p. 1034). The majority "thus hints that the ultimate criterion of thoroughness and efficiency is whether some undefined percentage of Ohio students are achieving academically" (p. 1034).

S3 – default – no view expressed.

DeRolph v. State (Ohio, 2000) (DeRolph II).

Although a sequel to the first *DeRolph I* decree, *DeRolph II* (2000) shows inflation in both exhibited values and the demanded adequacy model. Justice Moyer says, "I am additionally dismayed by the majority's apparent expansion of its view of thoroughness and efficiency beyond the issues of school financing and improvement of physical school facilities, which was the focus of *DeRolph I'* (*DeRolph II*, p. 1033-1034), although the dissenters observe these are "unpredictable and indefinite concepts of educational thoroughness and efficiency" (*Id.*, p. 1030). This unpredictability is apparent in comparing Pfiefer's concurrence, which insisted the case was not about "high standards," and Resnick's majority opinion, which called for "rigorous" standards. The inclusion of computer literacy is a specific example of mission creep, and the resulting height and breadth were raised to 6. This ambiguity carries through to the model's bias. While the court insisted it was not calling for equal funding between districts in *DeRolph I* (1997),

its emphasis on "overreliance" on local funding indicates it wanted a system more equal than it said. It is not clear what the *DeRolph II* majority meant when it claimed its assessment of "complete systematic overhaul" of school finance in Ohio "is qualitative rather than quantitative" (*Id.*, p. 1006), although the dissent's characterization of the majority opinion as "taking the position that it will know it when it sees it" (*Id.*, p. 1036) perhaps says it better. The majority also called for a "commitment to provide extra resources and support to students and schools who start out furthest from the goal line" (*Id.*, p. 1019). Although not specific, there is clear movement away from the liberty bias in *DeRolph I* toward a progressive bias, resulting in a neutral, N rating.

This changed model seems to be the result of different expressed values. While the court respected the challenges of budgeting in *DeRolph I*, it insists other priorities must yield to education in *DeRolph II*, thus moving from R3 to R4. Similarly, student entitlements moved from sufficient equipment and buildings that met code to an output entitlement, E3.5. The school role in society score remains at S3.

This changed model is probably not the result of changed basic values in the judges, but rather the recognition of an opportunity to create change in light of the General Assembly's response to *DeRolph I*. Parts of the majority opinion sound like political stump speeches.

The General Assembly should not allow the momentum of recent efforts to be impeded for any reason. Everyone's cooperation and best efforts are required as we strive to ensure that educational opportunities are available to all children in this great state (*Id.*, p. 1002)

Consequently educators, lawmakers, businesses, parents, and students must all work together to strengthen Ohio's system of public schools. (*Id.*, p. 1020)

Now is the time for Ohio's governmental, educational, and corporate leaders to forge a new agreement to enable local communities and their schools to move forward to realize those goals. Governor Taft is providing the leadership to establish this compact, and now is the time for the General Assembly, educators, corporate leaders, and parents to join his efforts. (*Id.*, p. 1022)

Douglas's concurring opinion sounds even more idealistic. It referred to "the continued quest for a constitutional funding system" through the "education revolution, in which we are all engaged" (*Id.*, p. 1024). Douglas declares, "the cause of educational opportunity is a noble one. We should not shrink from our duty" (*Id.*, p. 1026). Indeed the dissenting justices assert they, too, "care deeply about education" (*Id.*, p. 1035), but that the majority opinion "constitutes an expression of the majority's estimation of good public policy; it has nothing to do with constitutional law" (*Id.*, p. 1035).

In *DeRolph III* (2001) the court again affirmed its belief in "the fundamental importance of education to the children and citizens of this state" (1189), and a new majority declared the system constitutional with some reservations. The court "created the consensus that should terminate the role of this court in the dispute" (p. 1190), although none "of us is completely comfortable with the decision we announce" (p. 1189). The resulting order called for adjustments to what the state was already doing and does not warrant a separate model.

The dissolution of the majorities (Sweeny, Douglas, Resnick, and Pfeifer) from *DeRolph I* and *DeRolph II* seems to rest somewhat on differences in the judges' beliefs and values about education. Douglas and Pfeifer remained in the majority in all three opinions, while Resnick and Sweeny dissented in *DeRolph III*. Pfeifer's concurring opinion in *DeRolph I* emphasized "the unconscionable funding inequities" and "coal bin classrooms, free-floating asbestos fibers, leaking roofs" (p. 780), which essentially were

equity and facilities issues. In *DeRolph II* Pfeifer emphasized "statewide minimum educational requirements," "horrible funding inequities" and "considerable school facilities deficiencies" (*Id.*, p. 1028) before concluding, "this case is not about high standards" (*Id.*, p. 1029). Douglas's lengthy concurring opinion in *DeRolph I* spent five pages (pp. 763-768) discussing facility problems in school districts, and although he would declare education a fundamental right, his remedy emphasized equity and facilities (*DeRolph I*, p. 778). Douglas's concurrence in *DeRolph II* waxes eloquent and aspirational, but it also discusses time "to fine-tune, tinker with, and /or scrap what has been done in their (and our) incessant search to do what is constitutional, necessary and right," "patience" (*Id.*, p. 1024), "our request that something be done" (*Id.*, p. 1025), and "the majority herein prefers to be problem-solvers by helping the Governor and General Assembly solve a problem" (*Id.*, p. 1026).

On the other hand, in *DeRolph I* Resnick discussed "the lack of honors programs, language courses, and other electives" as well as "self-esteem" (*Id.*, p. 780), and her higher aspirations for education are apparent in the majority opinion she wrote for *DeRolph II*. Sweeny's majority opinion in *DeRolph I* might not have reflected all of his values, since in his dissent in *DeRolph III* he mentions the base cost is flawed because it does not define "what resources are necessary so that disadvantaged students can have the same opportunities to achieve as more affluent students" (*Id.*, p. 1243), and he quotes John Adams in saying "laws for the liberal education of youth, *especially for the lower classes of people*, are so extremely wise and useful that to a humane and generous mind, *no expense for this purpose would be thought extravagant*" (*Id.*, p. 1244, emphasis

added). If the majority's belief scores could be scaled from largest to smallest, they might descend from Resnick, through Sweeny and Douglas to Pfeifer.

The fact that Pfeifer and Douglas joined the former dissenters, Moyer and Lundberg Stratton, in the *DeRolph III* majority might be related to their beliefs about education. Pfeifer's concurring opinion in *DeRolph III* speculated that the current legislation would "smooth out the unconscionable funding inequities that exist between school districts in this state," and he speculated further smoothing could occur with expanded school building construction because "school buildings are tangible evidence that we cared, that we saw an opportunity to help our children, and that we accepted our responsibility to do so" (*Id.*, p. 1216). Thus Pfeifer's lower belief score with its continued emphasis on good facilities and minimum requirements made him available to the majority in DeRolph III. Douglas's opinion in DeRolph III discusses separation of powers extensively. Although he cites Marbury v. Madison 1 Cranch (5 U.S.) 137 (1803), his opinion reflects the theory of judicial policymaking discussed by Chayes (1976), with the judiciary an equal partner with the executive and legislature in public policymaking. In this context he discusses the court's options and decides that declaring what the General Assembly had done up to that point as constitutional was the best option. He opines

certainly Ohio's schoolchildren are better off today than they were before *DeRolph I* and *DeRolph II*. New facilities have been and are being constructed. Learning materials, including books, have been updated and replaced. Student-teacher ratios have been decreased. Technology has been introduced and improved.

Is the solution perfect? No. Is the solution adequate? I hope so. The constitutional mandate is one of adequacy – not equality (*DeRolph III*, p. 1212).

In sum Douglas concluded that the state was providing sufficient inputs, and his political judgment was to "forgo insisting that in Ohio, education is a fundamental right" (*Id.*, p. 1214) and implement, with modifications, the policy solution that had been developed.

Resnick's dissent in *DeRolph III* further highlighted her more expansive educational beliefs. She maintained the model districts were not good models because not all included "all-day, everyday kindergarten for all students," "three foreign language courses" for high schools and programs for gifted students (*Id.*, p. 1229). Furthermore, the costs of "educating disadvantaged pupils in both inner cities and poor rural areas" (*Id.*, p. 1229) had not been determined or included in the plan. Also mentioned are "strict academic standards," "advanced placement courses for high school students and foreign language opportunities in elementary schools; replacement cycles for textbooks; professional development time for all teachers; classroom materials and equipment such as computers, televisions, and VCRs" (*Id.*, p. 1233).

In retrospect, there appears to be a relationship between the belief and values displayed in the members of the majority in *DeRolph I* and *II* and their willingness to certify the constitutionality of the education system established by Ohio's government in *DeRolph III*. The judges with the lower apparent education belief scores, Pfeifer and Douglas, accepted what the General Assembly had written up to that point, while Resnick and Sweeny, with the higher education belief scores, were unwilling to accept what the legislature had created. This association should not be oversimplified. Certainly other philosophical questions, such as the proper role of the judiciary in the American governmental system, weighed heavily in the equation. Justice Cook, the consistent dissenter in the *DeRolph* decisions, continually emphasized the policy nature of the

question and the impropriety of judicial involvement. "I view this court's ill-conceived foray outside its legitimate role to be a most serious affront to individual freedom and democratic ideals" (*DeRolph II*, p. 1037).

Claremont School District v. Governor (N.H., 1993/1997) (Claremont I and II).

Although a successor to *McDuffy v. Secretary of the Executive Office of Education*, 615 N.E.2d 616 (1993) in a sense, New Hampshire's *Claremont* decisions also show a gradual expansion of judicial intervention into the governing process. The *Claremont School District v Governor* (1993) (*Claremont I*) cannot be modeled. It declares the literature clause of the state constitution "commands, in no uncertain terms, that the State provide an education to all its citizens and that it support all public schools" (*Claremont I*, p. 1378). Furthermore the justices conclude "that in New Hampshire a free public education is at the very least an important substantive right" (*Id.*, p. 1381), and that the right is "not based on the exclusive needs of a particular individual" (*Id.*). That might put the level of entitlement between E2 and E4. Finally they say education should extend "beyond mere reading, writing and arithmetic. It also includes broad educational opportunities needed in today's society to prepare citizens for their role as participants and as potential competitors in today's marketplace of ideas" (*Id.*) This conception of school's role in society ranks S3.

In *Claremont School District v. Governor* (1997) (*Claremont II*), the court declares the education finance system unconstitutional. They conclude "we find the purpose of the school tax to be overwhelmingly a State purpose and dispositive of the issue of the character of the tax" (*Claremont II*, p. 1356). Since some districts paid four

times the tax rate of other districts, clearly "there is nothing fair or just about taxing a home or other real estate in one town at four times the rate that similar property is taxed in another town to fulfill the same purpose of meeting the State's educational duty." Later they disagree "that the taxation of property to support education must reach the level of confiscation before a constitutional threshold is crossed" (*Id.*, p. 1360), thus earning an R3. They also announce "our decision does not prevent the legislature from authorizing local school districts to dedicate additional resources to their schools or to develop educational programs beyond those required" (*Id.*, p. 1360), showing an L bias.

In *Claremont II* the court ratcheted up its demands on two accounts. First, it declared "a constitutionally adequate public education is a fundamental right" (*Id.*, p. 1359) rather than "at the very least an important substantive right" (*Id.*, p. 1381) as it did in *Claremont I*. In a second irony, the court then adopted the "sufficient" skills criteria from *Rose* (1989), thus earning a breadth of 6 and a height of five. This appears to contradict its profession in *Claremont I* that "We do not define the parameters of the education mandated by the constitution as that task is, in the first instance, for the legislature and the Governor" (*Claremont I*, p. 1381). The opinion is also peculiar since New Hampshire's constitution has its own list of curricular areas and KSAs. It calls for

"the promotion of agriculture, arts, sciences, commerce, trades, [and] manufacturers" and [inculcating] "the principles of humanity and general benevolence, public and private charity, industry and economy, honesty and punctuality, sincerity, sobriety, and all social affections, and generous sentiments among the people" (cited in *Claremont I*, p. 1381).

In the end *Claremont II* yields belief scores and a model very similar to *Rose* (1989).

Legal activity trailed *Claremont II* like August dust: March 1998, May 1998, November 1988, September 1999, October 1999, December 1999, December 2000,

September 2001 and December 2001 are all dates of actions listed in *Claremont III* (2002). Justice Doggett identified the "allure" of the court working with the legislature, but in *Claremont III* it seemed the judiciary were not "mere appendages" (*Edgewood II*, p. 505) of the legislature, but rather leaders and counselors in the development of legislation. The bone of contention in *Claremont III* was the accountability system. The court declared, "if the State cannot be held accountable for fulfilling its duty, the duty creates no obligation and is no longer a duty," and therefore "the State's duty to provide a

Table 18

Claremont II majority opinion matrix

Category	Justice's decision
State funding	Property taxes "are in fact State taxes that have been authorized by the legislature" to
	provide for a constitutional education (p. 1356).
Local funding	Local school districts may "dedicate additional resources to their schools" (p. 1360).
Educability – L	"not based on the exclusive needs of a particular individual" (p. 1381).
Breadth - 6	"We view these [Kentucky] guidelines as benchmarks of a constitutionally adequate
	public education" (p. 1359).
Level - 5	"We view these [Kentucky] guidelines as benchmarks of a constitutionally adequate
	public education" (p. 1359).

Belief Set

R3 – Should not "reach the level of confiscation" (p. 1360). "We agree with those who say that merely spending additional money on education will not necessarily insure its quality" (p. 1360).

E3 – "Comparable funding must be assured in order that every school district will have the funds necessary to provide" an adequate education (p. 1360).

S3 – "Broad exposure to the social, economic, scientific, technological, and political realities of today's society is essential for our students to compete, contribute, and flourish in the twenty-first century" (p. 1359).

constitutionally adequate education includes accountability" (*Claremont III*, p. 751). The court then reviewed the existing accountability systems and declared "the State has not provided a sufficient mechanism to require that school districts actually achieve" the goal of educating children, and thus "has not met its constitutional obligation to develop a system to ensure the delivery of a constitutionally adequate education" (*Id.*, p. 758). It's interesting that *Claremont III*, in addition to the extensive judicial involvement in the governing process shown by the dates, is the insistence upon measurable standardsJustice Resnick in *DeRolph II* made similar demands. Also reminiscent of Justice Resnick is the insistence that "this court has consistently declined to determine whether the State's definition of an adequate education is constitutional" (*Id.*, p. 759), and "we recognize that we are not appointed to establish educational policy and have not done so today" (*Id.*, p. 760). So despite repeated involvement in the policy process, the *Claremont III* majority insisted it was not making policy.

The dissent in *Claremont III* recognized the creeping standards. It noted accountability "does not appear in and is not required by any of the court's *Claremont* decisions" (*Id.*, p. 522). It concludes "that by deciding the State is required to set standards that when applied indicate whether the school districts are providing an

adequate education and hold those school districts accountable, the majority moves unnecessarily into the province of the legislative and executive branches" (*Id.*, p. 524).

Vincent v. Voight (Wis., 2000) (Vincent).

The dissent in *Vincent v. Voight* (2000) also noted creeping standards from the Wisconsin high court's earlier decisions. The *Vincent* decision came from a fractured court in which three justices supported the new constitutional definition of educational adequacy and thought the current education finance system was unconstitutional, three justices opposed the new adequacy definition and thought the current system was constitutional, and one supported the new adequacy definition and thought the system was constitutional. Justice Prosser dissented in part from the majority "because I am unwilling to impose legal standards that did not exist before this decision" (*Vincent*, p. 664), and Justice Sykes wrote that the difference between *Vincent* and previous cases was "that this court has never before arrogated to itself, under the guise of constitutional interpretation, the power to dictate educational content, character or scope" (*Id.*, p. 682). This shift in the constitutional standard can be attributed to the values expressed in an earlier education finance case, *Kukor v. Grover*, 436 N.W.2d 568 (1989) (*Kukor*).

Although neither *Kukor* nor *Vincent* overturned Wisconsin's education financing system, they help reveal the link between beliefs and adequacy. The 4/3 split in the *Kukor* decision can be reasonably attributed to differing beliefs about children's entitlement, with the majority reflecting an E3 equal entitlement position and the dissent supporting an E4 or nearly E5 position resulting in more equal outcomes.. The majority stated, "the question of whether [the constitution's education section] mandates that

resources be allocated such as to guarantee that each district operates with sufficient resources to assure equality of opportunity for education in the sense of responding to the particularized educational needs of each child has not been previously addressed" (*Kukor*, p. 485). It summarized its position by saying the

legislature is only required to present an equal opportunity for an education to the students. If the students are not able to take advantage of the opportunities, there is no way a change in the formula can force those opportunities upon them" (*Id.*, p. 586).

To add emphasis, the majority concluded the constitution "does not require the legislature to allocate funds to provide a school system which produces students who are educated to a level as nearly uniform as practicable, although the latter may be desirable" (*Id.*, p. 587). The dissent explained that "the uniformity clause does not mandate that … everyone must score a touchdown; it does mandate that everyone on the playing field have an equal opportunity to do so" (*Id.*, p. 588). For the dissent equal opportunity meant funding numerous "special needs programs," thus "raising the quality of educational opportunities for children at the lower end of the spectrum" … "to give these children an equal opportunity to become educated citizens" (*Id.*, p. 592).

To a lesser extent the differences between the majority and dissent in *Kukor* can also be attributed to differences in beliefs about the role of schools in society. The majority declared "our deference would abruptly cease should the legislature determine that it was 'impracticable' to provide to each student a right to attend a public school at which a basic education could be obtained" (*Id.*, 582, probably S2). In contrast, the dissent concluded children should be "equipped for their future roles as citizens, participants in the political system, and competitors both economically and intellectually" (*Id.*, p. 590, at least S3). In *Kukor* the dissent lamented "we have never had the occasion to define

[equal opportunity for education]" (*Id.*, p. 589), but they retained their seats on the high court until *Vincent*.

In *Vincent* (2000) the court claimed to "affirm *Kukor*, but explain further the *Kukor* definition of equal opportunity for an education" (*Vincent*, p. 401). They did this employing "the notion of educational adequacy as a better approach than previous educational equality analyses" (*Id.*, p. 406). Consequently they proposed to consider "the Table 19

Vincent majority opinion matrix

Category	Justice's decision			
State funding	"A school finance system that uniformly funds school districts to provide a basic level			
	of education is constitutional" (p. 632).			
Local funding	"Wisconsin requires districts to fulfill a constitutional minimum educational offering,			
	not a maximum" (p. 633).			
Educability – P	"takes into account districts with disproportionate numbers of disabled students,			
	economically disadvantaged students, and [ESL] students" (p. 397); "non-uniform			
	education can result from treating differently situated students and school districts			
	in the same way" (p. 418); "equality of resources for school districts and special			
	attention to special needs, beyond equality" (p. 427).			
Breadth – 8.5	"proficient in mathematics, science, reading and writing, geography, and history" (p.			
	396); "receive instruction in the arts and music, vocational training, social sciences,			
	health, physical education and foreign language, in accordance with their age and			
	aptitude"(p. 397).			
Level – 5	"proficient" (p. 396).			

Belief Set

R3 – "The state has significantly increased its total state aid to the public schools, and the increase in state aid outweighs any disproportionate distribution of tax credit to wealthy property owners" (p. 401).

E4.5 – "The opportunity to be proficient in these core subjects must be as equal as practicable; the performance on proficiency tests is not expected to be equal." (p. 407). "The objective is to adopt a standard that will 'equalize outcomes, not merely inputs" (p. 408, citing Enrich, 1995, p. 151). "The new approach emphasizes the objective of equalizing student outcomes" (p. 431).

S4 – "equip students for their roles as citizens and enable them to succeed economically and personally" (p. 396).

quality of the educational services delivered to children in disadvantaged districts (Id., p. 406, citing Enrich, 1995, p. 109), and to list "the types of knowledge that a child should possess to guide a legislature in fulfilling its constitutional obligations" (*Id.*, p. 407). Essentially they grafted the *Kukor* dissent's beliefs about addressing student needs and legislative descriptions of curriculum onto the *Kukor* majority's decision in favor of a basic education. The result is a new interpretation of the constitutional wording that departs significantly from previous interpretations while it better reflects the beliefs of the Kukor dissent. While the Kukor majority specified "to assert that equal opportunity for education mandates an entirely different scheme of financing requiring the state to distribute resources unequally among students to respond to the particularized needs of each student is inconsistent with the intent evidenced in the express language" (Kukor, p. 579), the *Vincent* majority said, "An equal opportunity for a sound basic education acknowledges that students and districts are not fungible and takes into account districts with disproportionate numbers of disabled students, economically disadvantaged students, and students with limited English language skills" (Vincent, pp. 397 & 415).

Whereas *Kukor* does not attempt to list the subjects in a basic education, *Vincent* lifts contemporary legislation to constitutional status in creating a list similar to that in *Rose* (1989). Indeed Justice Bablitch, the dissenting author in *Kukor* and partially concurring in *Vincent*, says "the standard we adopt today [in *Vincent*] recalls the standard which I urged in my dissent 11 years ago in *Kukor*" (Id., p. 422).

Although the *Kukor* decision did not yield an adequacy model, the differences in values and results between it and the *Vincent* case are apparent. *Kukor* evinced a Neutral or Liberty bias, arguably an E3 level of entitlement and an S2 role of schools in society. The result would be similar to the models of Vance or Wintersheimer above (Figures 15 and 16). The dissent in *Kukor* and the majority in *Vincent* evinced a strong Progressive bias. They came short of calling for equal outcomes; however, greater equalization of outcomes was their goal, thus garnering an E4.5. The new entitlement to an education that will produce economic and personal success describes schools fulfilling role S4. While *Kukor* might have resulted in a model similar to those of Vance or Wintersheimer, Vincent yields a model similar to but smaller than that of Campbell I (Figure 17). In an final ironic twist, Chief Justice Abrahamson, who dissented in *Kukor* and supported the new definition of adequacy in *Vincent*, exclaimed, "If the function of interpreting the Wisconsin Constitution were left to the legislature, there would not only be a violation of the separation of powers doctrine, but also the legislature would be empowered to amend the constitution without abiding by the constitutional requirements for amendments" (Vincent, p. 416). While the constitution remained the same between the Kukor and Vincent rulings, Chief Justice Abrahamson helped amend its meaning in Vincent "without abiding by the constitutional requirements for amendments."

Leandro v. State (N.C., 1997) (Leandro).

Although North Carolina's constitution calls for a "general and uniform system of free public schools" rather than an efficient system, the high court's 1997 decision is very much like that in *Rose* (1989). In *Leandro v. State* (N.C., 1997) the court asserts the system must have four sufficiencies, and the North Carolina high cited *Rose* after giving its definition. The value scores are lower than those in *Rose*. Because the court expresses some comprehension of the large portion of resources North Carolina dedicates to its schools, it scores an R3 rather than an R4. While the *Rose* court emphasized equality in its opinion, the *Leandro* majority did not, resulting in an E2 entitlement score and a liberty bias. *Leandro's* model is similar in contour and height, but modestly narrower than the *Rose* model. Its value scores and model fall between the *Rose* majority and dissents (Figures 14, 15 and 16).

The dissent in *Leandro* argues for equality between districts. The dissent emphasizes that the 1970 constitutional convention added the phrase "wherein equal opportunities shall be provided for all students" (cited in *Leandro*, p. 262). The dissent then goes on to observe that

the majority apparently gives no significance to its meaning. Defendants contend that the phrase was adopted for the sole purpose of addressing racial segregation. I disagree and believe that the majority fails to give this constitutional mandate the full scope of its meaning. (*Leandro*, p. 262).

The dissent notes the low performance of students from poorer districts as well as court cases from the 1800s that bolster the position that to "interpret the phrase 'equal opportunities ... for all students' as equal opportunities for only minority students creates

a restrictive definition that the framers could not have intended" (Id., p. 262). The result is an E3 value score and a neutral bias.

The Leandro majority opinion is modeled in Table 20. The dissent differs in its provision for equality and its bias. The dissent does not have a separate table, but its scores are included in Table 25 and Figure 20.

Table 20

Leandro decision matrix

Category	Justice's decision			
State funding	The constitution "requires that all children have the opportunity for a sound basic			
	education" (p. 257).			
Local funding	"Because the North Carolina Constitution expressly states that units of local			
	governments with financial responsibility for public education may provide additional			
	funding to supplement the educational programs provided by the state, there can be			
	nothing unconstitutional about their doing so or in any inequality of opportunity			
	occurring as a result" (p. 256).			
Educability – L	The constitution "requires that all children have the opportunity for a sound basic			
	education, but it does not require that equal educational opportunities be afforded			
	students in all of the school districts of the state" (p. 257).			
Breadth - 5	"The right to education provided in the state constitution is a right to a sound basic			
	education" (p. 345). Definition includes reading, writing, and speaking English,			
	math, science, social studies, academic and vocational skills.			
Level - 5	Sufficient – "compete on an equal basis with others in further formal education or			
	gainful employment in contemporary society" (p. 255)			
Belief Set	R3 – "We note that in every fiscal year since 1969-70, the General Assembly has			
	dedicated more than forty percent of its general fund operating appropriations to the			
	public primary and secondary schools" and "more than fifty-nine percent of the			
	general fund operating appropriations were dedicated to overall public education." In			
	addition, planned reforms "will require additional large appropriations" (p. 260).			
	E2 – "does not require substantially equal funding or educational advantages in all			
	school districts" (p. 256)			
	S3 – "Purpose of preparing students to participate and compete in the society in which			
	they live and work is devoid of substance and is constitutionally inadequate" (p. 254).			

Campaign for Fiscal Equity v. State (N.Y., 1995, 2001, 2003) (CFE I, CFE II, CFE IV).

The malleability of constitutional education clauses under the steady banging of judicial hammers was demonstrated again in New York¹. In the case of School Board of Education, Levittown Union Free School District v. Nyquist (Levittown, 1982) the state high court declared "that the present admixture of statutory provisions for State aid to local school districts, considered in connection with the existing system for local financing, is constitutional" (Levittown, p. 363). Levittown was fundamentally an equity case in which no claim was made "that the facilities or services provided in the school districts that they represent fall below the State-wide minimum standard" (*Id.*, p. 363). The overriding theme is of judicial restraint in which the court "would be reluctant to override those [legislative] decisions by mandating an even higher priority for education in the absence, possibly, of gross and glaring inadequacy – something not shown to exist in consequence of the present school financing system" (Id., p. 369). The majority concluded "if what is made available by this system (which is what is to be maintained and supported) may properly be said to constitute an education, the constitutional mandate is satisfied" (*Id.*, p. 369).

Justice Fuchsberg's dissent in *Levittown* forcefully argued high-level beliefs in education. The dissent exclaimed education would help answer "many seemingly insoluble societal problems," and "without education there is no exit from the ghetto, no solution to unemployment, no cutting down on crime, no dissipation of intergroup tension, no mastery of the age of the computer" (*Id.*, p. 371). Fuchsberg quoted Horace

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¹ Note: The New York high court opinion in *CFE IV* is so dependent upon that of Judge DeGrasse in *CFE II* that both are analyzed. Thus the study of New York departs from that of other states in that it is not based solely on the state's highest court opinions.

Mann with approval in saying "education is not only 'the great equalizer of men,' but, by alleviating poverty and its societal costs, more than pays for itself" (*Id.*, p. 370). Fuchsberg further quoted with approval the Education Committee of an older constitutional convention saying education should be "paramount to every other interest in this State" (*Id.*, p. 370), and he said children "are entitled to an education that prepares today's students to face the world of today and tomorrow" (*Id.*, p. 375). Fuchsberg displays S5, E4 or E5, and R4 values. The difference between Fuchsberg and the majority is that he wanted the results that accrue to an educated public while the majority was certifying the constitutionality of the existing system regardless of results.

In 1995 a case "virtually identical to that advanced, fully tried and ultimately rejected on appeal in *Levittown*" (*Campaign for Fiscal Equity, Inc. v. State*, 1995, p. 664) was heard in New York's highest court as an adequacy pleading rather than an equity pleading, on the basis that "the State's educational financing scheme fails to provide public school students in the City of New York ... an opportunity to obtain a sound basic education" (*CFE I*, p. 664). In this decision the court indicated a "sound basic education" "should consist of the basic literacy, calculating, and verbal skills necessary to enable children to eventually function productively as civic participants capable of voting and serving on a jury" (*Id.*, p. 666). The court hedged its bet, however, saying

we do not attempt to definitively specify what the constitutional concept and mandate of a sound basic education entails. Given the procedural posture of this case, an exhaustive discussion and consideration of the meaning of a "sound basic education" is premature. Only after discovery and the development of a factual record can this issue be fully evaluated and resolved. Rather, we articulate a template reflecting our judgment of what the trier of fact must consider in determining whether defendants have met their constitutional obligation. The trial court will have to evaluate whether the children in plaintiffs' districts are in fact being provided the opportunity to acquire the basic literacy, calculating and

Table 21

CFE I majority opinion matrix

Category	Justices' decision			
State funding	"The Education Article imposes a duty on the Legislature to ensure the availability of			
	a sound basic education to all children of the State" (p. 665).			
Local funding	Some variety permitted, although absolute equality not required, as discussed in			
	Levittown			
Educability – L	Freedom to spend extra in localities confirmed in Levittown			
Breadth - 3	"We think it beyond cavil that the failure to provide the opportunity to obtain such			
	fundamental skills as literacy and the ability to add, subtract and divide numbers			
	would constitute a violation of the Education Article" (p. 667).			
Level – 3	"The trial court will have to evaluate whether the children in plaintiffs' districts are in			
	fact being provided the opportunity to acquire the basic literacy, calculating and			
	verbal skills necessary to enable them to function as civic participants capable of			
	voting and serving as jurors" (p. 666).			
Belief Set	R3 – Default, although described in <i>Levittown</i>			
	E2 – "Children are entitled to minimally adequate physical facilities and classrooms			
	which provide enough light, space, heat, and air to permit children to learn. Children			
	should have access to minimally adequate instrumentalities of learning such as desks,			
	chairs, pencils, and reasonably current textbooks. Children are also entitled to			
	minimally adequate teaching of reasonably up-to-date basic curricula such as reading,			
	writing, mathematics, science, and social studies, by sufficient personnel adequately			
	trained to teach those subject areas" (p. 666).			
	S2 – "function productively as civic participants capable of voting and serving on a			
	jury" (p. 666).			

verbal skills necessary to enable them to function as civic participants capable of voting and serving as jurors. (*Id.*, p. 666-667)

While acknowledging the court's caveat, the *CFE I* majority's description of adequacy is modeled above. The result is similar in values and result to *DeRolph I* (Table 16).

The incongruous thing about the adequacy model defined by the court in CFE I is its tentativeness. As the self-proclaimed source of deepest knowledge and absolute truth regarding all things constitutional, before whom all other branches of government and citizens should yield, the court is saying it needs more information before it can decide what the education article really means. Necessarily then the meaning of the education article depends not upon the plain wording of the constitution or the intent of the framers or the existing case law, all available to the court before this case, but upon some evidence yet to be presented. Dissenting Justice Simons noted that "conspicuously absent [from the constitution] are descriptive words, establishing a qualitative or quantitative standard for the education the State must provide;" "[t]he quality of that education was mentioned only in passing, a delegate stating that it should be 'adequate;" (Id., p. 677). Justice Simons also noted that in Levittown "we rejected the extensive qualitative analysis of the lower courts, holding that the courts were not free to review the adequacy of the appropriations, except 'possibly,' in the case of 'gross and glaring inadequacy" (Id., p. 679). Not able to justify its choice based on traditional reasons, the court set itself up to receive new justifications. In a manner similar to *Claremont*, Edgewood and Vincent, the dissenting position from Levittown became the majority opinion in *CFE I*.

CFE I concurring Justice Levine fretted "the determination of the adequacy of all such educational resources will be made by the Trial Judge in this case" (Id., p. 675).

New York County Judge Leland DeGrasse tackled this job with relish. While explaining "the Court of Appeals set forth a 'template' to guide this court's determination," (*CFE II*, 2001, p. 480), he maintained that clearly "the Court of Appeals' template describes qualities above [the requirements to vote or be a juror]" (*CFE II*, p. 485). Consequently he determined that productive citizenship means being "an engaged, capable voter" with the "intellectual tools to evaluate complex issues, such as campaign finance reform, tax policy, and global warming" (*Id.*, p. 485). According to Belfield and Levin

fundamentally, the DeGrasse ruling articulated standards of a sound basic education as productive service on a jury and informed voting at a high level of demands. These two capacities may be representative of a more broad idea of 'civic engagement:'... In addition, the Court stipulated that a sound basic education is one that equips individuals for career jobs, i.e. jobs beyond a low grade work with flat lifetime earnings profiles. This definition sets out the social importance of education clearly: jury participation and competence for enfranchisement must be established, along with the development of human capital to provide both social and private returns to productive employment. (2002)

The education article also meant students should be high school graduates who obtained good jobs. Although education in New York City was already very well funded, the trial court laid the blame for student failure upon the state. Student demographics were not an acceptable reason for students' failure. The state was to blame for their failure.

The resulting model is comparable to *Vincent*. Considering the high cost of resources and demographic factors, the input score could be much higher. What is striking is how different *CFE II* is from *CFE I*. Although it is beyond the scope of this paper to investigate, it might be interesting to know how much local politics affected the ruling. As a local judge DeGrasse had the opportunity to single-handedly bring billions of other people's dollars into the city against their will with only the higher courts to stand in his way.

Initially the higher court did stand in his way. In *CFE III* (2002) the intermediate-level appeals court reversed DeGrasse's *CFE II* decision, declaring "the IAS court went too far in stating that a sound basic education must prepare students for employment somewhere between low-level service jobs and the most lucrative careers" (*CFEIII*, p. 8). Essentially the *CFE III* court held that an eight grade education met constitutional muster.

New York's high court disagreed with the intermediate court and essentially reinstated the original DeGrasse decision in *CFE IV* (2003, p. 329). The high court determined a high school education was constitutionally required, although they are not perfectly clear (*Id.*, p. 331), so the model level was reduced from 7 to 6. The high court did not list courses but called for a "meaningful high school education" (p. 332), so the breadth for this model copies *CFE II*. The value scores and educability bias are identical to *CFE II* except for the high court's recognition of competing priorities for state money. In sum, the values, input, and KSA scores of *CFE IV* are similar but slightly lower than those in *CFE II*.

Both the majority and the dissent in *CFE IV*, as well as the foregoing analysis, describe the changing meaning of the education article of New York's constitution. The majority notes that in *Levittown* the right was initially described as a "sound basic education," which was expanded upon in *CFE I*. Based upon mountains of testimony that would have come before the legislature in a previous era, *CFE II* measurably expanded the meaning of the education article. That expansion took the intermediate court by surprise in *CFE III*, but the high court substantially affirmed it in *CFE IV*.

The dissent notes that the court approved the existing finance system in Levittown, approving the existing distribution of state funds to districts and noting with

Table 22

CFE II opinion matrix

Category	Justice's decision		
State funding	"Under the State Constitution the state is ultimately responsible for the delivery of a		
	sound basic education, and any failure to do so may not be blamed on the actions of		
	its subdivisions BOE or the City" (p. 535).		
Local funding	While "New York City is a relatively wealthy district," (p. 531) "the State's method		
	for financing education is a substantial cause of the failure to provide New York City		
	public school students with the opportunity for sound basic education" (p. 535).		
Educability – P	Regarding poverty, race, ethnicity, immigration status, homelessness, teen pregnancy,		
	poor health and other special needs the court said, "these negative life experiences can		
	be overcome by public schools with sufficient resources well deployed." "The court		
	finds that the City's at risk children are capable of seizing the opportunity for a sound		
	basic education if they are given sufficient resources" (p. 491). "The court rejects the		
	argument that the State is excused from its constitutional obligations when public		
	school students present with socio-economic deficits" (p. 517).		
Breadth – 7	Although not listed, some abilities mentioned included analyzing "campaign finance		
	reform, tax policy, and global warming," "DNA evidence, statistical analyses, and		
	convoluted financial fraud." High school graduates should have "foundational skills"		
	for employment and education (p. 484-485)		
Level – 7	"Some middle ground between" "low-level jobs paying the minimum wage" and		
	acceptance "into elite four-year colleges" (p. 486). Discussed students obtaining jobs		
	requiring "rigorous formal education" (p. 486).		

Table 22 (continued)

CFE II opinion matrix

Category	Justice's decision
Belief Set	R4 – The court's objective was to bring additional state money into one of the best
	funded school systems in the country. Other state priorities were not a concern.
	E4 – The court's indicated New York City graduates were entitled to high paying jobs
	in the service sector or work in "New York City's Silicon Alley" (p. 487).
	S4 – "The labor needs of the City and State must be balanced with the needs of high
	school graduates." "A sound basic education would give New York City's high
	school graduates the opportunity to move beyond [low level service jobs]" to obtain
	"jobs that pay a living wage in the service sector" (p. 486).

approval the high level of education funding in New York (CFE IV, p. 362). *CFE I* provided a "template" for adequacy, then the trial court was "left with policy choices to make, not factual contentions to resolve" (*Id.*, p. 362). In *CFE II* the trial court fashioned "the constitutional concept and mandate of [what] a sound basic education entails on the testimony of competing experts" (*Id.*). "The trial court modified the 'template' to reflect a 'dynamic' understanding of the constitutional imperative that must 'evolve' with the changing demands of a modern world," and in the process the "template was transmuted from a constitutional minimum into 'the aspirational, largely subjective standards expressed by the lower courts and the dissent in *Levittown*, representing what typically one would desire as the outcome of an entire public education process" (*Id.*, p. 363, citing

Table 23

CFE IV opinion matrix

Category	Justices' decision			
State funding	"The State remains responsible when the failures of its agents sabotage the measures			
	by which it secures for its citizens their constitutionally-mandated rights" (p. 343).			
Local funding	"If the State believes that deficient city tax effort is a significant contributing cause to			
	the underfunding of City schools, it is for the State to consider corrective			
	measures" (p. 344).			
Educability – P	Quoted with approval CFE II in saying the opportunity for a sound basic education			
	must still "'be placed within reach of all students,' including those who 'present with			
	socioeconomic deficits" (p. 337). "Inputs should be calibrated to student need and			
	hence that state aid should increase where need is high and local ability to pay is low"			
	(p. 348).			
Breadth – 7	"meaningful" (p. 332)			
Level – 6	"The mandate of the Education Article for a sound basic education should not be			
	pegged to the eighth or ninth grade, or indeed to any particular grade level" (p. 331).			
	A sound basic education "means a meaningful high school education" (p. 337).			
Belief Set	R3 – "In issuing our directive to the State we recognize that it has fiscal governance			
	over the entire State and that in a budgetary matter the Legislature must consider that			
	any action it takes will directly or indirectly affect its other commitments" (p. 348).			
	E4 – Quoted with approval Regents in saying "all children can learn given			
	appropriate instructional, social, and health services" (p. 337).			
	S4 – "An employment component was implicit in the standard" (p. 330) but "[m]ore			
	is required" than the ability to get a job and stay off welfare (p. 331). "It should not			
	be the purpose of public schools to prepare students for [menial low-skills jobs]" (p.			
	352, Smith concurring).			

Levine concurring, *CFE I*). If New York City had been a state at the time of *CFE IV* it would have "ranked fifth in per-pupil expenditures; it would rank ninth if spending were adjusted for cost-of-living differences" (Id., p. 366), thus financing remained generous from *Levittown* to *CFE IV*.

Thus what the majority saw as a positive development of judicial thought, the dissent saw as formerly rejected lower court and dissenting opinions becoming the majority opinion in later cases. This study has noted similar creeping in judicial thinking in *Edgewood*, *Claremont*, *Vincent* and *DeRolph*.

Abbott v. Burke (N.J., 1985, 1990) (Abbott I, Abbott II)

New Jersey's *Abbott v. Burke* cases are the among the most famous adequacy cases, and they have their roots in *Robinson v. Cahill* (1973). Consequently *Robinson* will be examined briefly before the *Abbott* cases.

Reading *Robinson* is a bit like reading a predictable but poorly-written novel. Even knowing the outcome in advance, the reader is surprised when the author arrives there. First the court disposes of the federal and state equal protection clauses. Then addressing the education amendment, the court finds its roots in an 1871 statute that provided for free schools and said in part that "if the moneys received by any township from the tax imposed by this act shall not be sufficient to maintain free schools for at least nine months each year, *then the inhabitants thereof shall raise, by township tax, such additional money as they may need for that purpose*" (Sec 1, p. 94 cited in *Robinson*, p. 291, emphasis added). After noting that there "appears to be no helpful

history spelling out the intended impact of this [1875 constitutional] amendment" the court declares

we can be sure the amendment was intended to embody the principle of the 1871 statute that public education for children shall be free. It is also plain that the ultimate responsibility for a thorough and efficient education was imposed upon the State." (*Id.*)

The court then cites a series of cases affirming that "it is the duty of the [State] Commissioner [of Education] to see to it that every district provides a thorough and efficient school system (Board *of Education of the City of Elizabeth v. Elizabeth*, 55 N.J. 501, 506, 262 A.2d 881, 883 (1970) cited in *Robinson*, p. 292). They also specify

we cannot say that the amendment of 1875 was intended to bar the delegation of the taxing responsibility to local government. We know that with respect to the *cost of providing the schoolhouse itself, the 1871 statute left the burden with local government* and that burden continued there after the 1875 amendment. (*Id.*, emphasis added)

Finally they confirm "our Constitution was amended in 1958 in terms which did assume that fiscal responsibility was properly reposed in the local school district" (*Id.*, p. 294).

Having thus established a legal and constitutional basis that the free public schools would feature local responsibility for funding, local responsibility for capital expenses, disparate local funding and quality, and the State's power to ensure local districts maintained thorough and efficient schools, the court declares "we do not doubt that an equal educational opportunity for children was precisely in mind" (*Id.*, p. 294), and if a school system is not thorough and efficient

whatever the reason for the violation, the obligation is the State's to rectify it. If local government fails, the State government must compel it to act, and if the local government cannot carry the burden, the State must itself meet its continuing obligation (*Id*)

The court then declared its vision for the school system.

Indeed the State has never spelled out the content of the educational opportunity the Constitution requires. Without some such prescription, it is even more difficult to understand how the tax burden can be left to local initiative with any hope that statewide equality of educational opportunity will emerge. (*Id.*, p. 295)

The State's obligation includes as well the capital expenditures without which the required educational opportunity could not be provided. (*Id.*, p. 297)

The trial court found the constitutional demand had not been met and did so on the basis of discrepancies in dollar input per pupil We agree. We deal with the problem in those terms because dollar input is plainly relevant and because we have been shown no other viable criterion for measuring compliance with the constitutional mandate. (*Id.*)

Today a system of public education which did not offer high school education would hardly be thorough and efficient. The constitution's guarantee must be understood to embrace that educational opportunity which is needed in the contemporary setting to equip a child for his role as a citizen and as a competitor in the labor market. (*Id.*, p. 295)

Robinson I may be summarized this way. First, where localities had been responsible for raising money to provide adequate schools in the past, that responsibility was now the state's. Second, even though there was no definition of quality, the state had not met it.

in *Robinson I* there was no showing that any district failed to achieve a thorough and efficient education. Rather, it was the absence of substantive educational proofs – a measure to assess whether the constitutional command was being met – that led the Court to declare the statute unconstitutional in its entirety (1990, p. 376-377).

The Abbott II court commented

Third, even though prior law required local capital funding, the court directed state funding of capital needs. Finally, even though prior law provided for different levels of local funding and school quality, the court insisted upon equal funding. In the end,

it is reasonable to label the court's construction of the century-old thorough and efficient clause an intuitive judgment. Certainly nothing in the literal language of the clause mandates equating "equal opportunity" with thorough and efficient. (Notes, 1977, p. 514)

Litigation related to *Robinson* continued until 1976 after the legislature enacted the Public School Education Act of 1975 in response to the court's order to redistribute state aid funds in accordance with the court's wishes (Notes, 1977, p. 515).

Although the court certified the constitutionality of the Public School Education Act of 1975, they did so with the proviso that if they didn't like how it worked after a while, they would become involved again. The 1975 Act defined the goals of a thorough and efficient education, which the court said, "satisfies the constitutional requirement for legislative standards" (*Abbott II*, 1990). In *Abbot v. Burke* (*Abbott I*, 1985) the court ordered litigants and the state to other forums. The Commissioner of Education found that the statutory system was constitutional so the plaintiffs returned to the state high court in *Abbott II* (1990). The court in *Abbott II* explained the "change in focus from the dollar disparity in *Robinson I* to substantive educational content in *Robinson V* is clear" (*Id.*, p. 369), thus foreshadowing similar transformations in other courts.

"Indeed, while the [Public School Education Act of 1975] statute was sustained as facially constitutional, the doubts and qualifications expressed by some members of the Court suggested the inevitability of the litigation [in *Abbott II*]" (*Id.*, p. 369). By way of comparison, just as New York's high court set itself up for further involvement in defining adequacy in *CFE I*, so New Jersey's high court set itself up in *Robinson*. Like the New York high court in *CFE I*, the New Jersey high court explained, "our decision in *Robinson I* was necessarily general because of the narrow record in that case" (*Id.*). Both courts were unable to define adequacy with the traditional tools of the court, i.e. constitutional language, precedent, and history. The ability to define adequacy did not reside in the high courts of either state, and they had to look outside to define it.

Abbott II is the culmination of the court's thinking up to that time, but the evolution of that thought is not broken out here. The New Jersey high court's social agenda was plainly displayed in Abbott II (1990), and it shaped its definition of adequacy. As a result of the litigation it did not declare the entire system unconstitutional. In fact it maintained that for the vast majority of districts there was no evidence that the system was unconstitutional. The court was concerned with the plight of children in 29 poorer urban districts plagued by crime, disease, drug addition, teenage pregnancy and unemployment (Id., p. 392). "These are districts where not only the students and education are failing, these are the districts where society is failing" (Id., p. 387). The court was concerned with children in these districts, explaining that "without an effective education they are likely to remained enveloped in this environment" (Id.). The danger the court perceived was that this

substantial segment of our population is isolated in a separate culture, in a society that they see as rich and poor, for to the urban poor, all other classes are rich. There is despair, and sometimes bitterness and hostility. The fact that a large part of our society is disintegrating cannot help but affect the rest. Everyone's future is at stake, and not just the poor's. (*Id.*, p. 393)

The high court declared the constitutional education clause "will enable the urban poor to compete in the marketplace, to take their fair share of leadership and professional positions" (*Id.*, p. 392). The court's goal was to use education to break the cycle of poverty so that children from poor families could enter the upper middle classes along with children from wealthier backgrounds. In theory this would reduce the friction of social stratification, resulting in a happier and more stable society. These ideas are not new. In fact, Tyack noted

WASP citizens found it more feasible to shift the burden of reform to the next generation, to define problems as educational rather than as injustices

or evils calling for immediate action. In the process conflicts arising from differences of class, race, gender ethnicity, and religion became defused and postponed" (Tyack, 1982, p. 32).

"Reforming the public schools has long been a favorite way of improving not just education, but society" (Tyack & Cuban, 1995, p. 1).

These are laudable goals; however, they are heavy burdens for an entire well-developed and efficiently functioning social welfare system to bear. By shoehorning these goals into the "thorough and efficient" education clause of the constitution the court avoided public debate on and taxpayer consent to their lofty social agenda.

The court's beliefs about education come through the opinion as clearly as the social agenda. In regard to resources the court announced,

the need is great and the money is there. We are the second richest state in the nation. Therefore, while the relatively high level of our expenditures must give us pause, it must also be viewed in the light of our needs and our wealth. (*Id.*, p. 393-394)

At the same time the court was not quite as dogmatic as the Wyoming court about resources, explaining "we are also aware of the fact that the increased funding may constitute a heavy burden for the State to adjust to" (*Id.*, p. 389). Consequently, the court allowed a phase in period, thus justifying a resource score of 3.5.

The court's goal was to raise students from poor urban districts into society with their peers from affluent suburbs. The court maintained that students from poor urban districts "require above-average access to education resources" (*Id.*, p. 402). To

achieve the constitutional standard for the student from these poorer urban districts – the ability to function in that society entered by their relatively advantaged peers – the totality of the districts' educational offering must contain elements over and above those found in the affluent suburban district." (*Id.*, p. 402)

Thus the children of the poor were entitled to the same outcomes from education as their wealthier peers, E5, and they were entitled to extra resources, above those provided to their wealthier peers, in order to raise them to a higher social plane. Plainly the court wanted to use schools to decrease social inequity, S5. The court announced, "that part of the constitutional standard requiring an education that will enable the urban poor to compete in the marketplace, to take their fair share of leadership and professional positions, assumes a new significance" (*Id.*, p. 412). The New Jersey court's beliefs about school's role in society exceeds those of all other courts. The model's dimensions follow the court's beliefs. The *Abbott II* decision is clearly the most progressive opinion examined here

The state education standards, "instruction intended to produce the attainment of reasonable levels of proficiency in the basic communications and computational skills" as well as "a breadth of program offerings designed to develop the individual talents and abilities of pupils" (N.J.S.A. 18A:7A-5 cited in *Abbott II*, p. 390), could be scored like the *Rose* (1990) standards. However, in considering the programs available in the richer districts the court was trying to recreate, they noted advanced placement courses and courses in computers, science, social studies, foreign language, music programs, art programs, industrial arts, vocational and physical education (pp. 395-398). Assuming they intended these courses for the poorer districts, they score a 10 for breadth. Although the level of achievement since *Robinson I* had been high school graduation, *Abbott II* looked beyond graduation. The judges wanted children from poor districts to mingle

Table 24

Abbott II opinion matrix

Category	Justices' decision	
State funding	"Funding cannot be allowed to depend on the ability of local school districts to tax" (p.	
	363).	
Local funding	"The social and economic pressures on municipalities, school districts, public officials,	
	and citizens of these disaster areas – many poorer urban districts – are so severe that tax	
	increases are almost unthinkable"; "municipal overburden prevents districts from	
	raising substantially more money for education" (p. 394).	
Educability – P	"The level of funding must be adequate to provide for the special educational needs of	
	these poorer urban districts in order to redress their extreme disadvantages" (p. 363); "The	
	State's obligation to attain that minimum is absolute – any district that fails must be	
	compelled to comply" (p. 369); "some districts may exceed [the minimum]" (p. 369);	
	"students of low [SES] are just as capable, just as bright and industrious as those of higher	
	SES, but that their [SES] has overwhelmed their native talents" (p. 385); "We have	
	decided this case on the premise that the children of poorer urban districts are as capable	
	as all others; that their deficiencies stem from their [SES]; and that through effective	
	education and changes in that [SES], they can perform as well as others" (p. 385-386).	
Breadth – 10	"Virtually every subject that ties a child, particularly a child with academic problems, to	
	school - of art, music, drama, athletics, even, to a very substantial degree, of science and	
	social studies" (p. 398); "However articulated, such a requirement must encompass more	
	than 'instruction in the basic communications and computational skill,' which the	
	statute cites as another major element in education" (p. 398).	
Level – 7	"requirement of a specific substantive level of education" (p. 368); high school education.	

Table 24 (continued)

Abbott II opinion matrix

Category	Justices' decision
Belief Set	R3.5 – "Such funding must be guaranteed and mandated by the state" (p. 363); "we
	recognized that the State not only had the power to spend in excess of the norm in view of the
	presumed greater needs of such [poorer] students, but that it might be <i>required</i> to do so" p.
	371, emphasis in original); "we view the State's constitutional obligation to provide a
	thorough and efficient education as not adequately satisfied if dependent on federal aid" (p.
	381); "Funding must be certain every year" (p. 408).
	E5 – "It is a level that <i>all</i> must attain" (p. 368, emphasis in original); "the Constitution indeed
	requires that poor children be able to compete with the rich" (p. 375); "the education needed
	to equip the [poor] students for their roles as citizens and workers exceeds that needed by
	[rich] students (p. 375); "in poorer urban districts something more must be added to the
	regular education in order to achieve the command of the Constitution" (p. 403).
	S5 – "Poorer disadvantaged students must be given the chance to be able to compete with
	relatively advantaged students" (p. 372); "to what extent does the requirement of thorough
	and efficient education impose on the schools the responsibility to account for and attempt to
	remedy the problems students bring with them to schools, intractable problems, problems
	never dreamed of in the past as being within the schools' responsibility, problems created not
	by the schools but by society?" (p. 375); "The goal is to motivate them, to wipe out their
	disadvantages as much as a school district can, and to give them an educational opportunity
	that will enable them to use their innate ability" (p. 400); "The nation has come to recognize
	the education of the urban poor as a most difficult and important problem" (p. 401);

suburban districts" (p. 408).

something is needed that deals "with the environment that shapes these students' lives and

determines their educational needs" (p. 401); students from poorer districts "have not been

able to achieve any level of equality in that society with their peers from the affluent

in the social classes with children from affluent districts and to take "their fair share of leadership and professional positions" (*Id.*, p. 412). This is at least as ambitious as the *Campbell* standard of all students being able to enter the University of Wyoming, and it is scored the same at 9.

The resulting model reflects the court's ambition, although like other models it may be difficult to pin the court down on any specific definition of adequacy. New Jersey's high court offered the explanation that "embedded in the constitutional provision itself, at least in its construction thus far by this Court, are various objectives and permissible outcomes – equality, uniformity, diversity, and disparity – that may require, if they are to be allowed, a continued general definition of the constitutional mandate" (*Id.*, p. 367). The model is most like that for *Campbell*, although for *Abbott II* the lowest quintile received 20 additional points, rather than the 10 attributed to the previous models, and 10 points to the upper quintile as well. The court directed that poorer urban districts receive the same state funding as the richest districts, plus categorical aid, plus federal assistance. This seems to better reflect the additional resources the court hoped to direct toward these poorer urban districts. Some additional achievement was added to the last quintile to account for higher spending in the wealthier districts.

Summary of modeled cases

The table and chart below illustrate the relationship between judicial beliefs and adequacy remedies. Although the numbers are simply qualitative scoring of the language used in the opinions, the correlation between judicial values and the hypothetical inputs

and KSA outputs seems consistent across the cases. Judges who showed higher belief scores tended to order more comprehensive adequacy remedies.

Table 25
All cases and scores

Casa	Daliaf Saara	Innut Coore	Madal Valuma
Case	Belief Score	Input Score	Model Volume
Rose (1989)	R4, E2, S3	B6, H5, L	40632
Majority	24	4,940	
Rose (1989)	R3, E2, S2	B3, H3, L	12,190
Wintersheimer Concur	12	1,664	
Rose (1989)	R3, E2, S2	B3, H3, N	11,862
Vance Dissent	12	1,404	
Campbell I	R4, E4.5, S4.5	B10, H9, P	104,602
	81	14,300	
Hunt (1993)	R3, E3, S3	B7, L6, N	46,130
	27	6,552	
DeRolph I (1997)	R3, E2, S2	B3, H3, L	12,190
	12	1,664	
DeRolph II (2000)	R4, E3.5, S3	B6, H6, N	41,202
	42	6,126	
Claremont II (1997)	R3, E3, S3	B6, H5, L	40632
	27	4,940	

Table 25 (continued)
All cases and scores

Case	Belief Score	Input Score	Model Volume
Vincent (2000)	R3, E4.5, S4	B8.5, H5, P	58,871
	54	7150	
Leandro (1997)	R3, E2, S3	B5, L5, L	33,860
	18	4160	
Leandro dissent (1997)	R3, E3, S3	B5, L5, N	32,950
	27	3900	
CFE I (1995)	R3, E2, S2	B3, L3, L	12,190
	12	1664	
CFE II (2001)	R4, E4, S4	B7, L7, P	48,482
	64	8164	
CFE IV (2003)	R3, E4, S4	B7, L6, P	41,556
	48	7,072	
Abbott II (1990)	R3.5, E5, S5	B10, L9, P	104,648
	87.5	14,840	

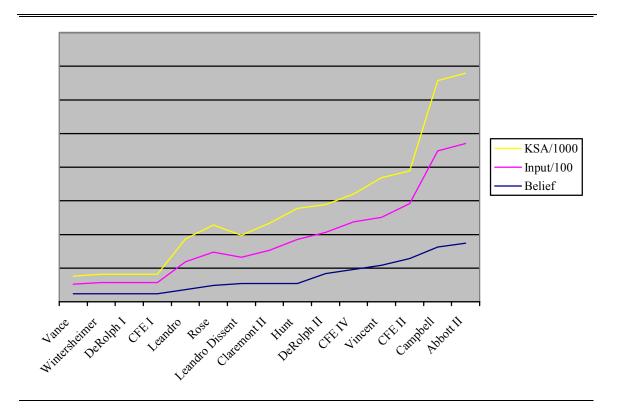


Figure 20: Relationship of beliefs to input and KSAs

Cases examined but not modeled

Many education finance cases did not lend themselves to analysis according to the adequacy model or the value scales discussed above. Some were equity cases, where the central dispute was the difference in resources available to different districts. Some were adequacy cases that did not develop an adequacy standard. Some were cases where the existing system was upheld, and some reflected unique state concerns. They are discussed briefly here.

Edgewood v. Kirby (Tex., 1989, 1991, 1992, 1995) (Edgewood I, II, III, IV).

Texas's *Edgewood* cases illustrate creeping judicial opinions in much the same way as some of the cases above. In the case of *Edgewood v. Kirby* (1989) the Texas court did not indicate any opinions not firmly based in the constitution and state history, nor did it proffer an adequacy remedy, and so the case is not analyzable in this paper. *Edgewood I* was strictly an equity case calling for equal funding for equal tax effort across the state. Its successors became increasingly divided and contentious.

In *Edgewood II* (1991) the court struck down as unconstitutional an education finance plan that continued to rely upon property tax and equalized the lower 95% of districts rather than all the districts. The court offers opinions about how the legislature could meet the court's constitutional demands, which a concurring judge described as "social policy preferences" (*Edgewood II*, p. 501). In response the legislature passed a bill enacting the proffered judicial desires, which the court struck down in *Carrollton-Farmers Branch Independent School District v. Edgewood Independent School District* (*Edgewood III*, 1992).

In *Edgewood III* dissenting Justice Cornyn recommended that "the court discard its collective mask of inscrutability and describe the basic elements of an efficient system of public education in Texas" (*Edgewood III*, p. 526). In this he calls for a definition of a "minimally adequate education" (perhaps S2) and says that the "state must fund remedial instruction and programs, triggered by substandard performance, to bring [ESL and learning disabled children] up to the legislatively articulated standard" (*Id.*, p. 527), arguably an S5. He offers no opinion about resources and loosely advocates standards similar to those from *Rose* (1989). Justice Cornyn's "bold adventure in revisionism of this court's unanimous writing in *Edgewood I*" (Id., p. 570), replacing the existing input-based equity model with an output-based adequacy model, was received either coldly or contemptuously by his peers and will not be reviewed here.

Justice Cornyn, the bold adventurer of *Edgewood III*, became the author of *Edgewood IV*. Consequently, the one-justice opinion written by Cornyn in *Edgewood III*, "which advocated a standard very different from the one set out in *Edgewood I*, has now been adopted by a majority of this Court" (Justice Spector dissenting, *Edgewood IV*, p. 767). While the question addressed in the earlier cases dealt with the efficiency of a system with disparities in revenue raising ability of 700:1, the answer in *Edgewood IV* was that the system distributed money fairly enough and that the accountability regime met "the Legislature's constitutional obligation to provide for a general diffusion of knowledge statewide" (*Edgewood IV*, p. 730). Thus Cornyn declared the legislative goals to be the constitutional standards. Justice Spector observed

all of this will come as a surprise to the litigants. The 'general diffusion of knowledge' requirement has never been a part of this case." (*Id.*, p. 768)

Even though none of the litigants argued based on the general diffusion of knowledge, "on its own initiative, the majority simply seizes upon these four words: equates them with accreditation requirements; and decides that our constitution requires no more" (*Id.*). That is not to say that the requirements are stable, since the majority notes "the State's provision for a general diffusion of knowledge must reflect changing times, needs, and public expectations" (*Id.*, p. 732, see *CFE* and *Abbott* above). The majority then quotes *Edgewood I* to say that while a general diffusion of knowledge is not precise, it does "provide a standard by which this court must, when called upon to do so, measure the constitutionality of the legislatures actions" (*Id.*, p. 736). It then quotes a different case saying "the word 'suitable' used in connection with the word 'provision' in this section of the Constitution, is an elastic term, depending upon the necessities of changing times or conditions, and clearly leaves to the Legislature the right to determine what is suitable, and its determination will not be reviewed by the courts if the act has a real relation to the subject and object of the Constitution" (*Id.*, p. 736). Dissenting Justice Spector observed

today's departure from the strict *Edgewood I* standard will mire the judiciary in deciding purely political questions. Even if we could speak coherently on such issues, addressing them at all is inconsistent with the proper role of the judiciary. (*Id.*, 768).

From reading the *Edgewood* decisions it is difficult to know the true meaning of the provisions of the Texas constitution. This is not just true of the constitution's education and equal protection language, but of other sections as well. As seemed true in other serial cases, the meaning seemed to shift with the membership of the high court.

Brigham v. State of Vermont (Vt., 1997) (Brigham).

The case of *Brigham v. State of Vermont* (1997) is strictly an equity case. The "plaintiffs here have not alleged that public education in Vermont is fundamentally inadequate or fails to impart minimal basic skills" (p. 387). The court expounds upon the co-location of provisions for civic virtue and education in the constitution as evidence of education's fundamental importance. The court denied that "the gross inequities in educational opportunities evident from the record" and conceded by the state have "a legitimate governmental purpose" or were "necessary to foster local control" (p. 396). Ultimately absolute equal funding was not required, only "substantially equal opportunity to have access to similar educational revenues" (p. 397). The justices rely on history to bolster their argument, and they leave "the specific means of discharging this broadly defined duty" to the legislature, so neither judicial values nor the adequacy remedy are available for study.

Helena Elementary School District No. 1 v. State (Mont., 1990) (Helena).

Montana's constitution states, "Equality of educational opportunity is guaranteed to each person of the state." (cited in *Helena*, 1990, p. 698). *Helena* is an equity case which is unsuited to analysis in this study. Like the court in *Lake View* below, the court denied separation of powers applies to education finance questions.

The guarantee provision of subsection (1) is not limited to any one branch of government. Clearly the guarantee of equal educational opportunity is binding upon all three branches of government, the legislative as well as the executive and judicial branches. (*Helena*, 1990, pp. 689-690)

Thus the Montana high court declared itself co-equal in policy-making with the legislative and executive branches of government.

Tennessee Small School Systems v. McWherter (Tenn., 1993) (McWherter).

case. Although the court asserts the "certain conclusion is that [Tennessee's constitution] guarantees to the school children of this state the right to a free public education" (*McWherter*, p. 152), the court does not define the parameters of that education. Also, although the court quotes a delegate to the 1978 convention saying the delegates' intent was to "leave the legislature free to act as conditions and circumstances change, to provide the necessary types of programs across the State that the people need and to fund it in a way that was feasible at that particular time" (*Id.*, p. 151), the court separates the legislature's freedom to define the education programs from its freedom to fund those programs. It then confirms "that the disparities in educational opportunities available to public school students throughout the state, found to be constitutionally impermissible, have been caused principally by the statutory funding scheme, which, therefore, violates the constitutional guarantee of equal protection" (*Id.*, p. 156). No further analysis is possible using the models from this paper.

Bismark School District v. State (N.D., 1994) (Bismark).

In the case of *Bismark School District v. State* (N.D., 1994) the majority was not sufficiently large to overturn the state education finance system, and the majority treated it fundamentally as an equity case. The majority opined "relative differences in funding significantly interfere with some children's right to an education" (*Bismark*, p. 261), and their listing of different pupil-teacher ratios in different districts shows their thinking was input oriented. Furthermore, the majority did not "define what level of funding equality

is mandated under its requirement" nor did it provide "a blueprint for constructing a new system" (*Bismark* dissent, p. 275), making analysis for this paper impossible.

Ironically, Sandstrom's dissent in the *Bismark School District* case was an adequacy defense of North Dakota's education finance system. Sandstrom noted that "all public schools in North Dakota, including those in the plaintiff districts, currently meet the statutory curriculum requirements," and all public secondary schools and all but one public elementary school "currently are accredited" (*Id.*, p. 269-270). Furthermore, Sandstrom asserts "student output is the appropriate measure of education quality," and test results show "North Dakota students on an average scored higher than the national average on all CTBS subtests at all grade levels" and they "achieved the top scores in the United States on the 1990 NAEP eighth grade mathematics assessment" (*Id.*, p. 270). He concludes "contrary to the plaintiffs' anecdotal evidence, differences in district funding do not have an effect on student learning as measured by standardized tests" (*Id.*, p. 270). So while the majority in the *Bismark School District* case used an input model of equity, the dissent used an output adequacy model.

Skeen v. State (Minn., 1993) (Skeen).

In *Skeen v. State* (1993) Minnesota's high court described a relatively progressive education finance system that provided extra funding for "at risk" students and in which "all plaintiff districts met or exceeded the educational requirements of the state" (*Skeen*, pp. 302-303). The disputed discretionary funding was approximately 7% of total education spending. The court concluded that since all districts were adequately educating their students, the remaining discretionary funding was rationally related to the

state's interest in increasing education funding. Their belief scores help explain the difference between the majority and the dissent.

The court noted that "in the absence of glaring disparities" education finance policy was a legislative matter (*Id.*, p. 318), indicating an E3 entitlement value. The majority also explained that

'adequacy' as used here refers not to some minimal floor but to the measure of the need that must be met. In this case, where the funding is 'more than adequate,' such a system satisfies the constitutional requirement. (*Id.*, p. 318)

Taken together, these sentences indicate an E4 entitlement belief, probably an S3.5 role of school in society. The court did not address resources.

The dissent in *Skeen* approached education finance with somewhat different values. While emphasizing the importance of equal educational opportunities for all children, the dissent says

while the state has a compelling interest in providing extra funding for districts with a large concentration of low income students, for districts with sparse populations, for desegregation expenses, or for complying with the Americans with Disabilities Act, no compelling interest exists for creating disparities in educational opportunities which are based solely on a school district's wealth.

Giving any child an advantage over others because of the wealth of the school district in which he or she lives denies children who do not live in such districts the opportunity to prepare for the future on equal footing. It harms the state generally by creating a disparity in the relative abilities of children educated in our schools. Indeed, this disparity in the opportunity to learn ensures that the disparity in wealth will continue into the future.

I read this [constitutional] language to say that the education of all children is paramount, and that the education system and its funding must provide equal opportunity for all children.

The court's decision today ensures that some of our children will be less prepared than others for the difficult issues of the future. (*Id.*, p. 322-323)

These statements indicate a stronger emphasis on equality, leaning toward equalizing outcomes, and the emphasis on the "paramount" importance of education could be construed to rate a higher resources score. These attitudes are similar to those shown in *Campbell* and *Abbott II*. Although not definitive, the dissent rates perhaps an E4.5, an S4.5, and an R3.5. While allowing a little liberty for districts who chose to increase their education funding did not offend the majority in *Skeen*, it seemed to offend the dissent's egalitarian notions of school as an equalizing and homogenizing influence in society helping to reduce "disparities in wealth." Once again, given identical evidence and similar training, the difference between the majority and the dissent was rooted in their beliefs about resources, student entitlement and school's role in society.

Idaho Schools for Equal Opportunity v. State (Idaho, 1992) (ISEO).

The justices in the case of *Idaho Schools for Equal Opportunity v. State* (1992) declared the state education system constitutional despite disparities in funding. The majority concluded that a uniform system meant "only uniformity in curriculum, not uniformity in funding" (*ISEO*, p. 731), and they declared that the current law defined a thorough system. The concurring and dissenting opinions did not support the idea that current law equaled the constitutional standard of thoroughness because of potential problems in the future and the risk inherent in allowing another branch of government to interpret the constitution. The Idaho court used the rational basis test rather than a higher level of scrutiny in examining the state school finance system. Overall the opinion did not define an adequate education system in a way that could be modeled, nor did it express judicial values about education that could be measured.

The one exception in *Idaho Schools for Equal Opportunity v. State* (1992) was in McDevitt's separate concurring/dissenting opinion. McDevitt quoted *Thompson v. Engelking96 Idaho793*, 537 P.2d 635 (1975) quoting the constitution's framers in saying the state must merely teach the children the three R's, but noted that today that could not "be given its literal meaning. There is, at least in the context of our present society, more inherent in a *thorough* system of education than instruction in the three 'R's'" (*ISEO*, p. 740, emphasis in original). Thus McDevitt was echoing the Idaho court's conviction that the breadth of a thorough education exceeded the three "R's," but he did not elaborate on that conviction besides noting the demands of modern life. This is only one dimension of the adequacy model.

Coincidentally, the majority in Idaho and the dissent in *DeRolph* used similar lines of argument regarding constitutional guarantees. The Idaho majority noted that their constitution "provides that the government should promote temperance and morality; however, this section does not create a positive right to the enjoyment of the same" (*ISEO*, p. 733). In *DeRolph II* (2000) dissenting Justice Cook cites an article by Professor David Mayer in the *Toledo Blade* (September 12, 1998), which asks

that we imagine the federal courts declaring the military budget unconstitutional based on the "common defense provision." This is implausible enough, Mayer notes, but would the United States Supreme Court then order Congress to prioritize a certain defense system above all other national budgetary concerns and give Congress a year to allocate sufficient funds? (p. 1036)

Their logic is similar. It is absurd to imagine the state courts forcing legislatures to guarantee public morality, just as it is absurd to imagine the Supreme Court directing military spending. This is not to say that the courts don't find strong morality and

national defense desirable. In the American scheme of government, it has been the legislatures' job to provide and control funds for those purposes.

McDuffy v. Secretary of the Executive Office of Education (Mass., 1993) (McDuffy).

Although cited as important (Thro, 1994), the case of McDuffy v. Secretary of the Executive Office of Education (1993) cannot be analyzed for this paper. This case discusses the history of education in Massachusetts extensively; however, only the role of schools in society (S2) can be discerned. The justices note that schools exist "not only to serve the interests of the children, but, more fundamentally, to prepare them to participate as free citizens of a free State to meet the needs and interests of a republican government" (McDuffy, p. 606), and that is based soundly in history and the founder's writings. The judges offer no opinion regarding student entitlements or resource usage. Ironically, they then declare "the guidelines set forth by the Supreme Court of Kentucky fairly reflect our view of the matter and are consistent with the judicial pronouncements found in other decisions" (Id., p. 618), although the connection between republican government and "self-knowledge," "grounding in the arts," "preparation for advanced training" (Id., p. 618) is not explained. The seventh criteria from the *Rose* decision, "sufficient level of academic or vocational skills to enable public school students to compete favorably with their counterparts in surrounding states, in academics or in the job market" suits an S3 rather than an S2 role of school in society ranking.

Lake View School District No. 25 of Phillips County v. Huckabee (*Ark., 2002*) (Lake View).

In the case of *Lake View School District No. 25 of Phillips County v. Huckabee* (2002) the court ruled the state education financing system unconstitutionally inadequate and inequitable; however, it did not define an adequate education or a constitutional finance system. For example, even though the court noted "that there is more than a 25% difference between the 5th and 95th percentile in amount spent per pupil" (*Lake View*, p. 482) and less than a 25% difference in revenue per pupil, the court did not define what percentage of difference would meet constitutional muster. Even though lower courts twice used the standards from Kentucky's *Rose* (1989) as a guide, the concurrence affirmed that "it appears doubtful to me that the framers of our constitution had a definition of 'efficient' in mind similar to that set out in *Rose*" (*Lake View III*, p. 515).

This judicial restraint is somewhat surprising since the court declared itself coequal with the legislative and executive branches in setting educational policy. Based on historical changes in constitutional language which gave responsibility for education to the State rather than the General Assembly, the court declared "the people of the state unquestionably wanted all departments of state government to be responsible for providing a general, suitable, and efficient system of public education" (*Id.*, p. 484). Justice Doggett observed "to some there is a certain allure to the notion of this [Texas] court working hand-in-hand with the Legislature as different drafts are submitted for review," with the result that

Texans excluded from the joint legislative and judicial decision-making process would be denied all opportunity for unbiased judicial review of legislative conduct. Judges would become mere appendages to other branches of government. (*Edgewood II*, p. 505)

Although the Arkansas court did not define adequacy in Lake View III, it did indicate some beliefs. Statements, including "that education has been of paramount concern to the citizens of this state since the state's inception is beyond dispute" (Lake View, p. 492) and "the State, in the budgeting process, continues to treat education without the priority and the preference that the constitution demands" (*Id.*, p. 495), indicate an R3 or R4 resource belief. The statement "however, Amendment 74 [allowing districts the discretion to enhance local spending] does not authorize a system of school funding that fails to close the gap between wealthy school districts with premier educational programs and poor school districts" (Id., p. 499) indicates an E3 entitlement belief. A concurring opinion indicated "that bare and minimal sufficiency does not satisfy the requirements of a suitable public school system" (Id., p. 517), confirming the E3 entitlement belief and indicating an S3 role for schools in society belief. The ability of localities to spend more was provided by constitutional amendment. Since Arkansas' education system was arguably one of the worst in the country, the court seemed concerned with raising funding for the poorest districts, but not to address varying educability. The poor condition of the education funding system relative to other states and the judicial beliefs are similar to conditions and beliefs in Kentucky and Alabama.

Sheff v. O'Neill (Conn., 1996) (Sheff).

Connecticut's equity case, *Horton v. Meskill* (1977), occurred before the third wave of education finance cases, but it helped set the stage for a unique adequacy case, *Sheff v. O'Neill*(1996). By the time of *Sheff* education funding was uniform across Connecticut; however, there was a large concentration of minority children in Hartford,

even though the state had not "intentionally segregated racial and ethnic minorities in the Hartford public school system" (*Sheff*, p. 1274). Responding to an argument similar to the one rejected by New York's high court in *CFE I* (1995, p. 669), the high court combined the constitution's education and equal protection clauses to determine that racial segregation denied children an adequate education.

The failure adequately to address the racial and ethnic disparities that exist among the state's public school districts is not different in kind from the legislature's failure adequately to address the 'great disparity in the ability of local communities to finance local education' that made the statutory scheme at issue in [Horton] unconstitutional in its application. (Sheff, p. 1278)

The dissent in *Sheff* was scathing. Since the remedy of equal distribution of ethnic groups in all schools is completely outside the theoretical framework for this paper, *Sheff* will not be modeled.

Abbeville County School District v. State (S.C., 1999) (Abbeville).

The high court in South Carolina seemed to create constitutional education standards out of thin air. The case of *Abbeville County School District v. State* (1999) is less than eight pages long, and educational adequacy is explained in under a page. In short, because South Carolina's constitution says "the General Assembly shall provide for the maintenance and support of a system of free public schools open to all children in the state" (S.C. Constitution, article XI, section 3), the court held the General Assembly must "provide the opportunity for each child to receive a minimally adequate education" (*Abbeville*, p. 540). The high court's definition included a list of subjects plus vocational skills. Since the lower courts set no definition of adequacy, and the opinion offered no

history or indication of values besides a brief listing of other adequacy cases, it is impossible to link the adequacy standard the court created to judicial values.

Committee for Educational Equality v. State (Mo., 1994).

In Missouri the legislature responded to the trial court's demand to change education finance before the high court examined the case. The high court's discussion in *Committee for Educational Equality v. State* (1994) decided to dismiss the appeal because the trial judgment was not final (*Id.*, p. 448). Because education finance was not examined in the state high court, it is not suited to this study.

Roosevelt Elementary School District Number 66 v. Bishop (*Ariz.,1994*) (Roosevelt).

The case of *Roosevelt Elementary School District Number 66 v. Bishop* (1994) deals principally with facilities, "does not define what constitutes a 'general and uniform' public school system" (Roosevelt, p. 824), and is inappropriate for this analysis. Like *DeRolph* and *Hunt*, the state offered virtually no defense. It did not file for a motion for summary judgment; it did not dispute the facts, and Superintendent of Public Instruction Bishop, the nominal defendant in the suit, provided testimony used by the plaintiffs. The majority opinion included two curious rulings. First they said, "even if every student in every district were getting an adequate education, gross facility disparities caused by the state's chosen financing scheme would violate the uniformity clause" (*Id.*, p. 815), indicating that the court's insistence upon uniform facilities was not tied to the facilities' contribution to student learning. Second, in a bit of circular logic, the majority declared

variation in facilities was permissible, but any variation that resulted from the state's chosen financing scheme was unconstitutional (*Id.*, p. 815). The fact that the state financing scheme would have to allow variation if variation were to occur did not deter the majority in its opinion. Joseph Heller would be proud. "That's some catch, that Catch-22" (Heller, 1955, p. 52). In a final echo of *DeRolph*, the dissent declared, "if I were in the executive or legislative branch of government and charged with the responsibility of fixing the allegedly broken system, I would have no idea where to begin" (*Id.*, p. 827).

Discussion of cases decided for the state.

The case of *Matanuska-Susitna Borough School District v. State* (Alaska, 1997) also deals with capital finance and taxpayer equity rather than educational adequacy.

Expert testimony revealed Alaska's school system was equitably funded.

Pennsylvania's high court declared the question of if "the Pennsylvania Constitution and statutes governing education require the Commonwealth to provide for an adequate system of public schools in the [Philadelphia] School District" and "the greater and special education needs" (*Marrero v. Commonwealth*, (Penn., 1998, p. 965) of its students was nonjusticiable.

In the case of *Coalition for Adequacy and Fairness in School Funding, Inc. v. Chiles* (Fla., 1996), Florida's high court determined "an insufficient showing has been made to justify judicial intrusion" (*Id.*, p. 407) into the powers of the legislature. They did not declare Florida's educational funding system unconstitutional. The concurring opinion said "certainly a minimum threshold exists," for example, if "a county in this

state has a thirty percent illiteracy rate" (*Id.*, p. 409). The concurring opinions' emphasis on "minimum threshold," "literate, knowledgeable population," "not requiring absolute uniformity among school districts" and "recognition of the fact that education is absolutely essential to a free society" (Id., p. 409) earn value ratings of E2 and S2. The dissent indicated that it would hold for a higher quality of education, saying "I reject the view that our education article allows any lesser system of education because it uses the word "adequate" as opposed to some superlative like 'terrific' or 'first class,' etc." (Id., p. 411). The dissent may earn higher value scores, perhaps S3 and E3. The dissent also indicated a greater willingness to "hold the legislature accountable for the responsibility and trust placed in it to provide for Florida's children" (p. 411).

In the case of *School Administrative District No. 1 v. Commissioner, Department of Education* (Maine, 1995) the plaintiffs did not present, nor did the court consider, an adequacy model. Maine's constitution provides that the legislature require "the several towns to make suitable provision, at their own expense, for the support and maintenance of public schools" (Maine Constitution, article VIII, part 1, section 1 cited in *School Administrative District No. 1*, p. 857). Thus this is neither an equity or adequacy case.

Like Maine, Oregon's constitution also contains language strongly supporting local financing of education. In the case of *Coalition for Equitable School Funding, Inc. v. State* (Or., 1991), the argument that the education finance system violated Oregon's constitutional call for "a uniform, and general system of Common schools," (cited Id., p. 118), uniform taxation and equal protection "was answered by a later-adopted constitutional provision that allows the state" (Id., p. 120) to rely on local property taxes to fund schools. Thus the resulting discrepancies were constitutionally permissible.

The case of *Gould v. Orr* (Neb., 1993) affirmed the summary judgment of the lower courts in favor of the governor because the "petition clearly claims there is disparity in funding among school districts, but does not specifically allege any assertion that such disparity in funding is inadequate and results in inadequate schooling" (*Gould*, p. 353). Consequently this could be considered an equity case that did not present adequacy evidence, or enough adequacy evidence to prove a constitutional deficiency. The dissent indicated a willingness to review an adequacy case, and it showed that diversity of inputs or outputs would be acceptable evidence. One concurring opinion indicated an E2 value, saying the constitution "requires 'free instruction' in the 'common schools,' not the same instruction in all such schools" (*Id.*, p. 355).

Virginia's case of *Scott v. Commonwealth* (Va., 1994) also acknowledges the disparities in resources available to different school districts, but like *Gould* the plaintiffs did "not allege that the present system has failed to reach the Standards of Quality" (*Scott*, pp. 140-141). Like *Sundlun* below, the Virginia court respected the primary role of the legislature in education policy, saying "the General Assembly is empowered to make the final decision about both standards of quality and funding" for education. Although they acknowledged the importance of education and equity, they explained

while the elimination of substantial disparity between school divisions may be a worthy goal, it is simply not required by the Constitution. Consequently, any relief to which the Students may be entitled must come from the General Assembly. (*Scott*, p. 142-143)

In the case of *Committee for Educational Rights v. Edgar* (III., 1996) the high court in Illinois benefited from both a relatively new constitution (1970) and a relatively recent case law (1976) in determining the education financing system was constitutional, and the quality of the education system was not subject to judicial analysis. Because the

constitution was only 26 years old, the court in *Edgar* knew the delegates were aware of discrepancies in education funding but did not act to eliminate it (*Edgar*, p. 1186), so the discrepancies could not be considered unimaginable as the Texas court maintained in *Edgewood I*. Similarly, the court relied on the record of the constitutional convention, court cases, and the *Baker* doctrine of nonjusticiable political questions to decide that

what constitutes "high quality" education, and how it may best be provided, cannot be ascertained by any judicially discoverable standards. The constitution provides no principled basis for a judicial definition of high quality. It would be a transparent conceit to suggest that whatever standards of quality courts might develop would actually be derived from the constitution in any meaningful sense. Nor is education a subject within the judiciary's field of expertise, such that a judicial role in giving content to the education guarantee might be warranted. Rather, the question of educational quality is inherently one of policy involving philosophical and practical considerations that call for the exercise of legislative and administrative discretion. To hold that the question of education quality is subject to judicial determination would largely deprive the members of the general public a voice in a matter which is close to the hearts of all individuals in Illinois. Judicial determination of the type of education children should receive and how it can best be provided would depend on the opinions of whatever expert witnesses the litigants might chose to present. Members of the general public, however, would be obliged to listen in respectful silence. (*Id.*, p. 1191)

As a result, *Edgar* presents a lucent case for judicial restraint; but it offers no explicit judicial values or adequacy model for analysis in this study.

In his dissent from *Edgar*, Justice Freeman presents an argument similar to that used in *Lake View*. That is, the constitutional wording changed so that the "State" rather than the "general assembly" was responsible for education, and so "the education system provision is a constitutional directive to the three branches of state government" (*Edgar*, p. 1200). He then goes on to explain "The State," plainly refers to the preceding 'People of the State,' which, as I explained, refers to the entire state government" (*Id.*, p. 1200). How the state government came to replace the people of the state is unclear in Justice

Freeman's comments, much as how the state and its populace were at odds in Sweetland's observations above. Justice Freeman maintained also that the "references to the constitutional convention record do not constitute such a clear expression of an obvious intent of the framers as to allow this court to ignore the unambiguous constitutional language," and he would reverse the 1976 court ruling holding education as a political question (*Id.*, p. 1202). In conclusion Justice Freeman asserts the connection between education resources and opportunity, and he declares that the court should issue a call for "the legislative and executive departments of state government to recreate and reestablish a public school funding scheme" (*Id.*, p. 1206). It is not clear if there were significant differences in values between Justice Freeman and the majority in *Edgar* besides on the proper role of the courts in education policymaking.

In City of Pawtucket v. Sundlun (R. I., 1995) the high court in Rhode Island overturned a lower court decision similar to the adequacy decisions modeled above. Compared to other states, Rhode Island had a very well funded education system, very small discrepancies between districts, constitutional language less than ten years old supporting local funding, and a government tradition in which the General Assembly was indisputably first among equals. While the trial judge combined the word "promote" from the constitution with an education department report and the Rose standards for adequacy, the high court showed the trial judge misrepresented the history of Rhode Island's constitution, ignored evidence from the recent constitutional convention, misrepresented the meaning of words and their context in history, and overstepped the court's role by intruding into the legislature's domain. Moreover, the court rejected the definition of equity "that requires 'a sufficient' amount of money allocated to enable all

students to achieve learner outcomes" (Id., p. 61) because the relationship between money spent and learner outcomes is so tenuous. *Sundlun* is primarily an eloquent example of judicial restraint, and the hints of beliefs shown in the opinion are too ephemeral to justify scaling.

Summary of cases not modeled

Of the cases not modeled, *Edgewood* provides the most interesting link to the modeled cases because of the similar creeping of the definition of the constitutional education provision in sync with judicial beliefs. Skeen and Chiles show that differences in beliefs can account for the position of judges in the majority or dissent. Brigham compares with *Rose* in the effectiveness and simplicity of judicial intervention in the political process. In both states the judicial branch was effective because of the precarious balance of political forces in the other branches. Edgar illustrates the importance of judicial restraint as well as the willingness of some judges to use the constitution to justify avoiding separation of powers. The power of the lower court in Missouri to force the legislature to change funding for education is somewhat parallel to that of Judge DeGrasse in CFE II. That a single judge should force the legislature to do things contrary to the previously expressed will of the entire population is noteworthy. Sheff seemed to be a singular case; however, the CFE cases also called for the legislature to address racial imbalance in the schools. Some of the forces shaping decisions in the cases that did not result in adequacy models seem to be similar to those which shaped decisions in the cases modeled above.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

At worst this analysis consists of little more than "parsing sentences in a two-foot stack" of opinions (*Roosevelt*, 1994, p. 823). Nevertheless given a model of adequacy, measures of beliefs about education and careful reading of high court opinions, there was a consistent relationship between the education beliefs judges evinced in their opinions and the size and shape of the adequacy remedies they ordered. Even in cases that did not result in an adequacy remedy, judicial beliefs seemed to play some role, if only to separate the majority from the dissent.

The original question asked how judges leap from cryptic constitutional phrases to full blown adequacy remedies. For example, how could a word like "efficient" in Kentucky's constitution come to equal the 141 words of the seven "sufficients" so widely quoted from *Rose* (1990, p. 212) or the 147 words describing the "essential, and minimal, characteristics of an 'efficient' system of common schools" (*Id.*)? While the lengthy opinions offered explanations from the plain meaning of the language, precedent and history, the beliefs of the individual judges also played a role. *Rose* is a good example. Given similar status and training plus identical documents and testimony, the seven judges in *Rose* disagreed about what "efficient" meant. The result reflected a genuine consensus of four judges in the majority of five. One concurring and one dissenting judge would have reduced the seven sufficients significantly, and one believed the

question was not the court's to answer. At least part of the reason for the difference could be attributed to their differing beliefs about resources for education, children's entitlement to education, and the role of education in society. The majority held higher beliefs and they ordered a larger remedy. The concurring and dissenting judges held lower beliefs and would have ordered a smaller remedy. Other cases showed similar relationships between judicial beliefs and the results of the cases.

Conclusions

In light of the preceding, there may be room for modifying Tyack's comments:

Legal principles have increasingly been evoked as a source of authority in education and other traditional forms of authority, such as professional expertise and local majority rule, have been questioned.

Some observers have seen activist judges as heroes of social justice, while others have condemned an "imperial judiciary" for exceeding its proper scope. (Tyack, 1982, p. 49)

The following paragraphs will use Tyack's comments as an outline to discuss the influence of constitutions, legal precedent and history in shaping decisions. Next it will consider the change of authority for bureaucracies and citizens, and finally it will discuss the implications of judges setting educational policy for a representative democracy.

The law traditionally has been based upon the words in key documents, especially constitutions. Thro said the language of state education clauses

could be, and probably should be, the determining factor during a third wave [of education finance cases]. For example, to somehow hold that a Category I clause calling for a system of free public schools of unspecified quality is the basis for reform would be ridiculous (1990).

Thro believed that "since the language of the education clauses defines the duty of the state legislature, there is a plausible argument that the language of the education clause

should be a major, if not decisive, factor in the litigation" (1993, p. 23). In simplest terms, by "looking at the language and comparing the text to provisions in other states, one can determine the level of duty, relative to other States, imposed on a particular state legislature" (Banks, 1991; Thro, 1993, p, 23). This analysis of the cases above shows that constitutional words are less important than the beliefs of the person saying what they mean. In the serial litigation in Texas, Ohio, Wisconsin, New Hampshire and New York the meaning of the state education clause changed measurably over a relatively short period of time. Nothing really changed but the people on the bench and the beliefs they brought with them. In New York and New Jersey the courts seemed to celebrate the ongoing redefinition of the meaning of the education clause as a positive thing. Specifically, New York's Category I constitution called for an education system of no specific level of quality, yet in CFE II the court demanded a system of very high quality. Previous research showed the education clause, at least as read by scholars and laymen, was no indication of how a court would rule in an adequacy case (Banks, 1991; Dayton et al., 2004; Lundberg, 2000; Swenson, 2000). Thro suspected that judicial beliefs might be the real reason for decisions going one way or another based on his observations of Montana and Washington (Thro, 1989, 1990, 1993). This research confirms Thro's suspicions. Judicial beliefs are correlated to the outcomes in education finance cases. Referring back to Tyack's comments above, it is not the legal principle, not the plain meaning, but the jurist that is key to the outcome of the case. Rather than being a sea anchor preventing the ship of state from being blown too far or too fast by the winds of change, some jurists used the constitution as a springboard for shaping state policy according to their intuition (Notes, 1977).

Precedent and *stare decisis* were no more dependable reference points than constitutional language. In some of the serial cases just reviewed the position of the dissent, rejected in an earlier case, became the majority position and the new law in a later case. The Texas court could not agree on what its last opinion really meant even while many of the same judges occupied their seats on the bench. The New York and New Jersey courts wrote their opinions with anticipation clauses, inviting more information to change their view of what the constitution meant. They referred to previous cases as only partial answers to what the constitution really meant, and they pointed to future cases where that meaning would change again. Judges using precedent seem more akin to theologians using scripture than engineers using formulas and tables.

The courts' use of history as an indicator of legal principle is also suspect, although not always so. The *McDuffy* and *Edgewood I* decisions delved extensively into history and did not stray far from its implications in their decisions. On the other hand, some found a speech by a politician clear evidence that everyone who framed the constitution felt a certain way, but then they ignored large swaths of consistent behavior that supported a conclusion different from the one they preferred. For example, in *Claremont I* (1993) the New Hampshire court cited a 1719 law that fined "the selectmen of Sundry Towns within this Province" for failing to provide grammar schools (*Id.*, p. 1380). This was clearly a penalty for the failure of local financing to provide for schools. Additionally the court declared, "we are unpersuaded by the State's argument that the fact that *no State funding was provided at all for education in the first fifty years after ratification of the constitution* demonstrates that the framers did not believe part II, article 83 to impose any obligation on the State to provide funding" (Id., p. 1381, emphasis

added). Both examples support the primacy of local financing over state financing, yet the court reached the opposite conclusion. In *Robinson* (1973), too, the contrast between the cited history and the outcome was striking.

Tyack refers to the apparent loss of power of traditional authorities as the courts exerted more influence in education. Professional expertise might not have lost its power, but it might be exercised now in a different venue and for a different master. The DeRolph and Hunt cases seem to show some bureaucrats can use the courts to enhance their power, forcing legislatures to provide more funding for their departments (Sandler & Schoenbrod, 2003). Local school districts, unions, advocacy groups, and sometimes even legislators are turning to the courts to obtain the resources they could not obtain from the legislatures. If the iron triangle relationship hypothesized in *DeRolph* and *Hunt* is real, then the bureaucrats have freed themselves from accountability to the public and have found a powerful new ally in the courts. Adequacy litigation in Kentucky has been renewed partly because the education portion of the state budget fell from approximately 46.6 to 41 percent (Day, 2003, p. 25). Educators want a higher percentage of the state's tax revenues, and they are going to the courts to try to get what they want. Courts force the legislatures to provide for things bureaucrats might not have obtained in the past. A new symbiosis has emerged. The courts have augmented their power with that of the bureaucratic experts, whose ideas exert influence in courtrooms, and the bureaucrats who share the courts' objectives have augmented their power through the courts.

Referring again to Tyack's 1982 analysis, the power that seems most diminished is majority rule, either local or statewide. By directing educational spending courts have assumed power that used to reside in the people and the legislature. Ladd and Hansen

explained that "adequacy is exclusively focused on schoolchildren and does not embrace taxpayers as objects of concern" (1999, p. 102, Berne & Stiefel, 1979). In *CFE II* the court effectively levied a tax upon the entire state to provide enhanced education to an already well-funded district without the consent of the legislature or the public.

Decisions about education are necessarily value laden, and the power of values to shape outcomes is apparent in this research. On September 29, 2004 Antonin Scalia said

what I am questioning is the propriety, indeed the sanity, of having valueladen decisions...made for the entire society by judges" (Gavel, 2004).

In reducing the influence of majority rule, judges in adequacy cases assert the primacy of their values in education policy making.

The bottom line in education finance cases is the amount of money dedicated to education. Assuming the state treats all students about equally, the fundamental question then becomes whether funding at the level designated by the legislature meets the constitutional standard, or if it requires a bit more than what the legislature provided. Can a constitutional standard like "efficient" be reasonably read to determine that it requires some percentage higher than the current level, or does a reasonable reading of the constitution preclude such fine tuning? According to Judge L. Ralph Smith

to decide such an abstract question of "adequate" funding, the courts would necessarily be required to *subjectively evaluate the Legislature's value judgments* as to the spending priorities to be assigned to the state's many needs, education being one among them. In short, the Court would have to *usurp and oversee the appropriations power*, either directly or indirectly, in order to grant the relief sought by Plaintiffs. (*Chiles*, 1996, emphasis added)

John Rose, nominal defendant in the *Rose* (1989) case made the following observation about Judge Corn's lower court ruling:

What Judge Corns wanted to do was appoint a committee. And initially [he] wanted myself and Speaker Blandford and other people in the legislature [to] serve on that committee, to develop a plan for education and then to bring that plan back to him. And he would decide if that's what needed to be done. (Interview by William McCann, Jr., 10 October 1990, cited in Day, 2003, p. 171)

By actively interpreting constitutional phrases according to their beliefs about resources, school's role in society and student entitlements, judges appear to be raising legislative questions into constitutional questions in order to enact their policy preferences.

Illinois Constitutional Delegate Fogal envisioned a dialogue between the legislature and the people in setting education policy.

Quality "means different things to different people. We had in mind the highest, the most excellent educational system possible; leave this up to the determination of the legislature and your local districts, and let the citizens keep pushing for higher-quality education. (Proceedings of the Illinois Constitutional Convention, 767, quoted in *Edgar*, (1996).

On the other hand, court management takes education policy out of popular and legislative control because

so long as the majority reserves ultimate veto power over any new funding system, its protest that it is not retaining control over educational policy in Ohio should convince no one. (*DeRolph II*, 2000, p. 1035)

Whether heroes or villains, judges have become significantly more involved in making education policy since Tyack wrote in 1982. The reduction in majority rule inherent in adequacy rulings deserves considered attention.

Recommendations

Recommendations for further study

The elite values identified by Wirt et al. and the questions they generated provide an important basis for further study. While the answers to questions such as "who has the right and responsibility to initiate policy?" (Handler, 1978, p. 31), "what policy ideas are deemed unacceptable?," "what policy-mobilizing activities are deemed appropriate?," and "what are the special conditions of the state that actors believe shape their policy making?" (1986, p. 17) have clearly changed as a result of litigation, no comprehensive analysis of the shift of power and elites was found for this paper. If Sandler and Schoenbrod (2003) are right in believing that Michael Rebell and his fellow litigators are the elites guiding special education policy in New York, and education policy making has shifted to other elites across the nation, then this sea change should be documented and analyzed (van Geel, 1982, p. 76). In this same context, if there is a new ruling triumvirate of elites, the iron triangle (Adams, 1982) discussed above in relation to *DeRolph* and *Hunt*, then that too should be examined and documented.

This study was an overview of cases from several states, and thus it missed the entire story of any one case. The history of education finance cases in the states might be the history of a shift in power between the branches of government. A shift of this magnitude deserves intense public and scholarly attention to the dynamics of power in the various states and the personalities that manipulate that power. Who brings the suits? Who supports the suits? Who are the defendants, and to what extent do they support or oppose the objectives of the plaintiffs? Who are the lower court judges who produce the initial judgments? What risks do the various players face, and are they proportional? If

governors and legislators are subject to swift loss of office when facing voter ire, while judges are immune from those pressures, is it a fair battle? How does the Fourth Estate factor into the equation? What are the incentives and risks for lower-level officials? Who are the mercenaries in this battle? How much are they paid? Who pays them? How much power do they wield? To what extent does their longevity give them power over government officials? Has adequacy litigation resulted in raising achievement as well as increasing spending?

A weakness of this study is its primary focus on court documents. Future research should examine other writings and public pronouncements of influential jurists in these cases to determine if the values this study found accurately reflect their convictions. Segal and Cover as well as Danelski recommended different types of document analyses to help better understand judicial predispositions. That technique could be useful in future analyses of these cases.

In sum, education finance litigation, and especially adequacy litigation, has profoundly changed the way education is financed and conducted in many states. Thro was disturbed by the thought that different courts "interpret identically worded or nearly identically worded provisions but ... reach radically different results," because it might "undermine the legitimacy of the state courts in the minds of the lay public" (Thro, 1989, p. 1660). This study demonstrates that judicial beliefs are an indicator of how courts will rule. This too should give the lay public cause for reflection.

Appendix A

Legal Cases

Abbott v. Burke, 100 N.J. 269, 495 A.2d 376 (1985) (Abbott I).

Abbott v. Burke, 119 N.J. 287, 575 A.2d 359 (1990) (Abbott II).

Abbott v. Burke, 136 N.J. 444, 643 A.2d 575 (1994) (Abbott III).

Abbott v. Burke, 149 N.J. 145, 693 A.2d 417 (1997) (Abbott IV).

Abbott v. Burke, 153 N.J. 480, 710 A.2d 450 (1998) (Abbott V).

Abbott v. Burke, 163 N.J. 95, 748 A.2d 82 (2000) (Abbott VI).

Abbott v. Burke, 164 N.J. 84, 751 A.2d 1032 (2000) (Abbott VII).

Abbott v. Burke, 170 N.J. 537, 790 A.2d 842 (2002) (Abbott VIII).

Abbott v. Burke, 172 N.J. 294, 798 A.2d 602 (2002) (Abbott IX).

Alabama Coalition for Equity, et al. v. Hunt, 624 So.2d 107 (Ala., 1993) (Hunt).

Bismarck Public School District #1 v. State, 511 N.W.2d 247 (N.D., 1994) (Bismark).

Board of Education, Levittown Union Free School District v. Nyquist, 57 N.Y.2d 27, 439 N.E.2d 359, 453 N.Y.S.2d 643 (N.Y., 1982) (Levittown).

Board of Education of Oklahoma City v. Dowell (498 U.S. 237 1991a) (Dowell).

Brigham v. State, 166 Vt. 246, 692 A.2d 384 (Vt., 1997) (Brigham).

Brown v. Board of Education, 347 U.S. 483 (1954)

Campaign for Fiscal Equity, INC. v. State, 86 N.Y.2d 307, 655 N.E.2d 661, 631 N.Y.S.2d 565 (N.Y., 1995) (CFE I).

Campaign for Fiscal Equity v. State, 187 Misc.2d 1, 719 N.Y.S.2d 475 (N.Y., 2001) (CFEII).

- Campaign for Fiscal Equity, INC. v. State, 295 A.D.2d 1, 744 N.Y.S.2d 130 (N.Y., 2002) (CFE IV).
- Campbell County School District v. State, 907 P.2d 1238 (Wyo., 1995) (Campbell).
- Campbell County School District v. State, 32 P.3d 325 (Wyo., 2001).
- Carrollton-Farmers Branch Independent School District v. Edgewood Independent School District, 826 S.W.2d 489 (Tex., 1992) (Edgewood III).
- City of Pawtucket v. Sundlun, 662 A.2d 40 (R.I., 1995) (Sundlun).
- Claremont School District v. Governor, 138 N.H. 183, 635 A.2d 1375 (N.H., 1993) (Claremont I).
- Claremont School District v. Governor, 142 N.H. 462, 703 A.2d 1353 (N.H., 1997) (Claremont II).
- Claremont School District v. Governor, 147 N.H. 499, 794 A.2d 744 (N.H., 2002) (Claremont III).
- Coalition for Adequacy and Fairness in School Funding, Inc. v. Chiles, 680 So.2d 400 (Fla., 1996) (Chiles).
- Coalition for Equitable School Funding, Inc. v. State, 311 Or. 300, 811 P.2d 116 (Or., 1991).
- Columbia Falls Elementary School District v. State, 2005 WL 648038 (Mont., 2005).
- Committee for Educational Equality v. State, 878 S.W.2d 446 (Mo., 1994).
- Committee for Educational Rights v. Edgar, 174 Ill.2d a, 672 N.E.2d 1178, 220 Ill.Dec. 166 (Ill., 1996) (Edgar).
- DeRolph v. State, 78 Ohio St.3d 193, 677 N.E.2d 733 (Ohio, 1997) (DeRolph I).
- DeRolph v. State, 89 Ohio St.3d 1, 728 N.E.2d 993 (Ohio, 2000) (DeRolph II).

- DeRolph v. State, 93 Ohio St.3d 309, 754 N.E.2d 1184 (Ohio, 2001) (DeRolph III).
- Department of Education v. Glasser, 622 So. 2d 944 (Fla., 1993)
- Dupree v. Alma School District No. 30 of Crawford County, 279 Ark. 340, 651 S.W.2d 90 (Ark., 1983) (Alma).
- Edgewood Independent School District v. Kirby, 777 S.W.2d 391 (Tex., 1989) (Edgewood I).
- Edgewood Independent School District v. Kirby, 804 S.W.2d 491 (Tex., 1991) (Edgewood II).
- Edgewood Independent School District v. Meno, 917 S.W.2d 717 (Tex., 1995) (Edgewood IV).
- Gindl v. Department of Education, 396 S. 2d. 1105 (Fla., 1979)
- Gould v. Orr, 244 Neb. 163, 506 N.W.2d 349 (NE, 1993) (Gould).
- Harper v. Hunt, Op of Justices, 624 So.2d 107, 86 Ed. Law Rep. 497 (Ala., 1993).
- Helena Elementary School District No. 1 v. State, 236 Mont. 44, 769 P.2d 684 (Mont., 1989) (Helena).
- Horton V. Meskill, 172 Conn. 615, 376 JA.2d 359 (Conn., 1977) (Horton).
- Hull v. Albrecht, 190 Ariz. 520, 950 P.2d 1141 (Ariz., 1997) (Albrecht).
- Idaho Schools for Equal Opportunity v. Evans, 123 Idaho 573, 850 P.2d 724 (Idaho, 1993).
- Idaho Schools for Equal Opportunity v. Evans, 128 Idaho 276, 912 P.2d 644 (Idaho, 1996).
- James v. Alabama Coalition for Equity, et al., 836 So.2d 813 (Ala., 2002) (James).
- Kukor v. Grover, 148 wis.2d 469, 436 N.W.2d 568 (Wis., 1989) (Kukor).

Lake View School District No. 25 of Phillips County v. Huckabee, 340 Ark. 481, 10 S.W.3d 892 (Ark., 2000) (Lake View I).

Lake View School District No. 25 of Phillips County v. Huckabee, 91 S.W.3d 472 (Ark., 2002) (Lake View II).

Leandro v. State, 346 N.C. 336, 488 S.E.2d 249 (N.C., 1997) (Leandro).

Marbury v. Madison, 1 Cranch (5 U.S.) 137 (1803)

Marrero v. Commonwealth, 709 A.2d 956 (Pa., 1998) (Marrero).

Matanuska-Susitna Borough School District v. State, 931 P.2d 391 (Alaska, 1997).

McDuffy v. Secretary of the Executive Office of Education, 415 Mass. 545, 615 N.E.2d 516 (Mass., 1993) (McDuffy).

Milliken v. Bradley, 418 U.S. 717 (1974).

Missouri v. Jenkins, 495 U.S. 33 (1990) (Jenkins)

N.A.A.C.P., Minneapolis Branch v. Metropolitan Council, 125 F.3d 1171, C.A. 8, Minn (1997).

Oklahoma City Board of Education v. Dowell, 111 S.Ct. 630 (1991).

Pauley v. Kelly, 255 S.E.2d 859 (W. Va., 1979).

Plessy v. Ferguson, 163 U.S. 537 (1896).

Robinson v. Cahill, 62 N.J. 473, 303 A.2d 273 (NJ, 1973) (Robinson I).

Roosevelt Elementary School District Number 66 v. Bishop, 179 Ariz. 233, 877 P.2d 806 (Ariz., 1994) (Roosevelt).

Rose v. Council for Better Education, 790 S.W.2d 186 (Ky., 1989) (Rose).

San Antonio Independent School District v. Rodriguez, 411 U.S. 1 (1973) (Rodriguez).

School Administrative District No. 1 v. Commissioner, Department of Education, 659 A.2d 854 (Me., 1995).

Seattle School District v. State, 585 P.2d 71 (Wash., 1978).

Serrano v. Priest, 557 P.2d 929 (Cal., 1976).

Sheff v. O'Neill, 238 Conn. 1, 678 A.2d 1267 (Conn., 1996) (Sheff).

Skeen v. State, 505 N.W.2d 299 (Minn., 1993) (Skeen).

Tennessee Small School Systems v. McWherter, 851 S.W.2d 139 (Tenn., 1993) (McWherter).

Vincent v. Voight, 236 Wis.2d 588, 614 N.W.2d 388 (Wis., 2000) (Vincent).

Woodahl v. Straub, 520 P.2d 776 (Wash., 1974).

Appendix B

Operative State Constitutional Phrases

State	Category	Operative phrase in the state constitution
AK	1	"establish and maintain a system of public schools"
AL	I	"foster and promote the education of its citizens in a manner consistent with its available resources" but "nothing in this Constitution shall be construed as creating or recognizing any right to education or training at public expense"
AZ	I	"establishment and maintenance of a general and uniform public school system"
AR	II	Purposive preamble. "maintain a general, suitable, and efficient system of free public schools" (Grubb Category III)
CA	III	Purposive preamble. "encourage by all suitable means"
CO	II	"establishment and maintenance of a thorough and uniform system of free public schools"
CT	I	"shall always be free public elementary and secondary schools in the state."
DE	II	"establishment and maintenance of a general and efficient system of free public schools"
FL	IV	"The education of children is a fundamental value" "It is, therefore, a paramount duty of the state to make adequate provision for the education of all children residing within its borders" for a "uniform, efficient, safe, secure, and high quality system of free public schools that allows students to obtain a high quality education"
GA	IV	"The provision of an adequate public education for the citizens shall be a primary obligation"
HI	I	"establishment, support and control of a statewide system of public schools free from sectarian control"
ID	II	"establish and maintain a general, uniform and thorough system of public, free common schools"
IL	IV	"A fundamental goal" "is the educational development of all persons to the limits of their capacities" "efficient system of high quality public educational institutions and services"
IN	III	Purposive preamble. "encourage by all suitable means"
IA	III	"by all suitable means"
KS	I	"establishing and maintaining public schools"
KY	II	"provide for an efficient system of common schools"
LA	I	"establish and maintain a public educational system"
ME	IV	Purposive preamble. "it shall be [the legislature's] duty to require, the several towns to make suitable provision, at their own expense, for the support and maintenance of public schools"

Operative State Constitutional Phrases

State	Category	Operative phrase in the state constitution
MD	II	"a thorough and efficient System of Free Public Schools"
MA	I	Purposive preamble. "it shall be the duty of the legislatures and magistrates" "to cherish the interests of literature and the sciences, and all seminaries of them;"
MI	I	"maintain and support a system of free public elementary and secondary schools"
MN	II	Purposive preamble. "establish a general and uniform system of public schools"
MS	I	"provide for the establishment, maintenance and support of free public schools"
MO	I	Purposive preamble. "establish and maintain free schools"
MT	II	"develop the full educational potential of each person" "provide a basic system of free quality public elementary and secondary schools"
NE	I	"provide for the free instruction in the common schools"
NV	III	"uniform system of common schools
NH	I	Purposive preamble. "it shall be the duty of the legislators and magistrates" "to cherish the interest of literature and the sciences, and all seminaries and public schools"
NJ	II	"maintenance and support of a thorough and efficient system of free public schools"
NM	II	"uniform system of free public schools sufficient for the education of, and open to, all the children of school age in the state"
NY	I	"maintenance and support of a system of free common schools"
NC	II	Purposive preamble. "means of education shall forever be encouraged"
ND	II	"uniform system of free public schools"
ОН	II	"secure a thorough and efficient system of common schools"
OK	I	"establishment and maintenance of a system of public schools"
OR	II	"establishment of a uniform, and general system of Common schools."

Appendix B (continued)

Operative State Constitutional Phrases

State	Category	Operative phrase in the state constitution
PA	II	"maintenance and support of a thorough and efficient system of public education"
RI	III	Purposive preamble. "promote public schools and public libraries, and to adopt all means which it may deem necessary and proper to secure to the people the advantages and opportunities of education and public library services"
SC	I	"maintenance and support of a system of free public schools"
SD	III	"establish and maintain a general and uniform system of public schools"
TN	I	"provide for the maintenance, support and eligibility standards of a system of free public schools"
TX	II	Purposive preamble. "establish and make suitable provision for the support and maintenance of an efficient system of public free schools"
UT	II	"establishment and maintenance of the state's education systems"
VT	I	"competent number of schools ought to be maintained in each town"
VA	II	"provide for a system of free public elementary and secondary schools" and "ensure that an educational program of high quality be established and continually
WA	IV	maintained" "It is the paramount duty of the state to make ample provision for the education of all children residing within its borders"
WV	II	"thorough and efficient system of free schools."
WI	II	"establishment of district schools, which shall be as nearly uniform as practicable"
WY	II	"The right of the citizens to opportunities for education should have practical recognition. The legislature shall suitably encourage means and agencies calculated to advances the sciences and liberal arts. Purposive preamble. "establishment and maintenance of a complete and uniform system of public instruction"

Extracted from Mills & McClendon, 2000, Appendix I

Appendix C

Validity

The study used the following procedures to check the validity of the belief scores.

- 1. Four peers familiar with the project were asked to evaluate two cases. Three agreed to read the cases, but only two read the cases and returned their scores.
- 2. The volunteers were given copies of the *Rose* and *Campbell* cases, a current copy of the methodology, a score sheet, and the author's analysis of the *Hunt* case as an example. They were asked to read the methodology and the cases, to note quotes which indicated judicial beliefs, and to score the judges' beliefs on the scoresheet.
- 3. The initial round of evaluations is displayed below. The first letter in the column head represents the case or judge: Rose, Wintersheimer, Vance and Campbell. The second letter represents Resources, Entitlement or School's role in society.

Appendix C Table 1
First round validity check

	RR	RE	RS	WR	WE	WS	VR	VE	VS	CR	CE	CS
E 1	4	1.5	1	4	2	5	4	2	4	4	1.5	1
E 2	2	2	1	4	2	5	4	5	2	2	2	1
(E1 + E2)/2	3.00	1.75	1.00	4.00	2.00	5.00	4.00	3.50	3.00	3.00	1.75	1.00
Author	3	2	2	3	2	2	4	4.5	4.5	3	2	2
Difference	0.00	0.25	1.00	-1.00	0.00	-3.00	0.00	1.00	1.50	0.00	0.25	1.00

Although the differences ranged from -3.0 to 1.5, the average difference across all 12 belief scores was 0.08. Considering the maximum average score was 4.333 ((5+5+4)/3), this difference was only 1.79% of the potential score.

4. After the initial round of evaluation, the author sent a copy of his scores to the evaluators to explain his scoring. After reading the author's rationale, the evaluators rescored the cases as shown in Appendix C Table 2.

Appendix C Table 2
Second round validity check

	RR	RE	RS	WR	WE	WS	VR	VE	VS	CR	CE	CS
E 1	3	2	2	4	2	3	4	3	4	3	2	2
E 2	3	2	1	3	2	2	4	5	5	3	2	1
(E1 + E2)/2	3	2	1.5	3.5	2	2.5	4	4	4.5	3	2	1.5
Author	3	2	2	3	2	2	4	4.5	4.5	3	2	2
Difference	0	0	0.5	-0.5	0	-0.5	0	0.5	0	0	0	0.5

Although there were still differences between the evaluators and the author, the net difference in the second round was zero.

5. Delimitations

Clearly this validity check would have been better with more evaluators; however, asking someone to do something as time consuming as reading, evaluating and scoring two court cases requires a substantial sacrifice from the evaluators. Nevertheless, the evaluators' raw impressions during the first round revealed the author's scoring was reasonably close to the mark. The second round might have been better following a conversation rather than simply sharing the author's scores; however, neither evaluator completely agreed with the author even after reading his rationale, but the average of opinions was still remarkably close to the author's evaluation.

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