

ECONOMICS LEFT AND RIGHT:
THE RISE OF ECONOMICS IN FEDERAL EDUCATION POLICY 1957-2002

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ABSTRACT

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Prior to the 1960s, educational purpose was conceptualized both humanistically and pluralistically; educational reform occurred primarily through a process of persuasion and change at the local level; and equality of educational opportunity focused on both quantitative and qualitative resources and, for African-Americans, emphasized desegregation. In *No Child Left Behind*, the only purposes of education explicitly mandated by the Federal government were economic—to address poverty and the increasingly unequal distribution of wealth, especially for minorities, and to make the nation more economically competitive at the global level. Standardized test scores were the only measurement that mattered in terms of the evaluation of teachers and schools and “data-driven” decision making became a necessity. When schools failed to meet ambitious prespecified goals, teachers and local administrators were assumed to be unmotivated, uncaring, or even racially prejudiced.

These dramatic changes can largely be explained by the success of a policy paradigm, particularly at the federal level, based on the ideas, theories, and methods of neoclassical economics. Initiated by the introduction of human capital theory into educational policy in the late 1950s, this paradigm was also comprised of the education production function and the principal-agent theory. The paradigm was supported by various interest groups from both the left and the right for ideological purposes; supporters benefited from what was perceived as the legitimacy of economic research, but economists benefitted as well. Strong political support for the economic paradigm has come from the left and from a body of advocacy research that arose

in the early 1970s known as the Effective Schools Movement. Economists' notions of both the production function and principal agent theory were used by ESM researchers to support the idea that all children were educable to high levels (as measured by standardized tests), regardless of non-school factors, and that differences in academic achievement between racial groups was the fault of the school. The research of economists, often described by its critics as "neo-liberal" or "neo-conservative," has actually been used quite powerfully by those committed to social justice and equality of educational opportunity.

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INTRODUCTION

Today, virtually all national educational leaders acknowledge that economics has become central to educational policy in terms of defining educational purpose—in fact, it is difficult to *not* find references to the economy in public discussions of education. On former president Obama’s website, *The White House*, the strong link between education and economics was not only stressed but was also used as the justification for his administration’s educational reforms and initiatives. His administration explained, “In today’s global economy, a high-quality education is no longer just a pathway to opportunity—it is a prerequisite for success. Because economic progress and educational achievement are inextricably linked, educating every American student to graduate from high school prepared for college and for a career is a national imperative,” (2015). Obama’s Secretary of Education, Arne Duncan, stated in a 2011 Budget Hearing, “...education remains a priority for the Administration due to the critical importance of our education system for our continued economic prosperity” (Duncan). Duncan did not indicate that education was important to the administration for purposes of democracy, the flourishing of the individual, or the undeniably noble pursuit of knowledge; it was seen as worthy of investment because of its relationship to the economy.

Even the country’s largest teachers’ union, the National Education Association, has endorsed a primarily economic purpose of education. In 2010, its foundation published “Human Capital: Unions and School Districts Collaborating to Close Achievement Gaps” in which the focus was professional development for teachers that would enable students to be more valuable to the economy. The NEA also promotes an education finance model known as *Tax, Economic Development, and Educational Funding* in which the arguments for the support of education are

economic, not moral or democratic: “Empirical evidence using regional economic models demonstrates that dollar for dollar, investing in public education grows the economy... We’re in a knowledge-based economy and investing in public education (our human capital) provides a greater return to our economic prosperity than investing in tax cuts and subsidies,” (NEA).

The centrality of economic ideas in education policy might indicate a long tradition of economics within educational policymaking, yet according to historians of economics, the economics of education did not exist until around 1960 (Blaug, 1985; Blaug, 1989; Bowman, 1966). This rapid rise in influence raises several questions: How did economics enter educational policy and come to have such a significant impact on education in the United States? What is the relationship between economic ideas, theories, methods, models, and policy? How were economists able to convince politicians, the public, and policy makers to apply their research to policy? Surprisingly, very little historical research has been done to pursue any of these lines of inquiry or to more deeply understand this significant transformation in educational legislation and government planning.

0.1 Economic Means for Economic Ends

The pervasiveness of economics in education policy today is not simply a result of the research that was done in the late 1950s on the relationship between education and economic growth, which became known as human capital theory. Although the theory did lead to a redefining of educational purpose, it also provided the justification for economists to envision education as an *industry* and to begin devising the artificial means and constructs that would be necessary to “force” education to operate as would a privately owned business. Over time,

economists created a comprehensive and systematic conceptualization of not only what education should be *for*, explained through human capital theory, but what education should *be*, how it should be *produced*, and how it should be *measured*. They insisted, implicitly and explicitly, that in order for education to be good, just, and effective, educational policy must create the constructs necessary for education to operate as though it were a private firm acting within a competitive market. These constructs, comprised of ideas, theories, methods, and models based exclusively on neoclassical economics, enabled economists to approach education as an industry and to advocate for policies that would attempt to manipulate education into operating as an industry.

The paradigm essentially consisted of three core ideas: human capital theory, the education production function, and principal-agent theory. Though technical terms, they provide the foundations for more commonly known concepts and terms such as global economic competitiveness, student achievement, outcomes, high stakes testing, the achievement gap, accountability, teacher merit pay, vouchers, efficiency, and data-driven, all of which are related, even if only implicitly, to at least one of the above economic ideas. The *values and methods* of neoclassical economics were institutionalized through policy frameworks designed around production-functions (and the emphasis on efficiency and the substitutability of inputs they involve), accountability, and choice. From 1957 to 2002 and beyond, this policy paradigm was strengthened within state and federal education law and policy and radically transformed public education in the United States.

0.2 Human Capital Theory

Human capital theory resulted from empirical, quantitative evidence demonstrating that the knowledge and skills that people have learned have a direct correlation with their productivity as workers. The originator of the concept, Theodore Schultz, explained, “The economic value of education rests on the proposition that people enhance their capabilities as producers and as consumers by investing in themselves and that schooling is the largest investment in human capital. This proposition implies that most of the economic capabilities of people are not given at birth or at the time when children enter their schooling,” (Schultz, 1963, pp. 10-11).

Economists today understand human capital theory as an integrated set of models of human behavior and social processes with well understood implications and an associated research program. By the early 1960s, pioneering human capital researchers, including Theodore Schultz, Gary Becker, and Jacob Mincer, had come to share, at least in broad outlines, a conception of the research agenda that arose from adoption of the human capital idea.

Economists had previously paid little attention to the relationship between education and earnings. In 1966, Mary Jean Bowman’s survey of several prominent economic research journals over the twentieth century found 420 articles involving education as investment, but only fourteen of those had been published before 1940 and the majority of them appeared within the decade 1955-1965. This surge of interest illustrates why Bowman described human capital theory as the “discovery of the economic importance of the investment in man,” a discovery she considered significant enough to be called a “revolution in economic thought.”

One reason for the large impact human capital had on economics was that it provided a

solution to the “puzzle” of economic growth that economists had struggled to explain for a number of years. The U.S. economy had experienced extraordinary growth throughout much of the first half of the twentieth century, but using labor and capital as the explanatory variables could only account for part of it. When taking into consideration the recent work that had been done on the relationship between individual earnings and educational attainment, economists were able to create more accurate national growth models. Beginning in the early 1960s, the idea that economic growth could be promoted by improving the quality of the labor force through education became a key element in economists’ analyses of national economic growth, income distribution, and international competitiveness.

Economists became seriously interested in education for the first time following the development of human capital theory, and it was the catalyst for the entrance of economic thought into education policy. According to one scholar, it has “re-theorized” education as a “primarily economic device,” (Fitzsimons, 2015). Perceptions that education and the economy were “inextricably linked” were the reason why education was increasingly seen and marketed, almost exclusively, as the handmaiden of economic growth and as the most desirable means of addressing economic inequality in the United States. It would seem that because economists provided evidence that a significant relationship between education and economic productivity existed, education *should be* used primarily as a means of achieving economic ends. However, implementing the idea of human capital theory into federal education policy would require a radical departure from the federal government’s long-held views on educational purpose and, even more importantly, its role in education.

Because of its premise that the human being should be viewed as an object of investment and that the most significant purpose of education should be to increase that investment, human

capital theory was seen, even by some economists, as being ethically controversial. Claudia Goldin, an economist who has written extensively on the history of human capital theory, explains, “Not that long ago, even economists scoffed at the notion of ‘human capital’...many thought that free people were not to be equated with property and marketable assets. To them, that implied slavery,” (Goldin, 2016). A concern with the moral implications of the theory was also expressed by Theodore Schultz. At a lecture given at the University of Chicago in 1959, he began by acknowledging the resistance to the idea of investing in humans by stating, “...we are strongly inhibited from looking upon men as an investment, except in slavery, which we abhor. Not is it good by our lights for man to look upon himself as an investment, for it too could be debasing...it is understandable why a study of man, treating him as though he were wealth, runs counter to deeply held values, for it would seem to reduce him once again to a material component” (pg. 110). Of course, Schultz was ultimately dismissive of those concerns and concluded that investing in oneself could provide more “choices” and this would “enhance” rather than “impair” freedom.

0.3 The Education Production Function Model

The second core idea that has been essential to the proliferation of economic modes of thought in education policy is the *education production function*, which has deeply influenced conceptualizations of what education is, how it occurs, and how it should be measured. To think about education using the production function concept is to think of learning as a production process in which quantitatively measurable inputs, like resources, teachers’ years of experience, and class-size, are combined to produce “human capital,” a potentially measurable output. This

approach is ubiquitous in educational research and policy; Doug Harris explains, “The education production function (EPF) is implicitly part of any research that attempts to establish a statistical relationship between education resources (e.g., class size) and measures of student outcomes (e.g., scores on standardized achievement tests)” (Harris, 2010, pg. 402).

It is significant that production functions were created by economists to study the production of objects, not humans. Starting in the late 1920s, economists began to use statistical data to estimate production functions to find the actual relationships between the outputs of production and the quantities of measurable inputs used in producing them. By 1960, such empirical or statistical production functions had been estimated for the manufacturing sector taken as a whole, for particular industries, for different types of farms and agricultural processes, and for the entire private economy. Production functions were believed to reveal information about the relative productivity of different inputs (e.g., how much additional output would be produced in the economy if the employment of labor were increased by 5%; how much more wheat could be produced if wheat acreage were increased by 10%), and were used to answer questions about the nature of efficient production in a particular firm or industry, as well as the factors contributing to the nation’s overall rate of economic growth (Biddle). However, as the economist Stephen Heyneman pointed out in 1995, economists have somewhat naively assumed that what worked for a sector such as agriculture would also work for education. Highlighting the problem of using production function on processes involving subjects, not objects, he explained, “Economics is more successful in estimating production functions when there is a single product (e.g., rice), and when the influences on productivity are physical. The difference between a classroom and a farm is that soils do not depend upon motivation” (p. 568).

Economists who apply the production function to education freely admit that while it is

“simple in theory, it is very complex in practice” (Brewer, Hentschke & Eide, 2010). Brewer and Hentschke provide a long list of the limitations of this method of conceptualizing and measuring education. They write, “For example, it is hard to identify and measure all inputs and outputs of schooling. Multiple outputs (e.g., basic skills, vocational skills, creativity, and attitude) are valued, may accrue in a cumulative manner, and may only be discernible many years into the future. Inputs can be hard to measure, and the dimensions most easily measurable may not capture the important features of that input adequately...” (). However, though these economists acknowledge a plethora of limitations, they support its centrality in the research and policy fields. Eric Hanushek, one of the first proponents of the use of the education production function in policy formation, wrote in 1979 that there was no reason to think that the production of test scores should be viewed any differently than the production of steel.

The correlation between the increasing use of the education production function in research and policy and the rise in the demand for standardized test scores is not a coincidence. Test scores were seen by economists of education as appropriate outcome measures in an education production-function because of their ability to serve as a proxy. A proxy, commonly used in empirical research in both the natural and social sciences, is “A variable that can be used as an indirect estimate of another variable with which it is correlated,” (OED). Throughout the latter half of the twentieth century, it became increasingly common to assume that standardized test scores were a legitimate substitute measure for something that is, in and of itself, extremely difficult to measure quantitatively: the quality of education a student receives, or the increase in the student’s human capital that results from education. Economists were initially interested in standardized test scores because they were seen as proxies for measurements of future earnings. However, the sort of earnings data needed to properly serve these purposes was difficult to

collect, and test scores quickly came to be seen as the most practical substitute measure of what was produced and enhanced by education, including other intangibles such as global economic competitiveness, the potential for economic growth, or future income. Thus, educational outcomes serve as a double proxy: they are assumed to be a legitimate substitute measure for both the quality of education a student has received *and* for future economic success.

0.4 Principal-Agent Theory and Model: Incentives and Accountability

Arguably the most complex of the three economic ideas, the application of principal-agent theory and model to education policy has also been the most controversial contribution made to education policy by economists. Unsurprisingly, economists have also less clearly articulated its assumptions and values and preferring to use the terms “incentives” and “accountability” to implicitly draw upon this theory.

Principal-agent theory is an attempt to explain and address problems that can result in organizations when one person (the principal) assigns a task or duty to another (the agent) who is expected to complete that task or duty. Problems can arise for two reasons: the principal and the agent have conflicting goals or it is difficult for the principal to observe what the agent is actually doing. Economists began developing this theory in the late 1960s and early 1970s (Eisenhardt, 1989) and evidence of its influence in educational policy can be found starting from that time.

This model is the chief framework through which economists analyze the issue of accountability and the theory led them to the belief that rewards and punishments for teachers are necessary to incentivize them to produce the desired academic outcomes in students.

Principal-agent theory is what led economists to believe that teachers, although extremely important in creating the desired outcomes, are also highly problematic from an operational perspective. In fact, it is because they *are* so important and yet also so hard to control that they are so problematic. Teachers have their own beliefs and motivations, work behind a closed-door, and see the process of education dramatically differently than economists.

The model inherently stigmatizes teachers and administrators, in the sense that its fundamental assumption is that unless properly monitored or motivated by external incentives, teachers and administrators will act in their own interests rather than in the interests of students and their parents (Figlio & Rouse, 2006; Ladd & Glennie, 2001). In the words of two prominent economists: "...school administrators and teachers may underperform because the state policymakers do not have a good means of monitoring them. It follows that student achievement would improve if state policymakers could monitor the teachers and school administrators more effectively" (Figlio & Ladd, 2008, pg. 375).

This model supports the belief that rewards and punishments for schools, administrators, and teachers are the best methods for producing the desired academic outcomes in students. The principal-agent model has also provided the logical foundations for arguments in favor of school choice and privatization—economists reason that part of the problem in public education is that schools and teachers are not in a competitive environment, so artificially creating competition is actually a method of controlling the behavior of teachers and local administrators through policy. As Daniel Koretz states, "The shift from using tests for information to holding students or educators accountable for scores is beyond doubt the single most important change in testing in the past century...it is not an exaggeration to say that it is now the cornerstone of American educational policy." (2009, pp.57-58).

0.5 Economists Articulate the Paradigm

As early as the 1960s, several economists of education had envisioned the outlines of a comprehensive approach to education (Heller, 1962; Benson, 1965). In 1981, Hanushek described a new education paradigm, which he called a “conceptual framework,” for approaching educational policy. The conclusions he drew, and his remedies for repairing what he considered to be the failing education system, were based on approaching education as an industry. In this approach, “problems” are either the problems that would naturally occur in an industry or they are the problems that arise when trying to manipulate or engineer education (and those involved in the educational process) into behaving as though education were an industry. For Hanushek, the questions became about how to see education as a measurable product with monetary value, how to make the product most efficiently and cost-effectively, and how to get teachers and local administrators (as employees) to behave in the way a business owner would want them to. Hanushek argued that conceptualizing education in these terms would bring coherence to the field of educational research as well as policy.

However, artificial constructs would need to be created, through policy, because education was significantly different from private industry in several ways. One of the most obvious differences was that educational outcomes were not “produced” in the competitive, market-based context of private industries. Competition was missing, and competition was a key assumption underlying the use of the production-function as an analytical tool. Without a competitive context, there was no incentive for actors to behave efficiently. Economists defined efficiency in terms of the outputs produced by a combination of inputs; from this point of view, any decisions or actions taken, by actors ranging from top-level policy makers to teachers, that

did not raise standardized test scores and/or decrease costs, was considered inefficient. In 1981, Hanushek stated, “The conclusion is simple. Schools appear to operate quite inefficiently in that they spend money on factors that do not consistently raise achievement” (pg. 204). Following the logic of economists, in the absence of competition, education was not being produced efficiently. The missing ingredient, they believed, was incentives. The problem then became how to incentivize teachers and school administrators to behave more efficiently, so as to raise achievement outcomes, particularly for minority students. Economists’ recommendation that school personnel be provided with incentives, in the form of rewards for evidence of efficient behavior and punishments for evidence of inefficient behavior became a central part of discussions of accountability in the education policy community, and test scores came to be regarded as the best evidence of efficient or inefficient behavior upon which to base the rewards and punishments. The education production-function became a tool in which test scores were used not only to provide a description of student achievement, but to evaluate educational policies and programs, that is, to evaluate their success (efficiency) in raising test scores. Economists’ faith in principal-agent theory led them to also advocate for another purpose for test scores: to be used as an incentive by holding schools and teachers accountable for the test scores of students. Over time, as economists have increasingly influenced the shaping of policy, they have created an unprecedented demand for standardized test scores.

However, the purpose of this dissertation is not just to describe the economic paradigm that has defined educational policy in the 21st century, but explain how it originated and gained preeminence. There are three contextual factors that supported the rise of the economic paradigm: an inherent tendency within the discipline of neoclassical economics to seek complete control over the fields to which it is applied, often described as *economics imperialism*; through

its broad political appeal, and through its ability to borrow and loan strength from and to political forces and ideologies.

0.6 Economics Imperialism

Economics imperialism, which is a term used by its apologists as well as its critics, refers to the application of economic methods and approaches to an increasing number of non-economic areas (Lazear, 2000; Fine, 2000; Fine 2002). This phenomenon has occurred in educational policy and it is now commonplace for discussions of educational policy to draw heavily from the methods, assumptions, values, and even conceptual metaphors used by economists (Allais, 2012; Ellison, 2014; Gilead, 2014).

Considering the extent to which economics now drives educational policy and research, the concept of *economics imperialism* is remarkably underexplored in educational research. To my knowledge, the first to apply *economics imperialism* to educational issues was Stephanie Allais in 2012, in '*Economics Imperialism, Education Policy, and Educational Theory*, in which she emphasized the ways in which outcomes-based frameworks “mimic” economic ideas. In 2014, Scott Ellison published an article provocatively titled “Attack of the Cyborgs: Economic Imperialism and The Human Deficit in Educational Policy-Making and Research Methods.” In addition to encouraging educational scholars to interrogate the ubiquity of economics in educational policy, he argues that the economic approach in policymaking and research has resulted in a kind of anti-humanization of education. In particular, the educational philosopher Tal Gilead has published a number of articles on economics imperialism and on theoretical aspects of the economics of education more generally. His work is helpful because it describes

the phenomenon theoretically that I wish to explore historically. He describes economics imperialism in educational policymaking in the following way:

Most significantly, as a result of the development of human capital theory in 1960s, the potential economic effect of education was established and quickly modeled in orthodox economic theory. Consequently, a much tighter link between education and economic thinking was forged as educational policy was increasingly seen as an essential ingredient of economic policy. In the last few decades, however, the use of theories and methods developed within orthodox economics in the educational domain has been extended much further. Orthodox economic methods and theories are now employed to study issues that are related loosely and indirectly, if at all, to the workings of the economic system. For example, many economists currently examine questions that pertain to educational improvement using economic methods and make far-reaching claims regarding teaching methods, curriculum, teacher training, and many other aspects of education that have nothing to do with pecuniary matters. (2014, pg. 354)

Outside of education research, economists such as Gary Becker, Edward Lazear, and George Stigler have celebrated the phenomenon while the Marxist economist Ben Fine has been one its most prolific critics (Hirshleifer, 1985; Lazear, 2000; Fine, 2000).

In the case of economics imperialism in education, an acceptance of economic goals led to an increased willingness to accept the *means* advocated by economists for achieving those ends. While the influence of economists on educational purpose is widely known, their influence on the construction of policies themselves is less obvious. The vast majority of the public is unaware of the ways in which these three core ideas discussed above provide the conceptual and methodological framework for the issues that currently drive educational policy.

0.7 A Note on Neoliberalism

What has not been neglected in educational research is a phenomenon called *neoliberalism*. However, I have chosen to not use the term nor to draw heavily from scholarship focused on neoliberalism for several reasons. The first is that in the field of educational research, the term has been applied so loosely that it has lost much of its specificity of meaning. I agree with Rowlands & Rowalle, who state: “Despite the frequency with which the concept of neoliberalism is employed within academic literature...there is a tendency in educational research to make extensive use of the word ‘neoliberalism’...as a catch-all for something negative but without offering a definition or explanation” (pg. 263).

In addition, when specific definitions are provided, neoliberalism seems to describe a phenomenon that could also be called "capitalism imperialism," in which free-market ideologies are applied to political and institutional processes. David Harvey defines the concept in this way: “Neoliberalism is in the first instance a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets and free trade” (2007, pg. 2). Critics of neoliberalism oppose the reshaping of political institutions to resemble markets; my critique extends beyond this and involves *methods* that are inherently more expressive of *scientism* than capitalism. Marxist, neo-Marxist, and leftist economists such as Martin Carnoy, Samuel Bowles, and Henry Levin, as well as neoclassical economists such as Eric Hanushek and Caroline Hoxby, conceptualize education as a production process involving measurable inputs and outputs, assume educational purpose to be primarily economic, and support economistic accountability measures—all methods that are highly

dependent upon standardized outcome measures. While some aspects of the current reform movement must be considered neoliberal, such as the “choice” movement of charter schools and school vouchers, as well as the privatization of previously public education-related industries, it is misleading to associate an emphasis on test scores with capitalism, as do many critics of neoliberalism (Lissavoy & McLaren, 2003; Apple, 2007; Au, 2008).

0.8 Bi-partisan Support and the Mutual Borrowing of Strength

A paradox of the economists’ agenda (and of neoliberalism) was that to make public institutions more market-like, the market-mechanisms had to be artificially created by the government. So, while the economists’ agenda promoted approaching education as an industry, such an approach is dependent upon both the government and their own technical expertise. Republicans and neo-liberal Democrats were attempting to serve two masters, in a sense, because they wanted both the benefits of the market *and* the benefits of the publicly funded institution of education. With accountability, they were able to persuade themselves that schools could have both: more “freedom” and better results.

Just as economists from various orientations have supported neoclassical approaches to educational policy, political support for economics-based reforms has come from both sides of the spectrum. A central argument of this dissertation is that the discipline of neoclassical economics has been able to gain so much power because its core ideas have been seen as useful for politically and economically diverse, even antithetical, reasons. Economics imperialism has occurred in educational policy because political interests on both the left and the right borrowed strength from the claims of scientific objectivity made by economists, while economists

borrowed strength from their movements.

Economists of education made a deliberate effort to apply the ideas and methods of their field to educational policy and to significantly influence policy decisions. However, there were many educational leaders and organizations on the political left and right who supported the economists' agenda for various reasons, and the origins of economics imperialism in education came from the left. Three of the four policies I examine were initiated by Democratic presidents and a large segment of what can loosely be called the "social justice movement" has been, and continues to be, supportive of high stakes testing and accountability (Skrla, et. Al., 2001). In order to tell the story of the rise of economics in education policy, it is necessary to explain how the ideas and values proffered by economists of education appealed to what are often considered to be oppositional political and economic positions. Economics of education has, since the 1960s, served the economic and political ideologies of both the right and the left. While neoclassical economics has inarguably influenced the more recent movements of school choice and privatization, the concepts of human capital theory, the education production function, and incentive plans for educators were first integrated into federal policy agendas prioritizing social justice as well as national economic growth.

Education policy has been transformed by those who accepted the neoclassical economics paradigm, including governors and state and federal legislators, civil rights activists, business interests, think tanks, and foundations. Economists themselves became political entrepreneurs and emerged from the shadows of research into the political sphere in the 1990s. Their ideas have become diffused throughout education policy at all levels. Unlike neoliberal accounts of the problems with education today, this is a story without a villain. Or, if there is a villain, it is the hubris implicit in attempting to impose a totalizing and monolithic form of

knowledge onto an area of, admittedly, bewildering complexity. If the ultimate aim of education policy truly is to improve the lives of citizens, it is critical that those who design and make policy are experts in the forms of knowledge that will enable wise decision making.

CHAPTER ONE

“The Revolutionary Idea of the Investment in Man”

Educators and the public had been aware of the relationship between education and future income for decades, if not centuries, before economists developed the theory of human capital (e.g., Goldin & Katz, 2010; Spengler, 1977). However, this recognition differed from the economists’ theory because, prior to Schultz’s interpretation of his research, education was understood to be for humanistic purposes.¹

In fact, the economist M. J. Bowman considered the development of human capital theory to be a revolution because, for the first time, a purpose distinct from humanistic ends had been discovered. Previous economists, such as Adam Smith and Thomas Malthus, had written about education, but “they were concerned with education for the betterment of man, not for the creation of human resources,” (pg. 113). Bowman saw this as a triumph and she claimed “the last bastions of the sacredness of education have been shaken...it is becoming respectable to say out loud that one of the most important things education can do is raise human productive capacities” (1966, p. 132).

Throughout the first half of the twentieth century, federal and state governments, as well as national educational organizations, the media, and the local communities which supported and

¹ Liberal humanism arose in Italy in the fourteenth century through a rediscovery of Greek and Latin philosophy, poetry, and drama. Throughout the middle ages, the Church had been the center of knowledge and social organization, but the ideas expressed in the works of classical authors led to a heightened interest in exploring human ideals from a secular (not atheistic) perspective. While this movement took many variations and eludes a simple definition, the ideals of classical humanism and liberal humanism guided many leading educational thinkers in the nineteenth and early twentieth centuries in the United States. To explore all of the reasons why this approach has become virtually extinct in educational thought is beyond the scope of this work, but it is clear that the neoclassical economic paradigm replaced humanism(s) as a guiding principle for federal policy beginning in the 1960s.

funded their local schools took it for granted that there were many quantitative and qualitative, tangible and intangible, reasons why education was valuable and the recognition of an economic benefit to education was not seen as threatening to the humanistic purposes of education. In 1918, the National Education Association issued a statement regarding the purposes of education, known as the Cardinal Principles, which became the driving force behind the movement for the comprehensive high school. The seven objectives they identified for secondary education were “health, command of fundamental processes [cognitive skills], worthy home-membership, vocation, citizenship, worthy use of leisure, and ethical character” (1918, pp. 10-11). In “The Money Value of Education,” a bulletin issued by the Bureau of Education in 1917, the author A. Caswell Ellis, a philosopher of education, stated: “The most valuable result of right education is the broadening, deepening, and refining of human life. This result can no more be measured by dollars and cents than truth, self-sacrifice, and love can be made out of pork and potatoes,” (Ellis, p. 5).

In discussions of educational purpose in the first half of the twentieth century, educational reformers competed for influence with state and local administrators and educators. Local policies played a much greater role in education policy than did state or federal policies. Those who advocated social efficiency and progressive education attacked the views of the traditionalists, who advocated a liberal arts education, but these camps worked through means of persuasion at the local level (Tyack, 1974; Tyack & Cuban, 1995).

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An example of the humanistic approach to education from a policy perspective can be found in the publications of the Educational Policies Commission, an organization that existed

from 1936 until 1968.² Founded by the National Education Association out of concern for the effects of the Depression on public schools and comprised primarily of highly respected educators, its purpose was not to administrate or evaluate, but to carefully consider education holistically and humanistically and to influence educational thought through persuasive reasoning. According to Wayne Booth, the group “intended to relate ‘educational problems to their economic, social, and political settings’” (2005, pg. 7).

The EPC differentiated between policy-as-practice and policy-as-vision. In 1961, the Secretary of the commission explained that policy-as-practice was executed by lawmakers, superintendents, school board members, and communities. The primary purpose of the commission, on the other hand, was to provide vision and guidance. The value of the commission was that it was dedicated to thinking wisely about education, in the words of Secretary Russell, “Wisdom in policy requires a set of conditions not easy to obtain in American education. It is to ensure these conditions that policies commissions were brought into being,” (1961, pg. 22).

Perhaps the most fundamental issue in policy thought is not what is the purpose of education, but what does it mean to be a human being? The Educational Policies Commission conceptualized human beings as rational, political, economic, social, ethical, historical, and creative and published dozens of reports in which they explored the relationships between education and of these human dimensions. In contrast, neoclassical economical economics conceptualizes the human being as essentially self-interested, ahistorical, and calculatingly rational. In 1942, the classical humanist Richard Livingstone warned that without a deeper

² Its members, 170 of them over the thirty-two year period in which it existed, were comprised primarily of K-12 educators recognized for excellence in their profession, but also included *ex-officio* leaders of the NEA, professors of education, and college presidents (Booth, 2005).

understanding of what it means to be a human being and what human needs are, which he described as a “spiritual idea,” society would have no alternative to the worship of materialism. “Our real problem lies deeper than politics, science, or economics, and in the absence of a spiritual idea, we shall never solve it. If we go on as at present, we shall probably decline into an economic religion, worshipping material prosperity in a more or less refined form. Such a religion is inglorious, and because it does not satisfy the deeper needs of human nature, short-lived,” (Livingston, 1942, pp. 112-113).

A humanistic approach, however, does not reject the material or the economic. The EPC saw the issue of economics, both in terms of school finance and human capital development, as one of great importance, and its members published several reports focused on these issues, including “The Economic Basis of Education” (1938), “Education and Economic Well-being in American Democracy” (1940), and “Manpower and Education” (1956). However, economic considerations were not the most important purpose of education and it is significant that the group’s first publication, “The Purposes of Education in American Democracy,” largely written by the historian James Beard in 1938, was about the relationship between education and democratic citizenship. The commission also wrote reports such as “Education and the Morale of a Free People” (1941), “Moral and Spiritual Values in Public Schools” (1951), and “The Central Purpose of Education” (1961).

According to the commission, the ultimate purpose of education was for society to “transmit what they think is good to all the generations to come”(1938, pp.1-2). To the writers of the report, education was not primarily for the acquisition of information, but about developing the attributes of what they agreed were historically situated ideals. Tests, they pointed out, which only measured the acquisition of information, were poor measurements of what were the most

important values society wanted to instill in youth. In the following passage, the writers of the report gave an eloquent description of what they believed education should be primarily concerned with:

Most of the standardized testing instruments [and written examinations] used in schools today deal largely with information. . . There should be a much greater concern with the development of attitudes, interests, ideals, and habits. To focus tests exclusively on the acquisition and retention of information may recognize objectives of education which are relatively unimportant. Measuring the results of education must be increasingly concerned with such questions as these: Are the children growing in their ability to work together for a common end? Do they show greater skill in collecting and weighing evidence? Are they learning to be fair and tolerant in situations where conflicts arise? Are they sympathetic in the presence of suffering and indignant in the presence of injustice? Do they show greater concern about questions of civic, social, and economic importance? Are they using their spending money wisely? Are they becoming more skillful in doing some useful type of work? Are they more honest, more reliable, more temperate, more humane? Are they finding happiness in their present family life? Are they living in accordance with the rules of health? Are they acquiring skills in using all of the fundamental tools of learning? Are they curious about the natural world around them? Do they appreciate, each to the fullest degree possible, their rich inheritance in art, literature, and music? Do they balk at being led around by their prejudices? (EPC, 1938, pp. 153-154).

1.1 Benevolent Detachment: The Federal Role in the Early Twentieth Century

During the rise of public education in the United States, beginning with the common school movement and progressing to nearly universal secondary school attendance, the federal government explicitly refrained from attempts to acquire authority over the administration of education. For over a century, the federal government accepted that education was a state and local responsibility, based on the principle that education was one of the “unspecified powers” referred to in the tenth amendment of the Constitution. Each state passed its own laws concerning the organization of the school system, teachers, schools, and finances, and these laws revealed differences between states in terms of values and perceptions of educational purpose. For example, Maine, around the turn of the twentieth century, stipulated that “all professors and instructors . . . are enjoined to impress upon their pupils the principles of morality and justice, the love of truth, country, humanity, industry, and frugality, as tending to preserve republican institutions and social and individual happiness, and public school teachers are required to consume not less than ten minutes each week in teaching their pupils kindness to birds and other animals” (US Bureau of Education 1896, pg. 1065). The federal government supported and endorsed a view of the multifarious nature of educational purpose, assuming that state and local governments were in the best position to make those decisions.

In 1910, the United States Bureau of Education published five types of information: annual statements of the commissioner, annual reports, official and informative circulars, bulletins, and miscellaneous items; by 1938 there were thirty-five categories of Bureau of Education publications (US Bureau of Education 1940). These materials promoted multiple purposes for education and did not attempt to provide or name a singular reason for why the

bureau supported the states in their attempts to expand and improve education. Local administrators and teachers were given access to information on a wide range of topics and from a variety of perspectives to aid in the development of locally designed policies and practices, but there was no requirement that specific policies be adopted.

Through the production and dissemination of educational research and data, the Bureau of Education expressed its broad interest in education and made recommendations regarding improvement, while also acknowledging a clear boundary between support and control. Information and data were provided by the federal government to be used only if administrators at the local level found them to be relevant and useful. In addition to providing research and information believed to be helpful in meeting the needs of local school districts, Congress periodically passed legislation to provide funds for education. However, these grants were only provided for very specific and often short-term purposes, with the assumption that state and local administrations knew how best to use the funds.

When presidents did express their views on educational purpose, what was of primary value was the relationship between education and democracy. The *Truman Report*, focused on higher education, described an increased federal investment in education as an essential means of meeting the needs of democracy (Ayers, 1991). Truman saw the purpose of the commission as the examination of “the functions of higher education in our democracy,” and maintained that “Only an informed, thoughtful, tolerant people can develop and maintain a free society” (Truman, 1946; Hutcheson, 2007).

Until the late 1950s, there was little indication that federal politicians or economists believed education to be a means of achieving economic national goals. President Franklin D. Roosevelt resisted federal funding for education and did not see education as a means to ending

poverty. Instead, his statements revealed that he saw education as an economic effect, rather than an economic cause. In 1940, he told the public:

But I suggest to you that the Federal treasury has a bottom to it, and that mere grants-in-aid constitute no permanent solution of the problem of our health, our education, or our children, but that we should address ourselves to two definite policies: first to increase the average of incomes in the poorer communities, in the poorer groups, and in the poorer areas of the nation; and second, to insist that every community should pay taxes in accordance with ability to pay. (quoted in Grassmuck 1984, pg. 190)

He believed that higher incomes and a more equitable distribution of wealth would naturally lead to improvements in education in formerly poor areas.

Even the majority of economists supported this view at the time. Advocates of federal funding for education were primarily educators themselves, not economic policy advisers; as has been noted, economists did not spend much time thinking about education. In 1945, Merwin Hart, president of the National Economic Council, testified against a proposed increase in federal funding for education in Senate hearings, “I oppose this bill, because I believe it would result in undesirable Federal control over education; because it would add by just so much to the bureaucratic burdens already borne by the people.” Hart's testimony gives no indication that he believed there was any compelling reason for federal involvement in education.

It was during the Eisenhower administration that the Federal government began to realize its own purposes for education, although this first had to do with the issue of national defense. In 1958, after the launch of Sputnik by the Soviet Union suggested an important connection between military security and education, Eisenhower proposed, and Congress passed, the National Defense Education Act, which provided federal funding for programs to improve

science education on the strength of an argument linking education to national defense. Even though the act contained provisions restricting federal control over education, for the first time federal interest in a singular educational purpose for a federal goal could be defended by an appeal to the Constitution.

It was at this moment that the economist Walter Heller made his debut before Congress as an advocate for increased spending on education, asserting that financial support of education was, by logic and by law, a responsibility of the federal government. Schultz's human capital theory, with its proposed link between spending on education and economic growth, allowed Heller to strengthen his argument. While state and local educational administrators had always seen educational purpose in terms of local goals, Heller urged the federal government to view education as a tool for meeting two important national priorities: national defense and economic growth.

1.2 Walter Heller, the Human Capital Idea, and Education as Federal Responsibility

Walter Heller played a key role in bringing the human capital idea into discussions of education policy. For Heller, Schultz's redefinition of education as investment in human capital, and his hypotheses about the relationship between human capital accumulation and aggregate economic growth, formed the basis for arguments that funding for education should be increased and that the federal government was responsible for providing that increased funding. Three assumptions that today underlie education policy discussions in the United States are that the federal government has an important role to play in both funding and regulating public education, the central purpose of education is to increase students' future productivity and

earnings capacity, and economists possess expert knowledge that gives them important insights into the educational process. These assumptions were not widely accepted in education policy circles in the 1950s; that they are so now is at least in part due to Heller's successful promotion of Schultz's human capital idea.

Walter Heller earned his PhD in economics from the University of Wisconsin. He spent most of his career as a professor of economics at Minnesota, but he also had an active and successful career as an economic policy adviser. Trained as a specialist in public finance, he held several positions within the US Treasury Department, was involved in the development of the Marshall Plan of 1947, and was a consultant on currency issues in postwar Germany. However, it was during his time as chairman of the Council of Economic Advisers, a position he held from 1961 to 1964 under Presidents Kennedy and Johnson, that he achieved his greatest successes. Heller, who called himself an “educator of presidents,” was particularly successful politically because of his impressive ability to translate the concepts of academic economists into policy-relevant arguments understandable to politicians as well as the public (Heller 1966; Kilborn 1987). Alan Greenspan called him a “major contributor if not the father of modern economic policy-making” (Kilborn, 1987). He is probably best known for his work in shaping and helping to promote President Kennedy's plan to stimulate the economy by cutting income tax rates. What is less well known is that Walter Heller was the key actor in bringing the recently developed theory of human capital into discussions of federal economic policy, and in identifying educational policy as form of economic policy. While the federal government had long acknowledged the abstract moral and social benefits to public education, Heller encouraged politicians and policymakers to view education through the lens of human capital theory, in which education was a means to achieve national economic goals. He did not argue explicitly for

a change in educational purpose, although the change was implicit in the new paradigm, but focused instead on the issue of federal funding for education using two economic concepts: human capital and externalities.

Heller's public advocacy for an increased federal role in educational funding can be found as early as November 1957, when he appeared before a subcommittee of the Joint Economic Committee of the US Congress. Heller was one of a large number of public finance specialists invited to speak and submit papers on matters related to determining the appropriate scope and form of federal fiscal activity. The paper Heller submitted was a lucid summary of then-current economic thinking on principles for “dividing resources between public and private use” (Heller 1957). The hearings themselves, however, took place a few weeks after the launch of Sputnik II and this led Heller to use his remarks to expand on a point from his paper regarding the need for government action in cases “where there are important third-party benefits . . . which accrue to others than the direct beneficiary of the service as in the case of education” (Heller, 1957, pg. 94). The federal government, he argued, should provide funds for education because the quantity of “brainpower” needed to compete with the Soviet Union would not otherwise be forthcoming. In essence, Heller was arguing that education generated a positive externality, and one sees in this passage from his testimony his ability to present clearly and persuasively what was then a little understood economic idea:

How do we translate the Soviet scientific challenge into economic guideposts for government budgetmakers? First, under the impacts of Sputniks I and II, we have become dramatically aware of our position- the position of all of us- as indirect or third-party beneficiaries of scientific training and basic research (and their broad underpinnings of general education). Russian scientific and military advances have greatly magnified the

size- as well as our awareness- of these indirect benefits that do not show up as economic advantage to particular individuals and therefore do not show up in the market prices which the private buyers of scientific brains and basic research are willing to pay. The only economic instrumentality (apart from philanthropic foundations and the like) that is able to fully assess and pay for these indirect benefits on behalf of all of us is the government. It and it alone can take the full benefits into account and balance them against the costs to arrive at the correct decision as to where our maximum advantage lies in the economic use of our national resources. ()

According to Heller, federal aid would ensure that the United States would be in a position to compete with the Soviet Union in terms of scientific and technological knowledge. In addition, Heller stressed that the federal government, rather than states or local school districts, should provide these funds since “the indirect benefits to be weighed transcend all State and local lines.”

The answer to how Heller was first exposed to the human capital metaphor of education as an investment or the hypothetical link between such investment and economic growth remains elusive. Though Schultz did not introduce his ideas on human capital publicly until 1959, he had talked about them with other economists before that. Schultz and Heller were both chairs of leading economics departments in the late fifties, and both were sought out by organizations desiring the advice of prominent economists (for example, both were associated at various times with the Committee for Economic Development). Regardless, by spring of 1958, when Heller was retained as an economic expert by the National Education Association, the human capital metaphor of “education as an investment,” and the link between investment in education and growth had both become important parts of his thinking about education policy and economic policy.

1.3 The National Education Association Borrows Strength from Heller's Arguments

The NEA, which began as the National Teachers Association in 1857, had actively sought federal funding for education from its very beginning, although it had been largely unsuccessful. By 1958 the NEA included 700,000 teachers, was the largest professional organization in the world, and was “a combination research organization, trade association, and labor organization” (West, 1980). After decades of failure, the organization’s board of directors claimed federal funding for school buildings and teachers salaries as its major legislative objective, and the organization as a whole became increasingly politically active and aggressive regarding this issue (Sundquist, 1968).

In 1958, Congressmen James Murray and Lee Metcalf introduced the NEA’s latest bill, the Murray-Metcalf Bill, which was a multi-million-dollar program of aid for school construction and teachers salaries. To the NEA, after so many years of failed attempts, the new approach that Walter Heller brought to the issue of federal funding represented a new opportunity to advance their cause. In hearings on the bill, Lyman Ginger, the organization’s president, introduced Heller with the following statement: “We value his opinions very highly, and we feel that he can give us excellent information about this program,” (Ginger, 1958, pg. 70).

In December of 1959, Heller published an article titled “The Economic Outlook for Education” in *The National Education Association Journal*, the organization’s journal for teachers and administrators. He explained the basic premises of human capital theory, including the value of measurable inputs and outputs and the idea that education could be and *should be* thought of as an investment rather than as something of value in and of itself (known as a

consumption good by economists). Although he acknowledged purposes of education that were not economic, he simultaneously dismissed them by pointing out that they were often difficult to measure. Heller seemed to assume that educators would continue to focus on other non-economic purposes, but he attempted to persuade practitioners to also accept that education was both measurable and of profound economic importance.

For the next several years, Heller repeatedly appeared in Congress on behalf of the NEA and he served as their consultant in 1958 and 1959 (Heller, 1958; Heller, 1959). During 1958 and 1959 Heller would introduce the human capital idea to Congress on the association's behalf. In an interview years later, he described the enthusiasm they showed for human capital theory: "It was a new concept to them, they just loved it - the idea that one could think of education as an investment," (Crichton, 1987).³ It is not difficult to see why the association loved the concept. By associating education with the most important political issues of the day, national defense and economic growth, the human capital metaphor could give education new prestige and importance at the federal level, and provide an additional justification for federal funding of education.

In April 1958, Heller testified before the House Subcommittee on General Education of the Committee on Education and Labor, which was holding hearings on a proposed program of federal grants to be used by the states in support of education. Heller testified along with, and in support of, National Education Association president Lyman Ginger. While Heller had only briefly alluded to a possible relationship between economic growth and education in his 1957 testimony, Ginger's remarks to Congress in 1958 indicate that Heller had by then absorbed, and

³ Heller's recollection of the NEA leadership's enthusiasm is confirmed in several letters received from NEA officers after his first Congressional testimony on their behalf in April of 1958. (Robinson to Heller, May 2; Lambert to Heller, May 1st, Ginger to Heller, May 5th; all in folder "National Educational Association Correspondence, 1958-1959", Box 1, Walter Heller papers, University of Minnesota Archives).

conveyed to Ginger, the fundamental tenets of Schultz's notion of education spending as a growth enhancing investment in human capital and the idea's potential as a basis for advocating greater federal involvement in education.

Ginger told Congress that his and Heller's testimony would demonstrate “that we as a nation are underinvesting in the education of our children, and thereby retarding our economic growth and limiting our defense potential,” and that the federal government, given its “assigned responsibilities for national defense, foreign policy, economic growth, and general welfare,” should correct this problem (US Congress, House, 1958, p. 70). He made the comparison between investment in physical capital and investment in human capital, noting that the latter's importance had only recently come to be appreciated. He asserted that education was “the most fundamental of all sources of economic growth,” and that increased spending on education was “one of the best ways of insuring that our economy will grow at an annual rate of 4 or 5 percent instead of dropping back to the 3 percent growth rate.” In a chart titled “Education as an Investment,” he showed the sort of evidence relating educational attainment to earnings levels that Schultz would later cite in his early public addresses on human capital. There were several references to the Soviets, including their recognition of the “strategic role of education in the development of military and economic power.” Ginger also repeated Heller's externality argument of 1957 (US Congress, House, 1958, pp. 71-78).

Heller's main role at the hearings was to provide expert testimony in support of Ginger's assertion that many states were inadequately funding education, and that the federal government had sufficient excess fiscal capacity to provide states with the levels of financial support stipulated in the proposed bill. Heller did, however, take an opportunity to reiterate a key point of Ginger's testimony: that the federal government had a constitutional responsibility for national

defense, and a statutory responsibility (under the Employment Act of 1946) for promoting economic growth, both of which gave it a “direct responsibility for improved education for our school children,” (US Congress, House, p. 84).⁴

In February 1959, the same subcommittee held hearings on a revised version of the bill, now known as the Murray-Metcalf Education Bill. This time, Heller was the lead witness for the National Education Association. He repeated Ginger's message about the link between education, economic growth, and military superiority. An exchange with Congressman Frank Thompson of New Jersey, which seems likely to have been planned in advance, allowed Heller to make the sort of rate of return comparison that Schultz recommended to assess the advisability of public investments in human capital. Thompson asked if there were data available that related a person's education to how much he earned over his lifetime and how much he paid in taxes. “I suggest this line,” Thompson explained, “because in public works projects, for instance, in which the Federal Government has a great interest, one sells projects on the basis of the return ratio. Why cannot the same standard be used in this case.” Heller's assistant handed him the same data on education and earnings that Ginger had presented in 1958, and, after noting some shortcomings of the data for the purposes of addressing Thompson's question, Heller proceeded to read the list of education levels and corresponding median incomes to the committee. “It would occur to me,” Thompson then exclaimed, “that the return ratio in terms of investment and return would be pretty healthy.” Heller concluded the scene by observing that “it looks like a very good return on investment compared with, say, common stocks or bonds or a lot of other things that one could

⁴ Drafts and notes made by Heller in preparing this testimony show him to have been experimenting with how to articulate the point that education should be viewed as a critical *investment* that would both boost long term economic growth and strengthen national defense (Folder “NEA Raw Materials”, Box 5, Walter Heller papers, University of Minnesota Archives).

list,” (US Congress, House, 1959, p. 61).

Heller also emphasized that he was not arguing for federal funds merely to help states meet their obligations. The funding of education was most certainly an obligation of the federal government:

First and foremost, education is an essential instrument for carrying out functions which are a direct Federal responsibility. Education is an investment in human resources from which we expect to reap positive gains in the form of higher productivity, more rapid advancement in technology . . . and a stronger Military Establishment and greater military potential. Here, the benefits of education transcend all State and local lines... (US Congress, House, 1959, p. 57).

One prominent argument against the federal funding of education was that it would lead to federal control of education. In Congresswoman Catherine May's argument against the bill, she quoted a ranking member of the Education Committee's views on this: “If this bill is enacted, federal control of education no longer will be a threat-it will be a reality-for programs of this kind have a tendency to snowball far beyond the expectations of well-meaning sponsors, and in order to qualify for grants, states would have to conform to the law,” (May 1959, pg. 14). Heller's response, in addition to calling it an illogical concern, was to claim that the Murray-Metcalf Education Bill was a brilliant example of federalism. He stated,

The Murray-Metcalf bill is an expression of the genius of our federalism in its ability to achieve national objectives in a tightly interdependent economy through constructive cooperation among different levels of government. Under this approach, the Federal government does what it can do best; namely, mobilize financial resources through taxation, and State and local governments do what they can do best; namely, make

grassroots decisions and carry out functions under the direct control and close scrutiny of the local electorate. (US Congress, Senate, 1959, p. 97)⁵

Heller appeared certain that the states were capable of using federal funds wisely and that the grantor of these funds would in no way attempt to control their decisions. In the same hearing, however, it became apparent that Heller's confidence belied the legitimacy of the opposition's concerns. When the seemingly contradictory nature of incentives was brought up, he became much less assured of his position. The question was raised of how the federal government could expect the states and local governments to comply with its goals without providing incentives, which would interfere with self-determination. Heller acknowledged that to support incentives too strongly would be to contradict his previous statements regarding state/local rights and admitted that it was "an extremely difficult and delicate area." He went on to say "If some formula could be worked out- and I must confess I don't have this easy answer- by which these incentives could be stated in such a way that they would not be an interference with local responsibility, I should certainly feel that there is a great deal to be said for it," (US Congress, Senate, 1959, p. 100). Ultimately, the Murray-Metcalf bill failed in Congress, and the National Education Association was destined to wait for several more years before finally seeing the first broad-based federal program for funding education. In the meantime, Heller went to work for a more powerful and influential client.

⁵ In retrospect, given the evolution of federal education policy in the US, May's concerns seem well founded.

1.4 Heller and the Kennedy Council of Economic Advisers: Education as Growth Policy

In late 1960s, president-elect John F. Kennedy named Walter Heller as chair of his Council of Economic Advisers. Kennedy was looking to Heller for advice on how to make good on his oft-repeated campaign promise to boost US economic growth. Unfortunately, there was at this time little confidence among economists that they understood the process of economic growth well enough to design policies to accelerate it. Heller, however, brought to the council his conviction that the link between education and economic growth was not only a well-established empirical fact, but clear proof that the federal government had both a statutory and a constitutional responsibility for education. Human capital theory would be at the center of the council's thinking on policies to promote long-term economic growth. As *Time* magazine reported in an article published within weeks of Kennedy's inauguration, Heller's most important prescription for faster economic growth was increased investment in “our most valuable resource, the human mind.” He described this approach as having “vast implications for public policy,” (“Pragmatic Professor,” 1961, pg. 22).

In October 1961, the Organization for Economic Co-operation and Development sponsored a “Policy Conference on Economic Growth and Investment in Education” in Washington DC, bringing together education policy makers and professional economists and experts from the member nations. Heller gave a keynote address titled “Education as an Instrument of Economic Policy,” in which he reviewed the concept of human capital, discussed the evidence on the link between investment in education and economic growth and the rate of return to education, and emphasized the Kennedy administration's commitment to using federal revenues to increase education spending in the United States (Organization for Economic Co-

operation and Development 1962, pg. 33-35). At this conference, Theodore Schultz was listed as the “Expert Advisor” to the US delegation.

A few weeks earlier, Heller had invited Schultz to participate in a “technical meeting” Heller was organizing in conjunction with the conference, in which European economists in Washington for the conference and a several American economists would share their current research in the economics of education. One session of the technical meeting would be devoted to discussing “the kind of research needed in this field” and exploring possibilities for collaborative research between European and US economists.⁶

The annual reports of the Council of Economic Advisers during Heller's tenure as chair, as well as Heller's own congressional testimonies from that period, reveal a coherent set of arguments, derived from human capital theory and supported by evidence from the nascent human capital research program, being used to justify proposals for increased federal spending on education. First and foremost was the argument that education was a form of investment in human capital, and that human capital formation was demonstrably linked to economic growth. As the 1962 “Annual Report of the Council of Economic Advisers” explained:

Americans have long spoken of foregoing consumption today in order to invest in their children's education and thus in a better tomorrow. For an economy, just as for an individual, the use of the word invest in this connection is clearly justified, since it is precisely the sacrifice of consumption in the present to make possible a more abundant future that constitutes the common characteristic of all forms of investment. That devoting resources to education and health is, in part, an investment in human capital

⁶ Letter from Heller to Schultz, Oct. 6, 1961, Theodore Schultz papers, Special Collections, University of Chicago Archives. In this letter, the typed “Professor Schultz” in the salutation is crossed out and replaced by a hand written “Ted”, suggesting a prior familiarity between the two men (reproduction of letter available from the author).

explains why programs in the area of education and health are economic growth programs. (Economic Report 1962, pg.117)

Following this, in 1963, testifying in support of Kennedy's National Education Improvement Act, Heller submitted a Council of Economic Advisers research report showing that "a rising level of education has been a key generator of long-term economic advance." In addition, he pointed out, "recent private studies have convincingly shown that education's contributions to our nation's economic progress to date have been far higher than we had previously understood," with one of them showing that over the period 1929-57, "two fifths of the sharp increase in real product per worker- an increase of 56%- for that period is attributable to improvements in the quality of the labor force resulting from increases in formal education," (US Congress, Senate, 1963, p. 408).

A second argument was that the link between education and growth made education a federal responsibility. Naturally, in Council of Economic Advisers reports this argument was made on the basis of the Employment Act of 1946. As Heller insisted to Congress in 1963, "we dare not view the Federal Government's responsibility under the Employment Act of 1946 in unduly narrow terms. . . Maximum employment and production do not depend only on capital equipment, agriculture and natural resources, and man-hours- the traditional interests of economists- but also on the education and total skills of the labor force. Programs and policies that maximize human resources in our nation are a major concern of National policy for economic growth." (US Congress, Senate, 1963, p. 410). National defense and foreign policy were beyond the purview of the Council of Economic Advisers, but the president's "Special Message to the Congress on Education" in January, 1963, included a statement that increasing

the quality and quantity of education was “vital” to national security, i.e., a federal responsibility (Kennedy 1963).

A third argument was that education had been shown to lead to higher earnings, which was a benefit to the individual, but also evidence that education increased productivity and thus economic growth. The 1962 annual report of the Council of Economic Advisers pointed out that “education's contribution to output is reflected by the well-documented fact that income- the measure of each individual's contribution to production- tends to rise with educational attainment” (Economic Report 1962, pg. 118). The 1965 annual report (largely compiled before Heller's departure from the council), cited the studies showing that over the last fifty years “the rising level of education appears to account for between one quarter and one half of the otherwise unexplained growth of output,” inviting the inference that this relationship would hold in the future as well by pointing to the 1963 data on differences in median earnings by education level (Economic Report 1965, pg. 157).

A fourth argument was that education as an investment had a rate of return, that its rate of return was as high or higher than the rate of return on conventional investments, and that this indicated the desirability of further investment in education. The “Annual Report of the Council of Economic Advisers” for 1965 explained that “even when viewed from the narrow perspective of economic benefit alone, expenditures on education yield high rates of return. The rate of return to society on its total expenditure for the public and private education of males is estimated at more than 10 percent at both the high school and college levels; this rate compares favorably with the return on other investments in the economy” (Economic Report 1965, pg. 158). Here Heller's externality argument of 1957 was subsumed into the human capital framework. The external benefits of education were now presented as part of its social rate of

return, which was to be distinguished from its private rate of return as reflected in earnings differentials, and which was the proper rate of return to consider in making government spending decisions. Heller made this point more subtly in his keynote address to the Organization for Economic Co-operation and Development conference mentioned above, and interest in developing a sound theoretical and empirical basis for the argument was one motivation for Heller's invitation to Burton Weisbrod to serve as a senior staff economist for the Council of Economic Advisers in 1963.

In 1961, Weisbrod, then an assistant professor at Washington University in St. Louis, contributed a paper titled “Education and Investment in Human Capital” to Schultz's National Bureau of Economic Research conference titled “Investment in Human Beings” (Weisbrod, 1962). The motivating argument of the paper was that in order to apply cost-benefit analysis to educational expenditures one must consider both the benefits received by the individual being educated and the “external” benefits received by others as a result of the individual's education. Weisbrod listed the various external benefits to education with suggestions and some examples of how such benefits might be measured. Over the next two years, Weisbrod expanded his analysis of the external benefits of education into a book, developing a number of additional strategies for estimating those benefits, and applying them in a case study of a local community (Weisbrod, 1964). It seems plausible that Heller planned for Weisbrod, while at the Council of Economic Advisers, to generate credible figures on the value of education's external benefits that could be used to bolster the case for federal support.

Heller considered President Kennedy a quick study when it came to learning economic ideas (1966, pg. 29) and Kennedy's arguments for federal funding of education were clearly influenced by Heller. On February 20, 1961, Kennedy outlined his goals for education in a

“Special Message to Congress on Education” in which he proposed a 2.3-billion-dollar aid to education program. He stated:

Our progress as a nation cannot be swifter than our progress in education. Our requirements for world leadership, our hopes for economic growth, and the demands of citizenship itself in an era such as this all require the maximum development of every young American's capacity. The human mind is our fundamental resource. A balanced Federal program must go well beyond incentives for investment in plant and equipment. It must include equally determined measures to invest in human beings- both in their basic education and training and in their more advanced preparation for professional work. Without such measures, the Federal Government will not be carrying out its responsibilities for expanding the base of our economic and military strength. (American Education, Message from the President, 1961)

This bill did not pass, but Kennedy continued to press Congress to provide federal support for education. His last attempt was the National Education Improvement Act of 1963. In December of 1962, Heller wrote an administratively confidential report to the president on economic growth. He explained that the Council of Economic Advisers was focusing on four areas: taxation, civilian technology, education, and training. Heller's discussion drew heavily on human capital ideas, but also mentioned the importance of improving the quality of education as well as the average years of educational attainment, and the growth-enhancing potential of policies that boosted the currently low educational attainment of “marginal groups.” On January 29, 1963, President Kennedy submitted to Congress a special message on education in which he proposed “a comprehensive, balanced program to enlarge the federal government's investment in the education of its citizens,” (Tiedt 1966, pg. 148). The Council of Economic Advisers talking

points on education and growth were clear in the message: This nation is committed to greater investment in economic growth; and recent research has shown that one of the most beneficial of all such investments is education, accounting for some 40 percent of the nation's growth and productivity in recent years. It is an investment which yields a substantial return in the higher wages and purchasing power of trained workers, in the new products and techniques which come from skilled minds and in the constant expansion of this nation's storehouse of useful knowledge. (Kennedy 1963) The bill itself reflected the goals and priorities Heller had recently outlined in his report, including “expansion of opportunities for individuals in higher education,” “improvement of educational quality,” and “strengthening public elementary and secondary education.” Although this bill was also unsuccessful, Kennedy, albeit unknowingly, did play a role in the successful legislation of federal funding for education by initiating economic research in the area of poverty. Although he would be assassinated before events played out, poverty, rather than economic growth, was the political issue that finally overcame the resistance to the permanent provision of federal funding for education.

CHAPTER TWO

The Economization of Social Justice: Measuring Equality of Educational Opportunity

2.1 From Economic Growth to Social Justice: The *War on Poverty*

In December 1962, Kennedy asked Heller to look into the issue of poverty in the United States. After Kennedy's assassination in late 1963, President Johnson immediately met with Heller, who briefed him on Kennedy's request and the work on poverty that the Council of Economic Advisers had done so far. Johnson was enthusiastic and unequivocal in his support of Kennedy's plans for developing antipoverty initiatives. According to Gillette, Johnson “instantly embraced the proposal and within weeks declared ‘unconditional war on poverty’ (pg. 2). Johnson chose Heller to lead the economic task force of the War on Poverty (Vinovskis, 2008). At Johnson’s request, the economists Walter Heller, Burton Weisbrod, and Robert Lampman used the nascent theory of human capital to address one of the most pressing political issues of the time: racialized poverty (Brauer, 1982).

Not only did this lead influential actors outside the field of education to think of schools as a means of achieving national socio-economic goals, but many within education also supported this highly moral, albeit narrowly instrumental, purpose for education. The National Education Association embraced the idea of using the schools to eradicate poverty, and the U.S. Commissioner of Education, Francis Keppel, heralded the Elementary and Secondary Education Act as a direct response to the demands of the Civil Rights movement.

Within just a few years, human capital theory went from being discussed as a main weapon in the Cold War to a main weapon in the War on Poverty. In Congressional testimonies,

Keppel used the idea of human capital to argue for federal funding for education in both administrations but the reasons he gave were significantly different. While speaking as a member of the Kennedy administration, Keppel emphasized the need for economic security in the Cold War. In support of Kennedy's second education bill in 1963, the commissioner of education stated: "As I see the situation, national security and economic growth now change the need for a federal program in education from a desirable domestic goal to a deadly serious necessity" (Tiedt, 1966, p.33). However, while working in the Johnson administration, Keppel's argument focused on the issue of civil rights: "We must find ways to eliminate the inequality of educational opportunity. There are rural slums, backward areas, in which children don't have a fair chance to learn. There are growing, high-density areas where the schools don't keep up" (Tiedt, 1966, p.34).

In 1964, when testifying in support of the Economic Opportunity Act, a centerpiece of War on Poverty legislation, Heller conveyed the idea this way: "The Nation is more and more aware that in compassion lies strength-not only moral strength but economic strength. For a war on poverty is truly a war on waste-on waste of our most precious asset: the mental, physical, and spiritual power of human beings. A program which gives life to the latent capacities of millions of our poverty-stricken citizens is a sound investment which will yield rich returns," (US Congress, 1964, 29).

It is important to emphasize that there were other options for addressing poverty, but Heller and Johnson made the deliberate choice to emphasize education over other means. Both were opposed to the idea of redistributing wealth directly. Zarefsky states, "There is abundant evidence of efforts to define the poverty program as entirely different from traditional public welfare. In his opening statement before the House Committee on Education and Labor, Walter

Heller specifically rejected an ‘income’ strategy...claiming that it would touch only the symptoms and not the roots of the problem,” (2005, pg. 48). Johnson indicated his agreement with Heller as to the root causes of poverty in his State of the Union Address in January, 1964, when he stated that “very often, a lack of jobs and money is not the cause of poverty, but the symptom. The cause may lie deeper—in our failure to give our fellow citizens a fair chance to develop their own capacities in a lack of education and training.” A more direct method of wealth redistribution would have been even less popular with conservatives. The emphasis on education was meritocratic: if everyone started out with an equal chance at financial success, it would make an unequal distribution of wealth justifiable and would reduce the obligation to redistribute wealth in more direct ways, (Zarefsky, 1980; Brauer, 1982).

Heller facilitated the increasing connection between education and economic outcomes in the War on Poverty planning. Julie Roy Jeffrey explains that “Heller’s own interests reinforced the group’s tendencies to perceive poverty as an economic condition with an educational solution” (Jeffrey, 1978, pg. 33). The educational solution became the Elementary and Secondary Education Act of 1965.

ESEA was an extensive statute that comprised the most far-reaching federal educational legislation in the history of U.S. education. There were six sections, or titles, but Title I: *Better Schooling for Educationally Deprived Children*, accounted for five-sixths of the total funds authorized for ESEA and channeled millions of dollars to children from low-income backgrounds (Bailey & Mosher, 1968). The law was primarily based on human capital theory and was as much about economics as it was education; Heller, Weisbrod, and Lampman had provided most of its theoretical and methodological foundations (Jeffrey, 1978).

While there were two comprehensive educational acts in the War on Poverty, which were

ESEA and the *Higher Education Act*, the majority of its initiatives had an educational component, such as Upward Bound, Head Start, the college Work-Study program, and a number of remedial education projects. According to Stephen Bailey and Edith Mosher, “Educational activities of great scope and variety had become accepted methods for waging a national war on poverty” (1968, pg. 46).

2.2 Left Behind: Previous Understandings of Equality of Educational Opportunity

The economists involved in the War on Poverty and the *Elementary and Secondary Education Act* of 1965 contributed new understandings of what equality of educational opportunity meant and why it was important. From the time of Reconstruction, *equality of educational opportunity* had referred to both quantitative and qualitative educational resources available to blacks. It was important that African-Americans have this equality for many reasons, but most importantly for intangible reasons: because education would provide freedom, dignity, and justice. For economists, working with the idea of education as the primary means of developing human capital, equal educational opportunity primarily meant one thing: ending poverty.

Previous leaders of the civil rights movement, such as W.E.B. Du Bois and Booker T. Washington, along with the National Association for the Advancement of Colored People (NAACP), had placed great importance on education and believed that the opportunity to receive an equal education was a fundamental right of African-Americans. Du Bois defended the ideals of a humanistic education for African-Americans by rejecting the narrow emphasis on education solely as preparation for work. He insisted that education focus on teaching the ideas that could

bring about intellectual liberation. In 1915, in “The Basic Fallacy,” he stated: “While then we teach men to earn a living, that teaching is incidental and subordinate to the larger training of intelligence in human beings and to the largest development of self-realization in men. Those who would deny this to the Negro race are enemies of mankind” (pg. 133). Though Booker T. Washington, in contrast to Du Bois, did emphasize education for work, his ultimate goals for African-Americans were independence, self-respect, and dignity. Neither of these two men saw equality in the simplistic terms of earnings, but they had believed that having equal access to quantitative and qualitative educational resources was an essential human right.

In the late nineteenth century, the N.E.A., among other groups, used statistical evidence from surveys of schools to demonstrate the strikingly unequal educational resources between the north and the south and between blacks and whites, and to argue for federal assistance (Fenner, 1950). In 1944, the Swedish economist Gunnar Myrdal published *An American Dilemma: The Negro Problem and American Democracy*, a book that was widely embraced by the civil rights movement. To demonstrate the inequality between education for blacks and whites, Myrdal focused on expenditures, *de jure* segregation, differences in curricula, and the highly unequal workplace faced by blacks in comparison to whites after finishing school. Other researchers and reformers, in addition to compiling statistical data on school expenditures and resources, focused on what schools qualitatively provided, or failed to provide, minority children. An example of this was W. L. Warner’s *Who shall be educated? The challenge of unequal opportunities*, which described inequality in terms of educational purpose, curricula, the structure and organization of the school, and the qualities, ideals, and values of those who became teachers. Advocates for equality of educational opportunity had recognized that measurable resources were important for African-Americans for over a century, but the equality they sought was not limited to just

measurable resources. In their eyes, qualitative resources were as essential to equality as quantitative resources.

In fact, the idea that equality could be limited to measurable terms had been a *barrier* to be overcome by those seeking the desegregation of public schools and universities in the first half of the twentieth century. The issue of measurement had been a key theme in the Supreme Court ruling in *Plessy vs. Ferguson* in 1896, which upheld the right for states to legally segregate public facilities, including schools. The court's reasoning had been that if what could be *measured* was equal (funding, facilities, teacher education, etc.) in segregated schools, then the schools *were* equal. The belief that it was possible to quantitatively measure equality actually provided the main justification *for* segregation (Yudof, et al., 2012). Therefore, pointing out the limitations of measurement and emphasizing the intangible benefits of education were strategies used by opponents of segregation. Even when measurable resources were equal (although it was widely believed they were not), those fighting for equality believed that the presence of non-tangible elements were important. In Justice Earl Warren's delivery of the opinion of the court on *Brown vs. Board*, he asked "Does segregation of children in public schools solely on the basis of race, even though the physical facilities and other "tangible" factors may be equal, deprive the children of the minority group of equal educational opportunities? We believe that it does," (quoted in Yudof, 2012, pg.410).

In addition to decrying the idea that qualitative factors could be dismissed in discussions of equality of educational opportunity, Warren also clearly believed that school was a place in which the social, emotional, cognitive *and* economic benefits of education were of great value. Echoing the arguments of Du Bois, he emphasized citizenship, moral and cultural development, and psychological well-being as being the most important benefits of education:

Today, education is perhaps the most important function of state and local governments. Compulsory school attendance laws and the great expenditures for education both demonstrate our recognition of the importance of education to our democratic society. It is required in the performance of our most basic public responsibilities, even service in the armed forces. It is the very foundation of good citizenship. Today it is a principal instrument in awakening the child to cultural values, in preparing him for later professional training, and in helping him to adjust normally to his environment. In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms. (quoted in Yudof et al., 2012)

In addition to Warren's arguments, it was also clear that the plaintiffs in the case did not associate equality of educational opportunity primarily with economic advancement. Their case focused on demonstrating the harmful psychological effects, not economic effects, of segregation to show that it denied equal protection of the laws as guaranteed by the fourteenth amendment. In its arguments and brief, the NAACP Legal Defense Fund included the testimony of more than thirty social scientists who concluded that the effects of segregation were psychologically harmful for both blacks and whites (Clark et al., 2004). Psychologists, rather than economists, had provided the assumptions, values, and disciplinary methods through which the court conceptualized equality of educational opportunity.

As a result of *Brown vs. Board*, the issue of *equality of educational opportunity* was primarily associated with desegregation. Ten years later, in 1964, Title IV of the *Civil Rights Act* prohibited *de jure* segregation in public schools and was the legislative enactment of the ruling

on *Brown vs. Board* that had occurred a decade earlier. The support of the federal government led to significant reductions in the number of African-Americans in segregated schools in the latter half of the 1960s. However, as economists became more involved in educational policy, the focus shifted from desegregation to achievement outcomes, which were considered to be proxies for future earnings. *The Elementary and Secondary Education Act* of 1965 was the first step in initiating this new interpretation of equality of educational opportunity.

In “American Education and the Search for Equal Opportunity,” published in 1965, the Educational Policies Commission provided an alternative to the economization of social justice that focused on building trust between schools and communities. The authors of the report began by explaining that the ideals of humanism had frequently not included people of color and that many white Americans had “prided themselves on their belief in human dignity...But toward non-whites, they too generally placed prejudice above ideals” (pg. 3). The commission saw a critical role for education to play in bringing about equality of opportunity: the school was to both combat prejudice and to educate the disadvantaged. In order to do that, schools needed to build trusting relationships.

Although the commission believed education to be a crucial factor in addressing racism and inequality in the United States, the report did not blame schools for causing the problem or expect schools to solve the problem alone. Instead, it acknowledged the complexity of the issue and showed trust in schools. This trust was not above addressing the concerns that some educators did not believe that disadvantaged students could be successful academically and the commission warned against this. They insisted that “The public school must look with hope and respect upon all children...to succumb even slightly to a defeatist attitude is neither reasonable nor just” (pg. 10).

The report recommended a number of strategies for achieving greater equality of opportunity in and through education. Its authors recommended early childhood education, even beginning from infancy when needed; teacher preparation sensitive to the needs of disadvantaged students, including education in different cultural backgrounds and the civil rights movement; and strenuous efforts on the part of the school to reach out to parents and the community to increase both community involvement and leadership. But there were two points of emphasis in the report—the first was the primary importance of relationships between students and the staff. The school must make itself “a congenial place...a place in genuine contact with each child. The means to this end,” they explained, “once again, is attention to and concern for the individual child as a person important in his own right,” (pg. 10). The report was critical of “concepts that force teachers to see all children solely in relation to an artificial standard” because they interfered with teachers’ abilities to understand the needs of each student as a unique and individual learner. The report also was concerned that teachers not focus “so strongly on the subject matter at hand that they forget the child” (pg. 10). The second point of emphasis was on integration. The authors encouraged multi-cultural experiences for all students and multi-ethnic staff. An entire section was focused on the issue of *de facto* segregation and there were a number of observations and recommendations made.

2.3 The Economists’ Rationale for Equal Opportunity as Outcomes

The difference between defining equality in terms of access to educational resources or as educational outcomes as measured by standardized test scores was a distinction that carried profound consequences for educational policy: how policy defined *equality of educational*

opportunity critically impacted how it defined the problem of achieving it. Prior to ESEA, the problem had been how to provide black and white students with the same educational experiences in the school and desegregation was seen as the best solution. Segregation, however, was no longer the focus of federal policy. Although ESEA supported efforts to desegregate schools by granting the Office of Education the right to withhold funds to states or local districts unwilling to comply with Title IV of the Civil Rights Act, the primary purpose of the act was to address the issue of poverty by providing funding to address the cultural and educational deficiencies of the poor and it was assumed that the provision of these funds would equalize outcomes on standardized test scores between blacks and whites. David K. Cohen observed in 1970 in *The Schools and Social Reform: The Case of Compensatory Education*,

...the real (and avowed) aim of Title I programs is to eliminate inequalities in educational opportunity. Almost uniformly this is taken to imply eliminating race or class disparities in the outcomes of schooling. What is more...this not as an end in itself, but as a means to another more important end--the elimination of poverty...improved performance is important solely because it will lead to more education, better jobs, more income, and less poverty. (pp. 2-3)

Federal policy makers, including the civil servants at the Office of Education, *assumed* that these scores were an appropriate proxy for equality of educational opportunity, seemingly without question, and their decision to make measurable outcomes the goal narrowed the focus of the law, as Cohen points out, in significant ways.

2.4 Early Criticisms of the Economic Approach

As part of an economic program, ESEA contributed a different view of education for social justice, one in which economics, rather than the ideals of liberal humanism, democratic freedom, or psychological well-being provided its conceptual framework. In *Education for Children of the Poor*, Julie Roy Jeffrey described ESEA's narrowing of the broad goals of social justice to one area of measurement:

In practical terms...the ESEA's clearest social objective came to be the elimination of the easily measurable achievement gap that existed between middle-class white children and their deprived black and white classmates. This narrow focus on achievement scores was supported by the belief that raising test scores was the essential precondition for ending the cycle of poverty...Arguments about the success or failure of compensatory education thus tended to center around improvement or lack of improvement in test scores of Title I children. Few questioned whether these statistics were the crucial ones that related to ultimate objectives. (p.160)

A skeptical observer of the rise of the influence of economists in education, the Dean of the School of Education at Stanford University, H. Thomas James explained the deeper implications of the new economic models being applied to education in a lecture, "The New Cult of Efficiency in Education" given in 1969. Referring to Schultz and Becker, he stated "Because of their power, they influence the way we restate the aims of education, and the means for achieving those aims," (pg. 8). James pointed out that human capital theory, as an educational model, is premised upon terms and concepts, such as "human resources." He went so far as to say that human capital theory "horridifies some people" because "it violates Immanuel Kant's

categorical imperative that man is to be viewed as an end in himself and never as a means to an end” (pg. 11). James also described the narrowing of educational purpose that was concomitant with the investment model, and he highlighted the conflict between a humanistic understanding of education and a materialistic, economics based approach:

Anyone accustomed to thinking of man as an inquiring and freedom seeking individual must experience some alarm at the influence of the investment model on our educational institutions... [the investment model] leaves us with some nagging concerns about how it affects the dignity of man, and about materialism as a major goal for humanity. (pg. 15)

President Johnson attempted, at least rhetorically, to suggest that moral and even spiritual ends were the true goals of human capital theory. In a famous speech given at the University of Michigan in 1964, he insisted that investing in education could “prove that our material progress is only the foundation on which we will build a richer life of mind and spirit.” However, because the focus of ESEA was narrowly limited to, as Johnson would state, “ending poverty in our lifetimes,” equality of educational opportunity, from the perspective of the Johnson administration and the Office of Education, really meant measurable economic outcomes (State of the Union, 1965). Economists’ evidence of the strong link between education and future earnings led to the increasing tendency for many to conflate *educational equality* with *economic equality*.

CHAPTER THREE

Controversies of Culture and Causation

In the 1960s, the question of why poor and minority students were less academically successful than middle class whites came to the forefront. There were two opposing explanations: some argued that it was culture, the culture of poverty or the culture of African-Americans, in particular; others insisted that it was due to systemic racism and social prejudice. Even before the passage of ESEA, the Department of HEW, teachers' organizations, and researchers from other social sciences had identified culture as being the key causal factor of poverty.

At this time, economists looked to other social sciences to understand the nature and causes of poverty. As editor of the book *Economics of Poverty: An American Paradox*, Weisbrod included pieces by several writers who were not economists, one of whom was the sociologist Michael Harrington. Harrington not only saw a need for qualitative, even literary, descriptions of the poor, but he also pointed out the limits of statistical methods to understanding the economic phenomenon of poverty: "There is, in short, a language of the poor, a psychology of the poor, a world view of the poor. To be impoverished is to be an internal alien, to grow up in a culture that is radically different from the one that dominates the society. The poor can be described statistically; they can be analyzed as a group. But they need a novelist as well as a sociologist if we are to see them" (pp. 41-42). Economists involved in the War on Poverty valued insights provided by other disciplines; if culture was a cause of poverty, they were supportive of research interested in exploring, and changing, this culture.

3.1 The Theory of a Culture of Poverty and Its Backlash

The notion of a culture of poverty, popularized by the research of the anthropologist Oscar Lewis in the 1950s, inspired a body of related research in education. Proponents of this view believed that “cultural deprivation,” was the cause of systemic poverty; the theory was that if schools could reduce the impact of the home culture on poor students by systematic exposure to the culture of the middle class, and if remedial help was given to those students who struggled academically, students would be willing and able to become investors in their own financial well-being, as did their middle-class peers.

The publication of social psychologist Frank Riessman’s *The Culturally Deprived Child* in 1962 promoted this idea that education could provide the cultural remedy to an academic and economic deficiency. Soon after, the Educational Policies Commission published *Education and the Disadvantaged American*, which stated: “The problems of the disadvantaged arise because their cultures are not compatible with modern life” (1962, p.11). Later, they asserted: “The schools present the best hope for overcoming their cultural handicap” (p. 39). In 1964, the U.S. Office of Education issued a major report titled *Compensatory Education for Cultural Deprivation* (Bloom, et al.,). Johnson appointed Francis Keppel to develop a plan of federal grants to improve educational opportunity and achievement of poor students in both urban and rural areas. Research and policy at the federal, state, and local level focused on curing cultural deprivation in order to end poverty.

This association of culture with poverty shifted the focus to the economic *effects* of culture and implicitly suggested that these outcomes were indicators of the value of the culture itself. There was an inherent prejudice, of course, against the features of culture to which poverty

could be attributed. Social scientists like Lewis and Riessman were attempting to advocate on behalf of the poor rather than provide justification for a critique of black and Latino culture, but their dissemination of a materialistic and utilitarian lens through which to view and evaluate culture created reasons to see these cultures as deficient. Education, long thought of as an important means for the transmission of culture for purposes of assimilation, democracy, and for the promotion of the ideals of liberal humanism, now became the means of promoting the aspects of middle class culture that were assumed to lead to the creation of human capital. In this instance, social scientists from a range of disciplines, not only economists, contributed to the narrowing of educational purpose to economic outcomes.

Culture of poverty views also influenced *The Negro Family: The Case for National Action* (United States, 1965), written by the Assistant Secretary of Labor, Daniel Patrick Moynihan, whose intention was “to start a serious conversation among policymakers and to devise far reaching socio-economic reforms” (Patterson, 2010, xii). However, the report stirred tremendous controversy because of its conclusions about the causal factors of black underachievement. The report, which became known as the *Moynihan Report*, claimed that the causes of poverty and academic underachievement were rooted in the marital patterns of the African-American community.

The report elicited strong criticism from many prominent African-Americans and was seen by some as culturally biased, if not racist (Patterson, 2010; Ryan, 1971). Blacks had been victimized and oppressed for centuries, critics responded, yet were now being blamed for unequal economic and academic outcomes. The phrase “blaming the victim” comes from the title of a book written by the psychologist William Ryan in 1971 in response to the report. The report defined equality in terms of results, but saw the culture of African-Americans as the cause of the

problem. Even though Moynihan stressed that the cultural issues he had identified were not the fault of African-Americans themselves, and had been caused by centuries of slavery and oppression, his conclusions were vehemently opposed and resented by many within the African-American community.

Many of the rebuttals to the report insisted that the explanation for unequal outcomes between blacks and whites was current, systematic, and institutionalized racism. Laura Carper argued, “The Negro family is not the source of the ‘tangle of pathology’ which the report attributes to the Negro community. It is the pathological relationship between white social institutions and the Negro community which has bred the statistics the report cites” and Carper specifically included “low scholastic averages” as evidence of this (1966, pp. 470-471).

Those who rejected cultural explanations for the low academic achievement of many African-American students believed that the problem was entirely the fault of the school. In *Youth in the Ghetto: A Study of the Consequences of Powerlessness and a Blueprint for Change* (1964), Kenneth Clark stated his belief that the unequal outcomes between blacks and whites were due to the low expectations of teachers: “The major cause of poor pupil performance is seen to be a belief that the children of Central Harlem are ‘barely educable.’ Less is expected of the Central Harlem pupil; he is rewarded for substandard performance. The result is a steadily increasing gap between what he can accomplish and what is normally accomplished by other New York City pupils at his grade level” (pp. 4-5). Similarly, the revisionist historian Colin Greer accused U.S. public education as a whole of deliberately perpetuating economic and social inequalities. He argued in *The Great School Legend*, that schools were designed to fail poor and minority students. Jeffrey pointed out the position taken by many civil rights activists regarding student achievement on standardized tests: “Exposing the inadequate education black children

were receiving, civil rights activists loudly insisted that the schools wipe out racial differences in achievement as a step toward occupational and economic equality” (Jeffrey, 1978, pg. 8).

William Ryan illustrated the intensity of the demands being made about the social problem of low academic achievement among African-Americans when he stated in *The Crisis*, “The young Negro man who dropped out of school or, worse, graduated from high school with a seventh-grade education, represents a specific example of damage done...The damage must be corrected to the greatest extent possible, by re-education, by training, by any means that become necessary” (Ryan, 1965, pg. 631).

3.2 Blaming Schools, Not Victims, in ESEA

Senator Robert Kennedy also believed that teachers and schools were willfully neglecting minority students and should be held accountable for providing poor and minority students with an equal education. Through his involvement in the writing of ESEA, he indicated that blame should be placed in the shoulders of school administrators and teachers rather than on students. In *Evaluation and Reform: Elementary and Secondary Education Act of 1965, Title I*, Mildred McLaughlin wrote in 1975 that the accountability movement in federal educational policy began with Senator Kennedy, “If there was a midwife to the emerging notion of accountability, it was Robert Kennedy. Kennedy saw the failure of disadvantaged children in terms of disinterested and inefficient school administration” (McLaughlin, p. 3).

This suspicion of teachers and schools led to the legislation of the first mandated evaluation system in federal history, which was a component of ESEA. Kennedy and some of his constituents believed that if funds were given to schools to help the disadvantaged, as Title I of

ESEA intended to do, the money would not be spent on disadvantaged children without the schools being held accountable for improvements in outcomes on standardized tests. For this reason, Kennedy refused to support ESEA without an accountability component, and mandated that the schools be evaluated in terms of how well their poor students performed. McLaughlin and Elmore explain, “Coupled with Title 1 was an evaluation requirement, crafted by Kennedy and supported by Commissioner Keppel. By requiring localities and states to produce analyses of program effectiveness, Kennedy hoped to provide ‘a new source of political power’ to parents of disadvantaged children that could be used to ‘force local schools to reform their practices’” (McLaughlin and Elmore, 1982, pg. 163-4).

The Office of Education accepted this and an amendment to the law was made, stating: “...effective procedures, including provision for appropriate objective measurements of educational achievement, will be adopted for evaluating at least annually the effectiveness of the programs in meeting the special educational needs of educationally deprived children” (ESEA Section 205; Cross, 2004; Bailey & Mosher, 1968). ESEA required that the quantitative results of standardized tests to be used as evidence of the efforts of the schools to provide an equitable education to disadvantaged youth.

3.3 A New Federal Role: Administration and Evaluation

With the passage of ESEA, the Department of Education’s role began to shift from being neutral to being *administrative* and *evaluative*. As described previously, before the 1960s its primary responsibility had been to provide information related to local education administrations. When Eisenhower gave the Office of Education cabinet-level status by creating the Department

of Health, Education, and Welfare (HEW) he indicated that its mission was to remain the same: to *serve* local administrators through the provision of many different types of information, both qualitative and quantitative. Whether or not states, superintendents, or school boards decided to use the information, or how they decided to use the information, was beyond the purview of the agency.

However, ESEA granted the Department unprecedented power and, significantly, this power reflected the values and methods of economists. ESEA, after all, required that equality of educational opportunity be measured for purposes of human capital development. Suddenly, the Department of Health, Education, and Welfare was transformed from an agency devoted to the collection and dissemination of research intended to support local school districts to an agency with administrative authority. Now the Department was responsible for evaluating state and local education agencies attempts to provide equality of educational opportunity as defined in ESEA and for providing the funding to continue to do so. Writing in 1968, Bailey & Mosher stated: “Perhaps no piece of social legislation in American history has placed a greater premium upon the reporting and evaluating of results than ESEA” (p. 162). HEW now began to require that schools receiving Title I funds produce data in the form of test scores, even though schools generally did not find such data to be useful and considered their production and collection to be a waste of limited resources (McLaughlin, 1974, p.3). However, because HEW had the authority to grant or withhold funding, it was able to demand specific types of data and reject others; it was also able to draw conclusions from the data regarding the causal factors of educational outcomes.

Although the way in which the Department evaluated ESEA at this time was primitive by today’s standards, both in terms of methods and technology, a nascent form of the production-

function was developing. The assumption of the law and of its administrators was that the quality of the schools' interventions could be assessed through an analysis of quantified outcomes.

3.4 Wider Changes in Social Policy

In addition to the emphasis now being placed on data and analysis for economic purposes required by ESEA, economists also gained a foothold within HEW when President Johnson mandated that all federal agencies implement an approach to decision making known as the *Planning Programming Budgeting System*, or PPBS. The Secretary of Defense, Robert McNamara, introduced this approach to military spending to the Pentagon in 1961. Johnson had been so impressed that he ordered all federal agencies to use the management system; even though it had been designed for military purposes, he was optimistic that its explicitly rationalist methodology would also benefit the creation of social policies, including education policies.

PPBS centered on the economic methods of cost-benefit analysis, systems analysis, and operations research (Rhoads, 1978) and was essentially a decision making process that applied the framework and methods of economics and econometrics to policy issues. According to Beryl Radin, Yehezkel Dror, whom she described as “one of the earliest advocates for the creation of policy analysis as a new profession,” claimed that PPBS was “an invasion of public decision making by economics” in which “every decision” could be seen “as an economic problem” (2000, p. 14).

The economists William Gorham and Alice Rivlin were brought into HEW to implement the approach and many within HEW believed that PPBS could revolutionize policymaking and solve major social problems. Samuel Cohen of the RAND Corporation noted the optimism and

good intentions behind those advocating for the application of systems analysis to policy issues: “They believed that they could create a better world, and have control over this process of re-creating the world, through their science and their mathematics” (p. 77). Alice Rivlin later admitted, “We thought we were pioneers, crusaders for a cause. The ideas of quantifying, measuring, evaluating and systematically analyzing the cost effectiveness of alternative policies were relatively new...” (Rivlin, 1998).

Of course, these new methods were completely dependent upon quantitative data which, in the case of educational policy, primarily consisted of standardized test scores. In *Systematic Thinking for Social Action*, Rivlin admitted the centrality of test scores to the type of rational analysis involved in a system like PPBS, “No matter who makes the decisions, effective functioning of the system depends on measures of achievement,” (1971, p. 141). Rivlin acknowledged, as most economists and policymakers have, that test scores have limitations, but she saw no danger in focusing on them. She stated: “...test scores are, of course, imperfect proxies for intellectual skills that are themselves merely means to effective functioning later in life; moreover, they are by no means the only desirable products of the school experience. Nevertheless, it does not seem unreasonable to focus on these measurable outcomes, and see what light analysis can throw on how best to produce them” (p. 70).

Though Bailey & Mosher described the push toward what was called the “rationalization” of program evaluation, they dismissed the idea that economists and data would “take over” educational policy. In 1968, they reassured readers there was “little reason for either hope or fear that educational policy is about to be formed or substantially conditioned by economic wizards astride giant computers” (pg.182).

However, not everyone shared their nonchalant assessment of the rising influence of

economists. There was resistance to the rationalization of public policy making (Lindblom, 1959; Wildavsky, 1969). Some were concerned that the epistemological changes that were taking place, and the ways in which the increasingly narrow definitions of legitimate knowledge could be used, would distort the reality of the very problems policy makers were attempting to solve. In *Poverty knowledge: Social science, social policy, and the poor in twentieth-century US history*, Alice O'Connor documents the "analytic revolution" that occurred in the field of social science research in which qualitative, community-based, and ethnographic methods were replaced with a "more quantitative, technocratic model-building impulse," (2009, p. 210). O'Connor argues that the definition of legitimate knowledge became almost absurdly narrow. She provided a long list of what this new knowledge left out:

...it does not define itself as an inquiry into the political economy and culture of late twentieth century capitalism...nor does it much countenance knowledge honed in direct action or everyday experience...Historically devalued as impressionistic, feminized, or ideological, this kind of knowledge simply does not translate into the measurable variables that are the common currency of objective, scientific, and hence authoritative poverty research. (p. 4)

Writing in 1968 about the growing importance of PPBS, H. Thomas James noted its attractiveness to the increasingly powerful state and federal governments and made the connection between certain types of knowledge and educational purpose. As a type of knowledge to be used to make "legislative decisions," he speculated that PPBS "may very well change the aims of education, and the school as well." He pointed out "The federal advocates of PPBS have conceded that it may be impossible in many situations to find a single, conceptually clear output measure," (James, 1968, pg. 38-52). At one point, James admonishes educators to use the new

terms and methods inherent within PPBS or accept losing power in the decision making process. Yet he also calls for what he calls a “wary dialogue between humanists and social planner,” (pg. 64). He argued

for humanists to build an informed case against the mechanistic model for analysis of social institutions. We are, after all, attempting to recreate our social and moral world, and especially our schools, to fit a model of our own invention. We reason that since we have created complex machines, we can now use the laws we have derived from that experience to reconstruct our social institutions. (pg. 64)

In addition to the resistance from local administrators, teachers, and academics there were those involved in policy making who recognized the implicit relationship between methods and values. Michael W. Kirst, a member of the California State Board of Education in the mid 1970s, described the attempt to apply PPBS in California. He explained that what had sounded appealing theoretically became problematic at the level of policy making because of the “value-laden nature of such a technical approach,” (Kirst, 1975, pg. 537). Like James, he pointed out that insisting on a measurable goal involved choosing *which* goal to measure and assuming that all worthwhile goals were possible to measure.

3.5 A Principal-Agent Problem: Tension and a Lack of Trust

In her 1974 report, “Evaluation and Reform: The Elementary and Secondary Education Act of 1965, Title 1,” McLaughlin gave an account of the epistemological divide between educators and local administrators and those at HEW. McLaughlin described how the Department rejected the anecdotal and qualitative descriptions of Title I implementation some

schools attempted to submit as data; the agency claimed that because this form of information was difficult to quantify, it was useless to large-scale administration and insisted that schools submit standardized test scores. Most of those actually working with students, however, were vehemently opposed to the Department's use of standardized test scores as an evaluative tool. McLaughlin explained,

Schoolmen considered standardized tests to be a callous instrument, unfair to teachers and students alike. With much empirical support, educators argued that the tests were not an appropriate measure of the achievement of deprived or non-white students, and that the validity of these tests was unproven. Further, it was pointed out that the use of achievement scores as an outcome measure ignored other and possibly more important program goals and achievements. Educators were in almost complete agreement that standardized tests were insensitive and inappropriate measures of the effectiveness of a Title I program. (p. 9-10)

The local administrators who worked in education at the ground level made strong arguments against the reporting and evaluation component of ESEA that used test scores as the measurement of success or failure. They feared that rather than improve education for disadvantaged students, it would worsen it and that the use of test scores "would make the schools *less* responsive to special local needs and thus *less* conscientious in devising local solutions, *especially* for disadvantaged children," (p. 9). McLaughlin included one educator's prediction that "The result would be less attention to the multiple needs of poor pupils and more attention to the 'tested' school performance," (pg. 9).

The unwillingness of the Department to respond to these concerns introduced an element of antagonism, rather than cooperation, between the federal government and local school

districts. According to McLaughlin, most federal policymakers, resentful of the complaints being made by educators and local administrators, came to the conclusion those working in the schools simply lacked the proper incentives. Effective policy would mean creating incentives to provide the data, whether it was perceived as useful or not at the school level.

However, most schools believed they were already doing all that could be done to address this problem. She described the impasse between the schools and their critics:

Both sides agree that the motivation of slum children to excel in schools is low. Both also agree that the lack of motivation stems from economic conditions produced by racial and economic discrimination. On nothing else is there agreement...The major disagreement is that those who blame the home and community conditions claim that the schools are functioning at maximum efficiency; while those who see the problem in terms of deficiencies within the school believe that the schools are functioning at minimum efficiency. (McLaughlin p. 12n)

This battle over causation and responsibility was at the center of educational policy making at the federal level in the mid 1960s. Some thought the differences in achievement were the result of a culture of poverty but were still the responsibility of the school to fix, others than they were a result of culture and were beyond the control of schools, while still others believed that they were a result of racism and low-expectations on the part of teachers and schools. These policy questions would soon be provided with an answer and would open the door for economists and the education production function to offer a policy solution to the unhappy state of affairs.

3.6 The Surprising Conclusions of the Coleman Report

The legislators involved in the creation of the Civil Rights Act of 1964 assumed that there were gross inequalities in resources between schools attended primarily by African-Americans and schools attended to primarily by whites and that these inequalities of resources represented inequalities of educational opportunity. The law mandated that the Office of Education study the issue and the ensuing report, titled *Equality of Educational Opportunity*, was intended to provide the President, Congress, and federal policy makers with evidence of what were widely believed to be the significant inequalities between resources available to whites and blacks, (Grant, 1972).

The act required that data be collected through a survey of a large number of schools representing the United States more broadly, to provide evidence that not only were schools still highly segregated, but that there were major differences in opportunities, *as measured in resources*, between races. The mandate did define “equality of educational opportunity” in quantitatively measurable terms, but it was focused on inputs, or resources, rather than outcomes.

Eventually, the responsibility for handling the study fell to Alexander Mood, a statistician from RAND who had been recruited by Francis Keppel, the Commissioner of Education, for the purposes of developing the National Center for Educational Statistics and computerizing the Office of Education (Grant, 1972). Mood and Keppel were pivotal in orienting the study towards an *outcomes based* definition of equality of educational opportunity. Although economists of education had not yet explicitly applied the production-function to education, Mood later admitted that he had immediately envisioned the survey as a production-function study which would provide evidence not only of the differences in inputs between whites and blacks but of

causal relationships between inputs and outputs, with standardized test scores being the output measure. He persuaded Keppel of the need to move beyond the previous method of defining equality of opportunity only in terms of “inputs” and instead to begin to define it in terms of outcomes (Grant, 1972). Later, the sociologist James Coleman was recruited to the project, and although the report quickly became known as the Coleman Report after it was published, Mood and Keppel had made important decisions regarding how the study (as well as the Office of Education more generally) should define equality of educational opportunity prior to Coleman’s involvement.

Several years later, Coleman explained that the issue of how to define equality of educational opportunity “...was regarded, as it should have been, as the major problem in the design of the survey, and a great deal of attention was paid to it” (1972, pg. 147). Alluding to the debate surrounding the issue, he admitted that this was particularly difficult because “the very concept of ‘equality of educational opportunity’ is currently undergoing change, and various members of government and of society have different conceptions of what such equality consists” (pg. 147).

However, the design of their study and the methodologies they chose showed no equivocation. Their definition of equality of educational opportunity involved test score outcomes. Eric Hanushek would later point out that there was no indication in the mandate that legislators wanted a production-function study; the request was for facts regarding available resources (Hanushek and Kain, 1972). Hanushek emphasized that the researchers’ decision to make the study about the relationship between inputs and outputs had “redefined the very premise of the commissioned study.”

The *Coleman Report* was the second largest social science study to have been

commissioned by the federal government at the time. It included information on roughly 570,000 students, 60,000 teachers, and 4,000 schools. In order to procure the standardized test scores necessary for the study, Keppel confronted and, Coleman would later admit, bullied, superintendents and local school administrators into cooperating with their demands for test scores (Grant, 1972). This use of test scores by the Federal government was unprecedented and was strongly resisted by local administrators. Grant pointed out that this was a “radical step that would involve the agency for the first time in the politically sensitive sponsorship of classroom testing,” (pg. 4).

When Keppel explained to a group of superintendents that the study would require the use of standardized test scores, they responded by emphatically asserting that this would be detrimental to local control and could possibly misrepresent the quality of their schools. Alexander Mood described the meeting as a “catastrophe,” (Grant, 1972). The superintendents claimed the tests would lead to “unsophisticated and invidious comparisons between school districts” (pg. 6). Keppel, Mood, and Coleman indicated that they believed local resistance to this use of test scores was evidence of their guilt. Keppel continued to press superintendents, reminding them of the mandate, and eventually most of them cooperated. Coleman later characterized the relationship between the federal office and the states as a poor one and noted the “inadequate insensitivity to political problems” (pg. 7).

The researchers themselves gave only a cursory acknowledgement of the controversial nature of using test scores as a measurement for equality of educational opportunity. The published report (totaling over 700 pages) contains only a brief section explaining their decision to use test scores as a measurement of education and of equality of educational opportunity. The authors asserted, in an almost casual way, what remains a still controversial claim, “...while such

test results are not the only thing educators mean when they speak of the outcomes of schooling, they are a large and important part of it... The facts of life in modern society are that the intellectual skills, which involve reading, writing, calculation, analysis of information, are becoming basic requirements for independence, for political participation, for wise consumption” (Coleman, et al., 1965, pg. 218). Yet in the same section, the researchers acknowledge that the assimilation of the “highly technical and sophisticated” *culture* that defines modern life in America will to a great extent determine performance on achievement tests, in addition to the importance of family background and general influences of society. Although they vaguely acknowledged the complexity of causation in academic achievement and the limitations of attempting to correlate measurements of school characteristics to test scores, the authors proceeded to approach their findings and analysis as though these limitations did not seriously impede their ability to draw conclusions useful to policy makers.

Lawmakers, federal agencies, civil rights reformers, and even the researchers themselves had assumed that blacks had access to schools that were “measurably” inferior to those of whites; it was also tacitly assumed that schools were the most important influence on academic achievement and that integrating schools would improve the standardized test scores of African-American students. The researchers set out expecting to find evidence supporting all of these assumptions. In an interview that occurred prior to the analysis of the data, Coleman told the *Southern Education Report*, “...the study will show the difference in the equality of schools that the average Negro child and the average white child are exposed to. You know yourself that the difference is going to be striking. And even though everybody knows there is a lot of difference between suburban and inner city schools, once the statistics are there in black and white, they will have a lot more impact,” (quoted in Grant, 1972, pg. 9).

However, none of these conclusions were supported by the findings of the research. Albeit reluctantly, the researchers were eventually compelled to admit that, according to their data, there were only relatively minor differences in measurable inputs between white and black schools (they did find stark *regional* differences, i.e., between north and south, urban and rural, but variation in the resources available to black and white students within the same geographic area were relatively small). The researchers also provided conclusions regarding something that the *Civil Rights Act* had *not* called for, which were the *causes* of educational underachievement. They claimed that the report provided evidence that desegregation did not significantly improve the test scores of black students, which called into question the emphasis that had been placed on desegregation since *Brown vs. Board of Education* a decade earlier. Most importantly, the study revealed that the real predictor of educational achievement was not the school at all, but the socioeconomic status of the family and the community students came from (Gamoran, 2007). The implications of the report, that schools were limited in their ability to overcome socioeconomic differences in a student's background, were dangerously close those of the *Moynihan Report* and just as controversial.

For many in the civil rights movement, the *Coleman Report* was seen as an enemy of social justice. Ronald Edmunds (who would go on to pursue educational research for the explicit purpose of contradicting the findings of the report) and several other prominent African-American researchers, responded to both Coleman and Moynihan's reports, granting them the dubious honor of offering social science observations that sustain or encourage those who would reverse the national momentum of social reform. The Coleman 'Report' disparaged a decade of educational intervention on behalf of black children. Moynihan recommended "benign neglect" of national issues of race. (Edmunds, et al., 1973, pg. 76)

3.7 A Paradox of Responsibility

The *Coleman Report* created a policy paradox regarding who could be legitimately held responsible for the achievement outcomes of African-Americans. For those who believed, as did the researchers of the study and the Department of Health, Education, and Welfare that it was the responsibility of the school to create equal outcomes between racial groups, there was an obvious problem with the findings of the study regarding the relative *unimportance* of school resources when compared with home and community factors. Because of the implications of these findings, the Office of Education did as much as possible to ignore the report. They released the findings right before the fourth of July, hoping that the report would go unnoticed, and the report had very little impact on policy makers for the next several years (Grant, 1972).

James Coleman continued to pursue the issue of the definition of equality of educational opportunity. Although he was often accused of harming the aims of the civil rights movement, he was adamant that average outcomes between racial groups should be equal and that it was the responsibility of the school to make them equal. In an article published in the *Harvard Educational Review* in 1968, Coleman firmly stated that there was no longer any question of what equality of educational opportunity *should* mean in terms of policy:

The difference in achievement at grade 12 between the average Negro and the average white is, in effect, the degree of inequality of opportunity, and the reduction of that inequality is a responsibility of the school. This shift in responsibility follows logically from the shift of the concept of equality of opportunity from school resource inputs to effects of schooling... This is

a notable shift, and one which should have strong consequences for the practice of education in future years. (pg.21)

Yet Coleman was silent regarding the inconsistency between this definition and the findings of the report. If equal educational opportunity was to be defined as equal achievement outcomes, yet those outcomes were largely the result of factors beyond the scope of the school, what was the role of educational policy? The study had been initiated because it was believed that it would aid and guide federal educational policy, but the findings seemed to reveal the complex causality behind educational outcomes. To many policy makers, this indicated that there were serious limitations for educational policy to achieve its ambitious goals for equality (Grant, 1972).

CHAPTER FOUR

Economists Propose a Solution

Economists of education responded very differently to the report. When they realized that a statistician and a sociologist had attempted what was essentially a study of an education production-function, they leapt at the chance to embrace and make their own the conceptualization of the educational process as efficiently measured inputs leading to the production of measurable outcomes. The *Coleman Report* proved to be the catalyst for the development of a new field within the economics of education. The economists Heckman and Neal retrospectively claimed that, “an entire research community...emerged in the wake of the study” (1996, pg. 84).

Heckman and Neal described how the most prominent economists of education-- Hanushek, Sam Bowles, and Henry Levin-- “teethed” on the report. In the next several years, all of these economists published responses to the report that revealed both admiration and condescension. In 1968, Bowles and Levin wrote, “It is suggested that because of poor measurement of school resources, inadequate control for social background, and inappropriate statistical techniques used in the presence of interdependence among the independent variables many of the findings of the Report are not supported” (pg. 3). A few years later, Cain and Watts published “Problems in Making Policy Inferences from the Coleman Report,” a paper claiming “that the analytical part of the Coleman Report has such serious methodological shortcomings that it offers little policy guidance” (p. 228). Hanushek and Kain accused Mood and Coleman of having been “distracted” by the “allure” of the production process; according to them they had failed to provide what the act requested and had overreached their abilities and expertise as

researchers (1972, pg. 117). Economists agreed that Hanushek's dissertation, which used the data from the *Coleman Report*, was much closer to a true education production function study (Heckman & Neal, 1996).

Somewhat ironically, part of the attractiveness of the economists' production function was the promise it held for solving the paradox that the *Coleman Report* had created. Economists disagreed with the report's conclusion that educational policy could not produce the desired outcomes. Conditioned to think in the technical terms of the production function, premised upon the assumption that the efficient manipulation of measurable inputs could produce desired measurable outcomes, they argued that *their* application of the educational production function could inform the development of policies to efficiently target resources to schools in a way that would overcome the influence of home factors on achievement (Hanushek, 1972; 1979). School related inputs could be substituted for home related inputs to produce a desired level of educational output.

Thus, economists were able to dismiss the conclusions that had caused such alarm and consternation to policy makers and civil rights advocates. Hanushek reassured them by stating: "...when looking at education from a policy point of view, the question of 'relative importance' of family inputs...is an inherently uninteresting question...the legitimate question is how much additional input of one type is required to produce a specified change in output," (1972a, pg. 28). Economists assumed that because of the *substitutability of inputs*, an efficient allocation of resources at the level of the school *could* produce the desired outcomes, regardless of student background. It didn't matter, they said, if socioeconomic factors were associated with achievement because if the school was run more efficiently, policymakers (following the advice of economists) could make the necessary adjustments in inputs to get the desired outputs. The

production function provided a means of circumventing the problem of “blaming the victim.” The economists who advocated for this approach dismissed the importance of culture or the influence of the home on student achievement and claimed that it was reasonable to hold schools alone responsible for student achievement outcomes.

This rejection of cultural explanations for economic (and even non-economic) phenomena was becoming a characteristic of the discipline of economics. Though Heller, Lampman, and Weisbrod were open to insights from other disciplines, they had been exposed to institutionalist ideas early in their careers and, partly because of that, they were more likely to take an interdisciplinary approach to economic issues. Hanushek, on the other hand, was an orthodox neoclassicist. WM Dugger explains the differences between institutional and neoclassical economics by stating, “Institutionalism...assumed the necessity of considering the cultural and the social environment in which an economic system was nested and eschewed the universal and timeless description of man that was the foundation of neoclassical economics,” (Dugger, 1979).

Neoclassical economics was becoming increasingly hostile toward other methodological approaches, even for social and moral issues. Hardliners such as Becker and Stigler, the self-described leaders of economics imperialism, believed that admitting limitations within the discipline of economics and valuing insights provided by other social sciences were signs of weakness and surrender. For them, the best explanation for *any issue* could be found using the analytic models of neoclassical economics. In “De Gustibus Non Est Disputandum” they pointed out that when culture or “taste” is used as a causal explanation for behavior, economists are no longer the experts, a conclusion they seemed to find unacceptable. They wrote, “an explanation of economic phenomena that reaches a difference in tastes between people or times is the

terminus of the argument: the problem is abandoned *at this point* to whomever studies and explains tastes (Psychologists? Anthropologists? Phrenologists? Sociobiologists?). In our preferred interpretation, one never reaches this impasse” (p. 90). While Lampman, Weisbrod, and Heller had supported the idea that culture was highly relevant to poverty, the economists who began developing the education production-function used their methodology to *avoid* the cultural explanations that had caused such controversy in the Moynihan and Coleman reports.

4.1 The Economists’ Definition of *Equality of Educational Opportunity*

Several years after the publication of the *Coleman Report*, a number of faculty members from Harvard initiated an independent study, both to reanalyze the data used in the study and to make the findings more widely available to educators and the general public. In 1972, the statistician Frederick Mosteller and Patrick Moynihan, the author of the *Moynihan Report*, co-edited a collection of papers that resulted from the seminar, titled *On Equality of Educational Opportunity*. Among other things, this collection indicated how the leading participants, including the economist Eric Hanushek, approached the issue of defining equality of educational opportunity in the years immediately following the publication of the *Coleman Report*.

In the introduction, Mosteller and Moynihan praised what they saw as the report’s greatest achievement: a new definition for equality of educational opportunity and a new way of measuring it. They acknowledged that the issue of definition was part of a much larger political debate and that it “may perhaps best be thought of in terms of the long struggle between liberty and equality in the American culture.” However, the *Coleman Report* had, at least for them, ended that struggle by defining equality in terms of measurable outcomes. Mostellar and

Moynihan were not alone. For researchers who were committed to the education production function as a concept and method, the definition of *equality* as equality of outcomes was inherent within the method itself and quickly became an unquestioned assumption.

A number of economists acknowledged that the report had redefined equality within the economics of education community. Hanushek reflected on the importance of the Coleman Report several decades later, “Up until that time, very little attention was paid to student outcomes...It was all about inputs—whether the schools had books, libraries, or computer labs. The importance of the Coleman Report was that it changed the perspective to concentrating on student performance, and that has endured,” (1979). In their recollection of the report, Heckman and Neal emphasized the role it played in redefining equality of opportunity in a surprisingly short amount of time, “In one report Coleman and his colleagues changed the terms of the debate regarding inequality in schooling and defined new ways to think about inequality,” (1996, pg. 84).

On Equality of Educational Opportunity also included a chapter by the psychologist Edmund W. Gordon, titled “Toward Defining Equality of Educational Opportunity.” Although, tellingly, the collection of papers did not include any arguments *against* an outcomes based definition of equality, there must have been at least some debate amongst researchers on this topic, for Gordon lists the alternative views of a number of researchers, several of whom attended at least one of the seminars. However, after briefly considering other definitions, Gordon ultimately claimed that each one suffered from “critical limitations.” He concluded by providing his own definition, which was compatible with the assumptions of the *Coleman Report*: “Equal educational opportunity demands that, where what children bring to the school is unequal, what the school puts in must be unequal and individualized to insure that what the

school produces is at least equal at the basic levels of achievement” (pg. 433). This definition, with its reference to “what the school produces” and “what the school puts in” clearly evokes the metaphor of education as a process in which school inputs are able to mitigate deficiencies in home resources; it reveals the belief that schools can “produce” equal outcomes.

Equality of educational opportunity for economists came to mean the provision of funding necessary to ensuring equal outcomes on standardized tests between demographic groups. Creating equality no longer necessitated confronting racism and prejudice, addressing larger inequalities in the economy, or acknowledging cultural norms that often led to academic underachievement. Instead, it became a technical discussion focused on identifying both the amount of funding that would be necessary to equalize outcomes and which inputs should be selected. Thus, the application of the production function to policy issues concerning equality of educational opportunity both complicated and simplified the issue.

Methodologically, it was undeniably complex. Hanushek admitted “it introduced into the policy arena a bewildering array of technical and esoteric issues such as statistical significance, analysis of covariance, production efficiency, multicollinearity, residual variation, estimation bias, and simultaneous equations” (1979). A journalist writing about the *Coleman Report* and the debates that followed revealed how the methods themselves had become the topic of discussion. He stated that the report was “plagued with problems--in this case...statistical issues which must be debated in the methodologist's bewildering tongue. Education has become a social science, with the emphasis on science. But while its methods match physics' in complexity, they don't yet in certainty,” (Blumenthal, 1967).

On the other hand, it simplified educational purpose and issues of causation in unprecedented ways. Because it required a specification of the causal process generating

educational achievement in terms of the relationships between a small number of measurable inputs and a measurable output, it diverted attention away from the causal role that complex factors such as the values of the home, class, culture, and motivation, which were exactly what the findings of the *Coleman Report* had pointed to as being the most important, played in educational achievement. In the late 1960s and 1970s, for economists, and increasingly for state-level courts, it was often more amenable to their goals to view education solely as a process of students being acted upon by external inputs.

Hanushek was also dismissive of concerns about the appropriate definition of educational purpose. In his monograph, *Education and Race: An Analysis of the Educational Production Process*, he wrote, “The goal here is not to provide any new or particularly insightful views of the ‘goals of education.’ Those have been discussed, indeed overdiscussed, elsewhere” (1972, pg. 20). For economists, the purpose of education was to achieve the desired outcomes on standardized tests because they had decided that it was an appropriate proxy for future economic equality. For them, the debate was never whether or not equal outcomes on standardized tests *should* be the goal, but rather *how it could be brought about*. Economists had little interest in debating whether standardized test scores were an appropriate measure of the desired outcome of the educational process. For them, the only debate was how well standardized test scores served as a proxy for the outcome that was the measure of human capital theory--earning power. It played to their strengths to act as if there was wide consensus that productivity or earning power, proxied more or less well by test scores, did represent the relevant goals of public education and economists offered themselves as the experts who could show how public policy could effectively raise test scores and equalize them across racial groups.

Educational purpose, the definition of equality of educational opportunity, and beliefs

about the responsibility for educational achievement were shaped and directly impacted by the adoption of the economists' concept of the production function as a way of thinking about the educational process, particularly by civil rights advocates. The proliferation of research methods associated with these concepts brought with it assumptions and values that played, and continue to play, a significant *normative role* in educational policy. Further, although a sociologist and a statistician had designed the study underlying the *Coleman Report*, the outcomes based definition of equality that it was premised upon strengthened the claims of economists to have expert knowledge applicable to educational policy and catalyzed education production-function research in the economics of education community.

The relationship between test scores and the production-function is fundamental to understanding the increasing importance test scores would come to hold in federal policy. Once one accepted the idea that education could be regarded as a production process with a measurable outcome, it was essential to have that measure. Of course, the real measurement of interest for economists and most policymakers was the economic returns after students had received an education. However, although the *Coleman Report* did initially lead to lines of research in the economics of education that attempted to compare earnings (Heckman and Neal, 1996) the researchers of the *Coleman Report* and most economists of education willingly accepted test scores as a legitimate proxy for future earnings. Hanushek explained, "For an output definition of educational opportunity the focus of the data collection should be on achievement levels of a representative sample of population groups...If large inequalities in the average level of such income related measures are found to exist among groups in society, the policy objectives are quite clear, even if the exact means of achieving these objectives are not" (Hanushek and Kain, 1972, pg. 118).

For economists, guided by their faith in their positivistic frameworks, the development of the education production function not only meant that equality of education should be redefined, but that it had been insufficient in the past. Though for most economists of education this remained an unspoken assumption, Coleman explained his view that in the past, the true definition of equality (by which he meant quantitatively measurable outcomes) had been “half-hidden” because of limited research methods. Previous definitions based on inputs were used only because “research has been until recently unprepared to demonstrate what elements are effective” (Coleman, 1968, pg. 18).

The increasingly quantitative approach to studying the undeniably important yet staggeringly complex issue of academic achievement signaled an epistemological shift that would have major repercussions in federal education policy. Coleman admitted the narrowing of knowledge that occurred through the rejection of qualitative methods. In his reanalysis of the *Coleman Report*, he explained,

It is painfully evident to anyone who attempts to study a social system that our quantitative techniques are in their infancy. For, by sensitive observation and description...we can trace the functionings of a social system. Yet, when we try to carry out quantitative research in such a system, we find ourselves stymied. We shift from a sensitive examination of events, in which intimate sequence in time suggests causal relations between events, to a crude measurement of ‘characteristics’ and a comparative cross-sectional analysis that relates one characteristic to another. That is, when we shift from qualitative to quantitative analysis, we change our very mode of inference. (quoted in Grant, 1972)

4.2 Concerns Regarding the Appropriateness of Test-Based Evaluations

Though Coleman was ultimately a defender of the application of the production function to education, there was a small minority within the field of education research who were not. Several economists of education expressed concern over how this approach might actually harm educational policy decisions. Jesse Burkhead described the increasingly popular application of the method as just “another effort on the part of economists, well known for their arrogance, to impose their tools of analysis on a sector that does not fit the economists’ models” (Burkhead, 1973, pg. 196). Several years later, the economists Henry Levin (who would go on to be one of the leading designers of the economic paradigm), Dean Jamison, and Roy Radner warned “...such studies [production-functions] suffer from theoretical and econometric deficiencies that are so severe that their recommendations may spawn greater inefficiencies in the production of education” (1976). Levin was also disturbed by the incommensurability of the production function and the complex fabric of causal factors related to educational achievement. In 1975, he wrote,

...there are enormous difficulties in determining how a host of genetic, psychological, social, cultural, political, economic, educational, and chance factors determine a person’s ultimate life attainments. These difficulties and the complex nature of the problem suggest the inability of social science research to derive answers that can be utilized with any reasonable degree of reliability. (pg. 220)

4.3 The Education Production Function in State Courts

The education production function began to be applied in state court cases soon after economists began developing this line of research, but its use was controversial and highly disputed by social scientists, including economists. One of the earliest federal legal cases involving this approach was *Hobson vs. Hansen* in 1968. Julius Hobson, a civil rights activist, filed a class action lawsuit in federal trial court against the Board of Education of the District of Columbia and its superintendent, Carl Hansen. The suit alleged that these students were being denied equal educational opportunity because of certain discriminatory practices, such as ability tracking. Although the education production-function was not applied initially, it was later used by the defendants to justify these practices by arguing that changing them would not lead to increased educational achievement.

The economist for the plaintiffs, Stephan Michelson, explained how the production function was used to justify unequal treatment, “The argument of the defense eventually emphasized that what input differentials there were seemed to have no educational consequence, as demonstrated by their insignificance in ‘educational production functions’ (1972, pg. 286). Michelson, described the education production function as “theoretically absurd” and “empirically irrelevant.” He went on to point out the difference between the academic research of economists and the reality of the operationalization of theoretical and mathematical constructs into law. He wrote,

...as these schooling issues are brought more and more into the courts, economists will follow. We should be cautious in making claims based on little more than wishful thinking...it is reasonably harmless to impress our colleagues and improve our academic

standing by playing these games in journals. But such court decisions as in the Hobson case have sweeping consequences for children, teachers, administrators, and parents. It is to Judge Wright's credit that he dismissed 'educational production functions' as spurious... (pg. 306)

Several years later, Henry Levin, also one of the economists for the plaintiffs, addressed one the dangers of introducing this form of knowledge into legal proceedings. His concern was that the moral arguments for justice have been "overshadowed" by social science evidence connecting inputs to outputs. In "Education, Life Chances, and the Courts: The Role of Social Science Evidence," he described Judge Skelly Wright's concern with the way it shifted the emphasis from children to data. Levin's concern was that the education production function changed the equality debate from one of ethics and justice to one about highly technical methods and research. He reflected, "...if social science findings increasingly are used to create what appear to be technical issues out of essentially moral dilemmas, this presents a potential social danger. The apparently increasing reliance of the courts on social science evidence suggests that intensive debate on these issues should be given high priority" (1975, pg. 240).

The early 1970s was a time of rapid and dramatic change in the area of school finance. There were two legal rulings that brought school finance to the forefront in state, rather than federal, courtrooms. The first was a ruling in a California Supreme Court Case, *Serrano v. Priest* (1971), in which the judge concluded that the current finance scheme in the state of California was unconstitutional under the Fourteenth Amendment of the United States Constitution and under the California Constitution. Several years later, in 1973, the Supreme Court ruled, in *San Antonio independent School District vs. Rodriguez* that there was no federal right to education and funding inequalities due to tax revenue differences were therefore not unconstitutional.

Following these two decisions, many states, through their supreme court, legislature, or both, took steps toward reforming their policies on school finance, (Wynkoop, 1974).

Political demand from the civil rights movement for equal outcomes, and the support for this from many economists of education, led a number of state courts to grapple with the issue of how equality should be measured--in terms of inputs or outputs? This shift was the result of a new legal theory known as “adequacy,” a legal theory to a large extent based on the assumptions and methods of the economists’ education production-function. Berne & Stiefel point out the inherent relationship between this particular definition of equality of educational opportunity and the research method of the production function, “Focusing on outcome equity invariably leads to questions about what levels and uses of inputs and processes are required to achieve desired distributions or levels of outputs” (1999, pg. 12).

Many policymakers were hesitant to use outcomes based definitions of equality of educational opportunity because of the inconclusiveness of the research (Berne & Stiefel, 1999). However, New Jersey, Washington, and West Virginia led the way in operationalizing the production-function in their funding schemes (McCarthy, 1977). These courts viewed school finance as “the relationship between inputs and educational outcomes” and believed that these laws “emphasize the school’s responsibility to produce certain outcomes in terms of pupil achievement” (McCarthy, pg. 54).

Arthur Wise, who helped to catalyze the school finance movement with his dissertation on fiscal inequality, published as *Rich Schools, Poor Schools: The Promise of Equal Educational Opportunity* in 1968, became one of the leading critics of the new outcomes based definition of equality of educational opportunity in law and policy. In 1979, he published *Legislated Learning: The Bureaucratization of the American Classroom*, a jeremiad against the adequacy

movement and the way in which its operationalization in policy had led to what he called the “hyperrationalization” of schools. He explained that the purpose of his book was to focus on “the ideology implicit in educational policy...and the ways in which research shapes that ideology” (pg. 210). The problem as he saw it was by trying to hold schools accountable for equal outcomes, policymakers had not “been content merely to specify what learning they hope will occur. They have begun to mandate that learning occur” (Wise, 1979, pp. 23-24).

Wise devoted an entire chapter to an analysis of Robinson vs. Cahill, an early example of a state supreme court case using the evidence of economists to redefine the meaning of equality of educational opportunity. This case illustrated the rapidly evolving definition of equality of educational opportunity and the way in which the research of economists legitimated an outcomes based definition. He explained that the case began with the assumption that “the allocation of resources was equated with the allocation of opportunity,” (pg. 176). Several years later, “the ideal of equality of educational opportunity had been replaced by the concept of an adequate level of achievement” (pg. 176). According to Wise, this shift in problem definition had been facilitated by the economic social science research that had been introduced into the case. The economist Henry Levin and James Guthrie both testified and provided evidence that with the proper amount of funding, it was possible to achieve the level of educational outcomes the court wished to achieve. Wise argued that their use of the education production function had “legitimated achievement test scores...as the proper measure of the outcomes of schooling. Low achievement scores became the legally defined harm which the lawsuit was to remedy,” (pg. 181).

The vehemence of Wise’s argument arose from the fact that these technocratic changes were being done in the name of social justice. He claimed that this particular approach to trying

to lift up minorities and the poor had led to the proliferation of a host of other “techniques of management science,” being used in educational policy, including “accountability, PPBS, systems analysis, cost-benefit analysis, [and] economic analysis,” (pg. 12). His far-flung critique also claimed that the desire to create (or coerce) equal achievement outcomes had even penetrated pedagogy and classroom practice, and listed a number of current reforms further illustrating the hyper-rationalization of education: “competency-based education, performance-based education, assessment systems (federal, state, and local), program evaluation, behavioral objectives, and educational indicators,” (pg. 13).

Like human capital theory, the production-function model was originally applied to issues of equality of educational opportunity, in part because it conceptually and methodologically supported developments within the civil rights movement in education. Conceptually, even philosophically, the production-function supported a definition of equality that was premised on the measurable outcomes that the school, rather than culture or background, produced. Methodologically, it assumed that correct and efficient ratios of measurable inputs at the school-level could produce the desired outcomes regardless of socio-economic background, cultural influences, or student motivation. The policy question of what could be done to increase the academic achievement of poor and minority students could be answered in input ratios and dollars. Even though there were many concerns regarding the appropriateness of the production function in education, its ability to support a political agenda made it tempting to those policy makers who were intent on solving the problem of inequality of educational outcomes.

4.4 Complementary Lines of Research: The Education Production-Function and the Effective Schools Movement

Like the economists of education who were galvanized by the *Coleman Report* to develop a new body of research, several civil rights activists in the field of education deliberately created a new line of research to contradict the findings of the report. The leaders of what became the Effective Schools Movement simply rejected, on ideological grounds, the idea that schools were limited in their ability to equalize achievement on standardized test scores between students of varying backgrounds. Ronald Edmonds, Lawrence Lezotte, and Wilbur Brookover set out to study schools that *did* seem to be able to overcome the home and community factors identified as being so deterministic in the *Coleman Report* and used those schools to argue that all schools should be able to do the same. More than anything, economists working on the development of the production function and the researchers working within the ESM were united in their belief that schools alone *could* control academic achievement and *should* be expected to do so.

Researchers in the Effective Schools Movement clearly recognized the ways in which the research of the economists trying to prove the Coleman Report wrong could lend strength to their cause. In “Effective Schools for the Urban Poor” (1979) Edmonds cites several economists, including Cain & Watts (1970) and Hanushek & Kane (1972) to support his own more ideological refutation of the conclusions of the *Coleman Report*. And although they did not use the production function as a technical model, they did use it as a way of explaining how student achievement occurs. J.D. Jansen, a critic of the ESM, pointed out the similarities between the movement and economics-based research, noting that it used the production function as a

conceptual model, that it studied the relationships between measureable inputs and outputs, and that it used similar statistical methods (1985, p.194). Other critics accused the movement of using the research of economists to present itself as being “a scientific model for the evaluation of educational programs” when in fact it was really a “rhetoric of reform” (Ralph & Fennessey, 1983).

Also like economists, although effective school researchers acknowledged the limitations of test scores they ultimately accepted test scores as a legitimate measurement of the effectiveness of a school. Edmonds and Frederiksen explained,

...there may be many among you who do not think it proper to evaluate schooling on so narrow a basis as pupil acquisition of reading and math skills. We share your interest in broader purposes as proper ends for schooling, but hasten to point out the following. American city schools, as a group, do not now successfully teach reading and math to children of the poor. To bring city schools to widespread instructional success would be a social service triumph of the first order. We are therefore quite content, at least for now, to concentrate our energies on the means by which schools that serve the poor might be brought to greater and greater instructional success. (1979, pg. 52)

The premises of the movement also aligned with economists ideas of the importance of incentivizing the desired behavior of educators. Edmonds claimed that if teachers believed the findings of the Coleman Report, they would blame the students, rather than themselves, for low-academic achievement (Edmonds, 1979). They also believed that it was only due to willful neglect (due to racism or laziness or both) that any achievement gaps existed at all. Edmonds confidently claimed, “There has never been a time in the life of the American public school when we have not known all we needed to in order to teach all those whom we chose to teach”

(1979, pg. 19). From this he concluded that any failure to do so must be deliberate. Edmonds insisted, “Our findings strongly recommend that all schools be held responsible for effectively teaching basic skills to all children” (pg. 48).

While it was understandable that these reformers feared how some schools would react to the idea that much of what students chose to do or not do was beyond their control, by insisting that students reach a predetermined, quantitatively measurable achievement outcome, they created an artificial binary that aligned with the work of economists. If schools did not educate poor and minority students to the desired level, it was because they simply lacked incentives.

For economists, the education production function would allow them to become experts in the production of equality in schools, for civil-rights researchers, proving that schools could educate all children as measured by standardized tests put the responsibility for those outcomes squarely on the shoulders of schools and teachers, avoiding the controversial roles that family, community, and culture play in educational outcomes.

CHAPTER FIVE

The Economic Turn: From Special Interest to General Consensus

In the 1960s and 1970s, the work of economists influenced how educational policy makers conceptualized equality of educational opportunity. Human capital theory and the education production-function had directly impacted the *Elementary and Secondary Education Act* and the approach taken by the Department of Health, Education, and Welfare to implement the law. The responses of economists to the *Coleman Report* led to an increasing application of the education production-function in cases involving the issue of school funding in state-level courtrooms. However, in the 1980s, economic concerns other than poverty and inequality led to a widespread *economic turn* in educational policy. The economic recession of the 1970s and the increasing competitiveness of other countries, especially Japan, led many to embrace the idea that education was failing and that this failure had made the United States economically vulnerable. For all students, not just low-income and minority students, educational purpose was increasingly defined in terms of human capital. The importance of achievement outcomes, as a proxy for economic competitiveness, became an integral feature of educational policy discussions.

Ironically, though economic issues took center stage, economists were noticeably absent from the most influential conversations regarding educational reform. Instead, this turn towards a more economics-oriented approach to education was led by powerful business interests, philanthropies, and governors, and was supported by many national education leaders and much of the public. These new stakeholders borrowed, and loosely re-appropriated, economists' ideas of human capital theory and the education production-function. The technical details of these

concepts were largely overlooked, but the beliefs that schools greatly influenced, or even controlled, economic competitiveness; that standardized test scores were a legitimate proxy for economic competitiveness (thus emphasizing outputs over inputs); and that schools could “produce” higher test scores regardless of larger socio-economic forces became increasingly accepted and normalized.

5.1 A Report of Crisis

The Department of Education’s report, *A Nation at Risk*, published in 1983, played a large role in spreading a less orthodox version of economic ideas in education more broadly (Gardner, et al., 1983). Much has been written about the report; its publication led to a maelstrom of media attention, state level reforms, and educational research. In language that was authoritative, unequivocal, and ominous, the report made the explicit connection between education and economic productivity. Thomas Toch explained several years later that the perception of a failing economy “was the principal reason that the nation supported the push for excellence in education so strongly; more than anything else, it was the competitiveness theme that defined the education crisis in the nation’s eyes,” (1991). The ominous messages within the report began to appear more and more frequently in policy discussions.

Unsurprisingly, most economists of education were unsatisfied with the way in which human capital theory was being interpreted by reformers. For economists, human capital theory was a highly specialized, highly technical approach to thinking about the relationship between education and economic growth (or poverty). On the one hand, economists saw the emphasis on the economic purposes of education as an appropriate shift in priorities, on the other hand, many

were frustrated by the ways in which core economic ideas were misconstrued or neglected altogether. According to Dale Jorgenson, Hanushek, a consultant for the U.S. Department of Education between 1987-1995, would later complain that the reform movement of the 1980s was “almost completely devoid of economic content” (National Research Council, 1996, pg.6). In fact, decades later, Hanushek claimed that the misunderstandings about human capital theory that plagued educational discussions in the twenty-first century were the result of *A Nation at Risk*, which had “distorted the nation's understanding of the relationship between education and the economy for two decades” (2002).

Hanushek, reminding readers of the necessity of having economists involved in interpreting educational phenomena related to the economy, explained the misinterpretation of human capital theory created by *A Nation at Risk* in the following way: “The fact is that the supporters and the critics of *A Nation at Risk* have woefully misinterpreted the economic trends. They have been all too eager to jump on almost any economic news and to link it to today’s schools...this perspective fails to...distinguish between short-term swings in the business cycle and long-term trends in economic growth. It also ignores other factors that might affect both current economic conditions and overall patterns of economic growth and development” (Hanushek, 2002, pg. 142). Hanushek’s article, *The Economics of Schooling*, published in 1986, predicted that the reforms recommended by the 1983 report would fail because they were not focused on the production process of education.

There were two recommendations made in *A Nation at Risk* that, according to economists, were particularly misguided: the call for more financial investment and for more time in school. The economists Tsang & Levin (1985) wrote a critique of the latter, in which they approach this issue “from the perspective of economic theory.” Their conclusion, based on

an economic model, predicted that there would be a “rather small increase in educational achievement relative to rather substantial increases in instructional time.” It was doubtful, they said, that more time spent in an already failing system would improve test scores. (Levin, 1986). Several years earlier, Hanushek had already published “Throwing Money at Schools” in the *Journal of Policy Analysis and Management*, in which he surveyed evidence on the relationship between school funding and student performance (1981). This article, in which Hanushek claimed that “there is no relationship between expenditures and the achievement of students,” marked the beginning of the debate in policy research over the importance of funding.

5.2 Business Leaders, Philanthropists, and Governors Drive Reform

As economists of education watched from the sidelines, the Task Force on Education for Economic Growth was created without a single economist. Instead, the group was comprised primarily of governors and business and educational leaders. It released several reports during the decade of the 1980s and members made a number of recommendations for reform in their first report, *Action for Excellence: A Comprehensive Plan to Improve Our Nation's Schools* (1983). Their primary recommendation was that each state should create a plan that “acknowledge[s] the central role of education in the state's future economic growth and in preparing citizens for future jobs,” (pg. 34). Other suggestions included making partnerships with business leaders to improve education; using current resources more effectively and investing in additional resources; adopting more rigorous curricula, and increasing the duration and intensity of time in school. Lastly, the report recommended focusing on “unserved or

underserved” students, with the rationale that economic growth necessitated “draw[ing] upon the broadest base of talent” (pg. 40).

A growing belief that the success of business would save the U.S. economy increased the legitimacy of business leaders’ opinions and concerns regarding educational reform. Following swiftly after the release of *A Nation at Risk* was the passage of the *Education for Economic Security Act*, which added new science and mathematics programs for elementary, secondary, and postsecondary education. In hearings related to the act, Susan Adler, director of Washington Office for the Education Commission of the States, explained, “The Education for Economic Security Act sets an appropriate framework for discussion of the importance of education’s place in the design of economic strategies necessary to move us forward toward recovery and forward to sustained economic growth,” (pg. 88). National education leaders, including Albert Shanker, president of the American Federation of Teachers, and Willard McGuire, president of the National Education Association, both testified in support of the bill and echoed the claims being made by federal officials and business leaders. Shanker agreed that the “...number one problem is to increase the supply of mathematics and science teachers,” (pg. 275), while McGuire reiterated the concerns of *A Nation at Risk*, “...increasingly American youth across the land are not adequately prepared to take on the economic, technological, and national security challenges facing the nation,” (pg. 294). Although the hearings focused on a failing economy and the need for math and science teachers, the only supporting evidence provided by witnesses that either of these things were true was an article that had appeared in *Business Week* in March, 1983, in which business leaders explained the importance of these disciplines to the success of their businesses.

The release of *Investing in Our Children: Business and the Public Schools* by the

Committee of Economic Development in 1985 also indicated that business leaders were becoming serious about educational reform and were influencing discussions of educational purpose. The committee's 200 members were "drawn from the highest ranks of the U.S. business community and academia" (Doyle & Levine, 1985). According to several authors of the report, Japan's economic success, coupled with their excellent education system, provided business with sufficient evidence that reforming education was the best way to address their economic concerns. The report explained that "Today's business leaders think that education is the most important domestic issue." Again, although economic issues were at the forefront of these reformers' minds, economists were not included as advisors, task force members, or authors of commissioned papers.

Significant contributions to the reform movement prioritizing economic competitiveness also came from the field of educational philanthropy. In 1985, the Carnegie Corporation of New York initiated a forum, that would eventually become the *National Center for Education and the Economy*, in order to "focus attention on the important changes taking place in the global economy and the implications for education in the nation's elementary and secondary schools" (History of NCEE). In 1986, it released a highly influential report, *A Nation Prepared: Teachers for the 21st Century*, passages of which echoed the threatening message of *A Nation at Risk* but focused on what could be done to make teachers more responsive to the crisis (Carnegie Forum).

Governors, in particular southern governors, were also active leaders in the reform movements that occurred in the 1980s. Governors Bill Clinton of Arkansas (D), Lamar Alexander of Tennessee (R), Robert Graham of Florida (D), and Richard Riley of South Carolina (D) were in the vanguard. According to Vinovskis, this was because they "saw educational improvements as essential for the revitalization of their states' relative economic backwardness,"

(1999, pg. 41). The National Governors' Association played a key role in directing interest and support for an increasingly economic definition of educational purpose (NGA.org). In 1986, they released *Time for Results: The Governors' 1991 Report on Education* (it was a five-year plan, which is why 1991 was included in the title). In an overview of the report, the chairman of the NGA, Lamar Alexander, quickly established the reason why governors were suddenly so committed to reforming education in their states: "Better schools mean better jobs. Unless the states face these questions, Americans will forfeit their high standard of living. To meet stiff competition from workers in the rest of the world, we must educate ourselves and our children as we never have before," (Alexander, 1986, pg. 203).

In 1989, President George H.W. Bush encouraged elite business leaders and governors to become even more actively involved in educational reform. In June, he spoke at the end of an annual meeting of the Business Roundtable, an organization of chief executive officers from the most powerful American companies. The meeting was "one of the strongest signs yet of concern by American business executives about the national state of education. The Round Table...spent the entire session on what was becoming an increasingly frequent topic at corporate gatherings, the crisis in public schools and what business can do to improve educational quality," (Fiske, 1989).

Bush's Governors' Summit also provided the impetus for a bipartisan coalition of governors to create a plan for human capital development in their states. The group created a number of educational goals to facilitate economic growth at the state and national levels. These goals focused on both equality of educational opportunity and high achievement. The end result of this was what they called the "Jeffersonian Compact" which focused on "the readiness of children to start school; the performance of students on international achievement tests,

especially in math and science; the reduction of the dropout rate and the improvement of academic performance, especially among at-risk students” (NY Times, 1989, pg. 22).

Bush presented a slightly modified version of these goals several months later in his State of the Union speech. He emphasized that the reason for the creation of the goals, and the reason for the need for reform, was for the development of human capital. He stated,

This administration is determined to encourage the creation of capital, capital of all kinds: physical capital...intellectual capital...and of course our human capital -- the talented workforce that we'll need to compete in the global market. Let me tell you, if we ignore human capital, if we lose the spirit of American ingenuity, the spirit that is the hallmark of the American worker, that would be bad. (State of the Union, 1990)

5.3 The Rising Importance of Standardized Tests and Data

As has been mentioned, concomitant with the shift to a more economics-focused purpose of education was an increasing emphasis on outcomes. *A Nation at Risk* signaled that test scores were to take on greater significance within educational policy because, for the authors of the report, declines in test scores, particularly when compared to other industrialized nations, indicated a failing U.S. education system. Leading the list of their evidence was the statement, “International comparisons of student achievement, completed a decade ago, reveal that on 19 academic tests American students were never first or second and, in comparison with other industrialized nations, were last seven times.” Although national testing had begun in 1969 with the development of NAEP, prior to the 1980s, the results of the tests were a minor influence in policy discussions. In the 1980s, NAEP became more of a factor in policy goal definition and

was valued as a key indicator of economic strengths and weaknesses (Shepard, 2008; Messick, Beaton & Lord, 1983).

During the 1980s, the institutional infrastructure necessary to producing and analyzing standardized test scores for policy purposes grew dramatically at the state and national level. Smith explained, “Hardly an educational group or agency at the national or state level has not become involved in the business of education indicators during the 1980s” (Smith, 1988, pg. 487). A focus on economic ends as the purpose of education more generally led many to increasingly, and unproblematically, view test scores as the most critical indicator of future economic success. Although standardized tests were not new, their significance, in terms of both their importance and their meaning, changed.

In 1987, the National Governors’ Association indicated its wholehearted endorsement for more data collection on outcomes in “Time for Results” with the following education production-function oriented statement: “Governors should lead the way in defining targets the nation as a whole should aim for. The data we now have on educational results is not good enough. We know about the inputs but not enough about the outputs” (pg. v).

That same year, the Congressional Budget Office released the report “Trends in Educational Achievement” in response to the sudden rise in faith in the knowledge produced by test scores. The report not only documented the increasing importance being given to the outcomes measures produced by standardized test scores, it warned of their overuse and of the spreading misconception that these tests are comprehensive measures of school. The report accused *A Nation at Risk* for fostering the development of a deep association between the economy and standardized test scores, which had led to the increasing tendency to accept standardized test scores as legitimate measures of school quality “Americans appear to have

come increasingly to judge the quality of their schools by the results of achievement tests~a trend that is apparent from the local level to the national” (pg. 10).

The authors of the report made repeated warnings about the misuse of standardized test scores, claiming that there had been a widespread failure to acknowledge the inconsistencies inherent in educational knowledge premised exclusively on test scores. They reminded readers that “even the best of current tests are only incomplete proxies for educational achievement...The limitations of test scores...must be recognized,” (pg. 10). The report pointed out that standardized tests were not capable of measuring many of the skills and attitudes that were also important for students to learn. The authors stated,

the assessment of students' performance can be distorted by the scarcity of information about these characteristics in the available test data. Other attributes that schooling attempts to develop may be even more difficult to assess, such as an interest in reading, mastery of certain types of reasoning, and the ability and propensity to apply skills developed in school to very different and perhaps unstructured problems encountered out of school. (pg. 10)

These warnings were not powerful enough to mitigate the increasingly powerful demands for the economic reform of education that were sweeping the nation. A key message at the The Governors’ Summit in 1989 promoted the necessity of having increased amounts of standardized test score data at and pushed outcome-driven reform. In his account of the summit, Maris Vinovskis stated: “There was clear agreement that the goals should be performance- or outcome-oriented...This theme was addressed in almost every panel, and there was no opposition to this as an outcome of the summit” (Vinovskis, pg. 34).

5.4 The Evolving ESEA

During the decade of the 1980s, the changes to ESEA illustrated the ideological battle between conservatives and progressives over government oversight in education. During his first year in office, Ronald Reagan passed the *Education Consolidation and Improvement Act* (1981) reauthorized ESEA and shifted a number of responsibilities back to the states. Six years later, during Reagan's second term, Representatives Augustus Hawkins (D-CA) and Robert Stafford (R-VT) introduced the *Hawkins-Stafford School Improvement Amendments* which passed with overwhelming support from both parties. Improving the test scores of poor and minority students was the primary goal of the amendments and, in order to remain eligible for federal aid, local schools were required to document improvements in test scores. Bi-partisan support indicated that both parties now agreed that federal aid should involve close federal monitoring in order to ensure measurable gains in student achievement.

5.5 Economic Foundations

Economists indirectly influenced the discussions of the 1980s, because the discussions implicitly accepted many of concepts and assumptions they had introduced into the education policy realm in the 1960s and 1970s – that the purpose of education was largely economic, and aligned with important national goals, the “investment” view of education associated with the theory of human capital, and the idea that measures of these outputs and inputs were essential to diagnosing “inefficiencies” of the system economists. Although economists were critical of how these concepts were employed in the decade following the release of *A Nation at Risk*, everyone

in the discussion – economists and noneconomists – now shared a basic framework, one that was heavily influenced by economists. Indeed, the shared framework of the 1980s, and its flaws, arguably set the stage for increasing the influence of economists. First, through the building of the infrastructure of test score collection, which created a demand for economists to analyze the test scores, and second because policy makers wanted economists to explain to them the proper understanding and use of these concepts and tools which they all accepted.

CHAPTER SIX

The Political Construction of the Economic Paradigm

6.1 Economists as Policy Entrepreneurs

In the 1980s, economists had largely watched educational policy making from the sidelines as many governors, powerful business interests, and philanthropies attempted to make educational purpose more economic and improve economic competitiveness through traditional (not economics-based) methods: increased spending and an emphasis on rigor and “academic excellence.” Their frustration with these traditional approaches to educational policy led thirteen elite economists to create the *Panel on Economics in Education Reform* (PEER) in 1990, (Hanushek, 2010).⁷

This was a watershed moment for economists of education: after watching economic ideas muddled by politics and policymakers for decades, they began to move closer to policy creation, and institutional change, themselves. The formation of PEER was the start of a deliberate effort to become policy *entrepreneurs* in addition to being policy *researchers*.⁸

⁷ The members were: Eric A. Hanushek, Charles S. Benson, Richard B. Freeman, Dean T. Jamison, Henry M. Levin, Rebecca A. Maynard, Richard J. Murnane, Steven G. Rivkin, Richard H. Sabot, Lewis C. Solmon, Anita A. Summers, Finis Welch, and Barbara L. Wolfe

⁸ Three members of PEER in particular, Eric Hanushek, Henry Levin, and Lewis Solmon went on to become several of the most powerful education policy entrepreneurs of the next three decades. During the 1980s and 1990s, they held influential positions in government, universities, think-tanks, and foundations. From 1986-89, Hanushek was a consultant to the U.S. Commission on Civil Rights and from 1987-95 he was a consultant to the U.S. Department of Education. Levin received the 1991 New York Times National Leader in Education Innovation award and in 1992 the Charles A. Dana Award for Pioneering Achievements in Education from the Dana Foundation. After having served as the dean of UCLA’s Graduate School of Education from 1985-1991, Solman became the founding president of the Milken Institute, an economics think-tank from 1991-1997. In 1989 he published *From the Campus: Perspectives on the School Reform Movement*.

Members of this group included Eric Hanushek, Henry Levin, Richard Murnane, and Steven Rivkin, (all of whom are still active as policy researchers, advisors, and advocates) and the late Lewis C. Solman. The purpose of the panel was to create a comprehensive reform agenda based on economic principles. The group's final report, *Making Schools Work: Improving Performance and Controlling Costs* was published in 1994 and espoused an approach to educational reform founded on what they saw as the “critical” need for cost efficiency and performance incentives. In the chapter “Economic Principles: A Guide for Improvement” they explained:

As economists, we believe that economic principles are a crucial part of any reasonable procedure for making decisions about the allocations of economic resources... We believe that the unhappy state of public education is largely the result of inattention to three decision making principles designed to ensure that schools' resources are productively employed: efficient use of resources, implementation of appropriate performance incentives, and continuous learning from experience. (Hanushek, 2010, pg. 51)

Their agenda was premised upon human capital theory, the education production-function, cost-benefit analysis, and accountability—all of which necessitated an increase in quantitative data.

As they promoted their agenda, these economists appealed to both Democrats and Republicans at the national and state levels, specifically to those who advocated for increasingly centralized means of accountability. Because their research on accountability legitimized core ideas within both political parties, they were able to profoundly shape the reform agendas on both the left and the right and even to unite political interests that had been heatedly oppositional (Rhodes, 2012). Jesse Rhodes explains that a key feature of political entrepreneurship is the ability to build consensus and solidarity between different, even oppositional, viewpoints (2012).

Researchers have commented on the “counter-intuitive” and bi-partisan nature of NCLB; the unlikely alliances and hybrid forms of policy coalitions were primarily due to the ability of influential economists to market their ideas, in their academic research, in government agencies, in think-tanks and philanthropies, and in the media, in ways that went beyond traditional categories of liberal and conservative, Democrat and Republican (Rhodes, 2012; Hess & Petrilli, 2005). In the preface to *Improving America’s Schools: The Role of Incentives*, Dale Jorgenson wrote in 1994, “It is important to emphasize that the debate over the role of economic considerations in education policy reflects intellectual more than political disagreements. There has been a bipartisan consensus on the importance of clear objectives for national education policy...” (pg. 4).

Two years before the publication of PEER’s manifesto in 1994, Henry Levin was involved with the Commission on Chapter 1, which published *Making Schools Work for Children in Poverty: A New Framework Prepared by the Commission on Chapter 1*. This report, showing the intellectual influences of ESM and PEER, exemplified the way in which these two approaches complemented and reinforced one another. In addition to Levin, members of the commission included Cynthia Brown, Kati Haycock (who would go on to become the CEO and founder of The Education Trust), and Phyllis McClure of the NAACP Legal Defense and Education Fund. Preparing for the next reauthorization of ESEA, the commission created an eight-part framework merging economic ideas related to accountability with the tenets of the Effective Schools Movement. The report explained that the evidence now existed that proved that all children were educable to high standards and that any denials of this were “excuses” and “red herrings.” The report also recommended that the future law “Replace accountability for dollars with accountability for results” and “Have states reward schools that progress and change

those that do not.” Several years later, President Clinton’s educational laws, *Goals 2000* and the reauthorization of ESEA known as *Improving America’s Schools Act* revealed that economists and civil rights activists had begun to shift education policy at the federal level towards accountability.

6.2 Clinton’s Laws: Ideas from Business, Economics, and the Effective Schools Movement

Clinton’s *Goals 2000 Act* of 1994 was a federal law committing education to the promotion of economic growth within the context of global capitalism. The purpose of the act was to create “high-quality internationally competitive standards” in content, performance, and skills; and their assessments” (*Goals 2000*, p. 4). Robert Reich, Clinton’s Secretary of Labor, testified several times in the Congressional hearings leading up to the act’s passage. He attempted to provide the justification for this economically driven education reform by explaining the economic changes that were occurring nationally and internationally and the role that education could play in helping the United States adapt to those changes.

In testimonies related to the law, it became clear that in addition to the economy being the overarching purpose of education, education was also described as the *sole determinant* of national and individual economic success, which lent an even greater sense of urgency to the need for reform. Richard Riley, Clinton’s Secretary of Education, attempted to convey how crucial the right kind of education system was for the new economy, “As we approach the 21st century, our prosperity and dreams hinge upon education as never before. The global economy is characterized by an information-rich world dependent upon technology and filled with high skill, high wage jobs” (p. 5). The proponents of this global economy insisted that American workers

reconfigure ideas of what it meant to be educated, employable, and competitive. If workers failed to do so, they were told that the bottom of a two-tiered American economy awaited them.

In Reich's statements, he indicated that businesses were to play a significant role in the creation of the skills standards and were to be the main beneficiaries of the act. A number of powerful industries were represented in the hearings, including the Siemens Corporation, American Electronics Association, National Retail Federation, and the National Alliance of Business. A representative of the National Council for Advanced Manufacturing, an industry led, non-partisan organization, explained that it would provide support for "the creation of national voluntary skill standards promoted by the National Skill Standards Board, *but only if* industry plays a key role in determining those standards" (italics mine p. 38). Similarly, a spokesperson for the National Retail Federation praised the act for its creation of a better system of communication between business and education, "...the establishment of voluntary, industry-based skill standards will be a good first step in the right direction--the right direction for the business community to communicate to our Nation's education and training system what kind of skills we expect our applicants to have" (p. 79).

In 1996, Hanushek praised *Goals 2000* for responding to the widely perceived crisis of academic achievement of students in the United States and for focusing on outcomes rather than process or "inputs." He observed, "This legislation, which follows from the nation's governors in 1989, has two important features. First, it makes clear that student performance is indeed a national problem that requires serious attention. Second, it begins to lay out consequential goals for students and schools. Both of these represent positive changes from the past" (2010, pg. 47). However, Hanushek did not see these changes as being sufficiently "economic" in method. He explained that the problem with *Goals 2000* was that it did not include incentives and warned

that without using the economic paradigm, as defined by economists, there would be no improvement: “The basic concerns of economics, with its attention to the effectiveness of expenditures and to establishing appropriate incentives, must be used if schooling is to improve” (pg. 50).

Shortly after *Goals 2000* was passed, Clinton introduced IASA (1994), which focused on equality of educational opportunity. This law incentivized states to implement *Goals 2000* by tying Title 1 funds to the previous law’s recommendations; the funds were to be used to help poor and minority students perform well on the new standards and assessments described in *Goals 2000*. In 2002, the civil rights activist William Taylor, who was involved in both IASA and *No Child Left Behind* and known for his passionate belief in accountability,⁹ explained that while preparing IASA, Congress had “discovered” the research of the Effective Schools Movement: “In 1994 in the *Improving America’s Schools Act*, a bi-partisan Congress made a finding that is the foundation for subsequent efforts at school reform. All children can learn, Congress said, and all except those who have the most serious cognitive impairments can learn at the highest levels.” (pg. 3).

Taylor’s claims that ESM directly influenced the drafters of IASA was evidenced in the text of the law itself. In the section “Declaration of Policy and Statement of Purpose,” the assumptions of the movement have become the assumptions of the legislators:

All children can master challenging content and complex problem-solving skills.

Research clearly shows that children, including low-achieving children, can succeed

⁹ Margaret Spellings, Secretary of Education under President George W. Bush, said of Taylor: “He was a huge champion for closing the achievement gap, for accountability--just a hawk, and I use that as a huge compliment because he was ever-vigilant about that cause,” (Brown, 2010).

when expectations are high and all children are given the opportunity to learn challenging material.

The movement is specifically mentioned by name in Section 6003, when the term “effective schools programs” is defined as “school-based programs that...have the objectives (they fulfill the criteria of ESM) including ‘A climate of expectation that virtually all children can learn under appropriate conditions’ and ‘that continuous assessment of students and programs evaluate the effects of instruction.’”

For Taylor and the other Congress members he refers to, the logical conclusion of the ESM research was that schools should be held accountable for educating all students to high standards.¹⁰ However, although the law was clearly sympathetic to the ideals of the Effective Schools Movement and the theory of accountability, it still recognized the role that home and community played in student outcomes. The law stated that services *in addition to* public education, such as health and social services, were necessary to raise achievement:

Conditions outside the classroom such as hunger, unsafe living conditions, homelessness, unemployment, violence, inadequate health care, child abuse, and drug and alcohol abuse can adversely affect children's academic achievement and must be addressed through the coordination of services, such as health and social services, in order for the Nation to meet the National Education Goals.

In addition to this, a second clause was included:

Attention to academics alone cannot ensure that all children will reach high standards.

The health and other needs of children that affect learning are frequently unmet, particularly in high-poverty schools, thereby necessitating coordination of services to

¹⁰ As one of the writers of the *No Child Left Behind Act* seven years later, he was able to be involved with the successful legislation of these conclusions.

better meet children's needs.

While *Goals 2000* and IASA alluded to ideas of accountability, by repeatedly acknowledging the role that non-school factors played in achievement, legislators indicated that they believed it would be unfair to hold schools accountable for outcomes partially dependent on non-school factors. However, the willingness to acknowledge that it was not schools alone that could close the “achievement gap” would recede as the research on accountability, dominated by economists, emboldened many on both the left and the right to become more demanding and insistent toward schools and teachers.

6.3 Economists Press Forward with Their Agenda: Solving the Principal-Agent Problem

After *Goals 2000* and IASA, economists insisted that what was missing from education policy reforms were incentives, designed by economists, that would motivate schools and teachers to increase student achievement and close the gap between poor and minority students and the rest. In April of 1995, the Brookings Institute held a research conference on accountability attended primarily by economists and other quantitative social scientists in the field of educational policy. The economist Helen F. Ladd, who organized the conference and edited the subsequent publication, *Holding Schools Accountable: Performance-Based Reform in Education* (1996), stated that it was now assumed that an accountability approach was necessary and that the real question was a political as much as an empirical one: *how* should schools be held accountable?

In his review of several chapters in *Holding Schools Accountable*, Hanushek echoed the idea that the need for accountability was no longer being questioned in elite policy circles.

Reminding readers that these policies would be complex, he pointed out that economists were the ones who had the expertise to design the accountability policies, “School personnel, legislators, and state education administrators are not...generally prepared to think about incentives and they must rely on others to provide guidance in developing sound structures,” (Ladd, 1996, pg. 128).

A year later, Hanushek described incentives as being at the “top of...the unfinished agenda” economists had mapped out for education reform several years earlier (Hanushek, 1997). That same year while testifying before the Senate Budget Committee, Hanushek criticized the Federal government’s lack of “intellectual leadership” in school reform. He advised the committee that “Substituting a plan for developing new knowledge about organizational mechanisms and improvements in incentives within schools offers noticeably more hope than much of the current array of programs and proposals” (Hanushek, 1997, pg. 2).

Though economists of education typically did not focus on the possible unintended consequences their incentivization plans might have on education, Ladd did briefly acknowledge the concerns held by those who did not accept the premise that accountability was “necessary”—primarily educators. Citing the research of Milgrom & Roberts (1992), she stated,

Although economists usually endorse greater use of incentive programs, a well-known theorem in organizational economics demonstrates that when only one of the multiple goals of an organization can be measured, and hence rewarded, incentive programs are undesirable because they will encourage people to focus all their attention on the measurable and rewarded goal to the exclusion of other goals. Many educators are implicitly evoking this theorem when they express fear that the concept of outcome-based accountability threatens the complex fabric of education (Ladd, 1996, pg. 12).

6.4 Accountability Left and Right

Both social justice advocates on the left and free-market ideologues on the right borrowed strength from economists' research on, and advocacy of, accountability in the mid to late 1990s. In 1998, the organization Education Trust, self-described as "Fierce advocates for the high academic achievement of all students – particularly those of color or living in poverty" based their advocacy "research" on the ideas of the Effective Schools Movement and the research of economists focused on accountability, particularly at the level of the teacher. In "Good Teaching Matters: How Well-Qualified Teachers Can Close the Gap" the CEO of the organization, Kati Haycock, refers to the *Coleman Report*, the research of Ronald Edmonds (a pioneer of the Effective Schools Movement), and the research of numerous economists,¹¹ illustrating the ways in which these intellectual strands were woven together to create support for a particular policy reform position. She stated,

We argue, further, that if states and school districts work hard...they can close the achievement gap. Most of the time, we have felt as Ron Edmonds undoubtedly felt: surrounded by researchers clinging to dog-eared copies of the Coleman Report and arguing that nothing works. Recently, however, a number of large-scale studies provide convincing proof that what we do in education does matter. Schools—and especially teachers, it turns out—really DO make a difference. Earlier educational researchers just didn't have very good ways of measuring the variables. (Haycock, pg. 2)

In 1999, the neo-conservative think-tank the Hoover Institution created the Koret Task Force to promote their education policy goals of accountability, choice, and public access to the

¹¹ The report cites the following economists: Eric Hanushek, Ronald F. Ferguson, Helen F. Ladd, Dan Goldhaber, Dominic J. Brewer, John F. Kain, Robert P. Strauss, and Elizabeth A. Sawyer.

results of quantities data, which they called “transparency.” Members of the task force included Eric Hanushek and Caroline Hoxby, along with a group of senior education scholars.¹² The task force’s first publication was *A Primer on America’s Schools*, published in 2001, which reiterated human capital theory; stressed accountability, particularly for teachers; condemned teachers’ unions and advocated vouchers and charter schools (Moe, 2013).

At the 106th Congress in 1999, each party proposed amendments for the reauthorization of ESEA founded primarily on the agenda delineated by economists in *Making Schools Work*. However, the two proposals show that each party envisioned accountability somewhat differently and emphasized the different ideological benefits of accountability, i.e., social justice on the left and freedom from government regulation of the right. And while both sides supported the idea of charter schools, they wanted to hold charter schools, and all public schools, accountable through different mechanisms, with Democrats tending to prefer centrally administered performance-based accountability plans and Republicans relying more on school choice provisions and charter schools to introduce competition as a means of holding schools accountable.

The Clinton Administration’s plan for the reauthorization of IASA was the *Educational Excellence for All Act*. While IASA had touted the beliefs of the ESM, it had also acknowledged the role of non-school factors. However, in the new proposal all references to those were gone. The focus was on holding schools accountable for results—no matter what. According to the Fact Sheet, “Schools that enroll high concentrations of children living in poverty face the greatest challenges, but recent research demonstrates that, by implementing effective, research-based educational strategies, they can succeed in educating children to high standards” (1999).

¹² In addition to the economists Eric Hanushek and Caroline M. Hoxby, members included Chester E. Finn Jr., chairman of the Koret Task Force, a senior fellow at the Hoover Institution, and president and trustee of the Thomas B. Fordham Foundation, a conservative education policy think tank; John E. Chubb; Paul T. Hill; Terry M. Moe; Paul E. Peterson; Herbert J. Walberg.

The law mandated that low performing schools failing to improve after three years face severe punishments, including “closing the whole school entirely and reopening it with new staff or as a charter school.”

Republicans released their own proposal, *Academic Achievement for All: Increasing Flexibility and Improving Student Performance and Accountability*, also referred to as the Straight A’s proposal. Chester Finn, the president of the Fordham Foundation and also a member of the Hoover Institution’s Koret Task Force, along with Hanushek and Hoxby, testified in hearings on the proposal. He claimed that the Republicans’ version of accountability, in contrast with that of the Democrats, was really about less government, rather than more, like Clinton’s plan. He stated, “The Administration’s plan claims to impose accountability, but it does so primarily by regulating inputs and procedures.” However, he claimed that Straight A’s was superior because it “would represent an historic shift [in federal policy] from a preoccupation with inputs to a laser-like focus on results, from the regulation of how the money is spent to a clear insistence that higher achievement actually be produced.” Finn claimed that a number of conservative and even centrist leaders and groups had endorsed the plan, including House Speaker J. Dennis Hastert, the Education Leaders Council, the Christian Coalition and the Progressive Policy Institute.

One of the defining features of the modern Republican party was its preference for smaller government. Why, then, was it so supportive of the expansion of the Federal government’s power in education policy? Firstly, Republicans were just as concerned with the global economy and the interests of business as were Clinton Democrats. They believed that holding schools accountable for outcomes that were touted as being proxies for economic growth was in the nation’s best interest economically. Secondly, although not explicitly stated by

Republicans, expanding federal involvement in education for purposes of reducing poverty was a way to show compassion for the poor. In a critique of both parties, Harvey Kantor and Robert Lowe describe the inverse relationship between federal involvement in education and federal provisions of other social services (2006; 1995). The historian of education, Larry Cuban, also noted that none of the presidents most involved in education reform, Johnson, both of the Bushes, Clinton, nor Obama had focused in any significant way on the issue of poverty other than through the idea of human capital development through education (Cuban, 2011).

Lastly, unlike most Democrats, many Republicans hoped that by demanding more rigor in the schools they could reign in what was perceived of as the “liberal curriculum” in public education; a focus on academic achievement would help to assuage what they believed had been an undue emphasis on self-esteem, multiculturalism, and popular culture.¹³

6.5 *No Child Left Behind* and the Achievement of the Economic Paradigm

Neither the Democrats nor the Republicans were able to pass their proposals for the reauthorization of ESEA in 1999. However, George W. Bush emphasized education reform in his presidential campaign and after winning the election in 2000, passed *No Child Left Behind*, arguably the most significant federal education legislation in the history of the United States.

The law was the articulation of the economists’ agenda: it assumed primarily economic purposes for education and because it applied to all students, not just to poor and minority students, its purpose was the development of human capital idea in its broadest sense—economic growth and poverty reduction. While test scores had been used for decades to evaluate schools,

¹³ See Ravitch and Finn’s “What Do Our 17 Year-Olds Know?” (1987) and Bloom’s *The Closing of the American Mind: How higher education has failed democracy and impoverished the soul’s of today’s students* (1987).

because the stakes were so high, data now took on an even greater significance. It also incorporated the education production function as a conceptual and methodological model: measurable inputs arranged efficiently would bring about the desired achievement outcomes without any consideration for non-school factors. According to Hess & Petrilli, “Both Democrats and Republicans vehemently rejected the notion that poverty, culture, or family background constituted legitimate explanations for mediocre performance” (2005, pg. 16). Lastly, it held schools accountable primarily through sanctions. The policy response to the principal-agent problem that economists had pursued through research and policy entrepreneurship, had finally occurred.

The conservative Sandy Kress, a drafter of No Child Left Behind who went on to become a lobbyist for the test company Pearson, explained the relationship between the left and right in terms of defending NCLB. In “Confessions of a NCLB Supporter,” he explained that although there were differences between them, they needed to continue to fight together in order to overcome the opposition to test based accountability, which he called the “status quo” (Education Next, 2007).

While NCLB was initially supported by both parties, many leaders within the social justice movement began to express even more hostility towards teachers and schools that did not raise achievement scores to the desired levels. Of course, not all involved with civil rights or social justice supported accountability. Gary Orfield, the director of the Civil Rights Project at Harvard, called into question the premises and assumptions that had guided civil rights leaders involved with the writing of the law, pointing out the lack of evidence to support claims that this would improve education for all students (Reid, 2005).

However, in the years following the passage of the law, there was an even greater

alliance between those on the left and right who continued to support test-based accountability. In 2004, several leading business and social justice groups, including the Business Roundtable, the National Center for Education Accountability, Citizens Commission on Civil Rights and the National Council of La Raza, united to attempt to influence lawmakers to continue to support high stakes testing accountability (Robelen, 2004). And according to Beryl Radin, “Even after problems started to occur with NCLB, Ed Trust and more than 100 African American and Latino school district superintendents from across the country urged Congress to stay the course on accountability,” (2006, pg. 107).

In 2007, the economist of education Doug Harris highlighted the way in which the principal-agent theory component of NCLB had been interpreted politically. In “High-Flying Schools, Student Disadvantage, and the Logic of NCLB” he explains that a series of reports, based on the theme of “Dispelling the Myth” published by Education Trust and led many to believe that “educational inequity is entirely due to educators’ lack of effort or even outright racism” (pg. 369). Harris cited a number of these responses, showing how the conclusions of the reports, legitimized by the research of economists, perpetuated beliefs that legitimized the blaming of teachers and schools for the achievement gap (Stanton, 2001; Nathan, 2002; Christofferson, 2001; Schemo, 2001).

Harris argues that those who have been persuaded by the rhetoric of Education Trust, indicated by statements such as “‘It’s not about the kids,’ ‘The school hasn’t tried,’ ‘Racist nonsense,’ ‘No excuses,’” are choosing to ignore the evidence that student outcomes are not completely controllable at the level of the school. Yet Harris, critical of the accusations being made against teachers and schools, did not acknowledge the role that his own discipline played in fueling and legitimizing those conclusions. For decades, Hanushek and other economists had

claimed that schools alone could close the achievement gap and Education Trust cited their work in their influential reports.

In his account of the “complicated” political story of the lead up to No Child Left Behind, Jesse Rhodes observed that “...Democrats and Republicans have converged on a policy agenda that borrowed themes from both partisan camps without simply splitting the difference between liberalism and conservatism” (Rhodes, 2012, pg. 7). This was illustrated in the way that many of the most prominent civil rights groups began to use human capital arguments focused on global competitiveness and the economy as a whole. In 2010, a coalition of civil rights oriented organizations released “Framework for Providing All Students an Opportunity to Learn through Reauthorization of the Elementary and Secondary Education Act.” The authors stated, “As a nation, we are failing to provide the high-quality educational opportunities that are critical for all students to succeed, thereby jeopardizing our nation’s ability to continue to be a world leader...As a result of our history and changing demographics, our nation is at a point where we will remain globally competitive only through achieving educational equity” (NAACP). In the same year, Linda Darling-Hammond published the *The Flat World and Education: How America's Commitment to Equity Will Determine Our Future*, which won the Grawemeyer Award in Education in 2012, received much acclaim from within the social justice movement. Darling-Hammond, a long-time advocate of equity in education (who also holds a PhD in Economics from Stanford University) argued that the future economic competitiveness of the United States largely rested on whether or not there was a significant improvement in educational outcomes for poor and minority students.

Seven years later, the influence of economists in education policy was even greater, as evidenced by *Race to the Top*. If states wanted to be able to compete for the substantial financial

grants created by the policy, they were required to implement reforms that built upon and intensified the economic agenda that economists had created during the Clinton-era. This initiative pushed for more charter schools, teacher evaluations based on test scores, and state interventions into schools deemed to be “failing” because of low test scores.

As recently as 2014, those from the left and the right continued to work together to promote accountability. Patrick McGuinn explained that

The test-based accountability coalition is made up of a diverse array of groups from across the political spectrum. It includes conservative business groups like the Business Roundtable and Chamber of Commerce concerned about the impact of education on economic competitiveness, centrist Democratic Party groups like the Democratic Leadership Council and Democrats for Education Reform, think tanks like Education Sector and the Center for American Progress, civil rights organizations like the Citizens Commission on Civil Rights, and anti- poverty groups like the Education Trust. (pp. 9-10)

Although human capital theory originated as a technical economic model, it quickly became a powerful metaphor and conceptual model for educational purpose in educational policy and in educational thought more generally. In a similar way, the education production function also deeply influenced conceptualizations of what education was, how it occurred, and how it should be measured. highly specific educational outcomes could be produced apart from the larger social, cultural, and economic forces in which they occurred. The assumption that the educational process was analogous to factory production led to the conclusion that educational outcomes

could be largely controlled by the school or teacher, thus altering beliefs about who should ultimately be held responsible for those outcomes.

Within policy and policy research, “educational knowledge” has come to be defined almost exclusively as the relationship between measurable inputs and measurable outputs. In terms of outcomes-based policy, it is often unclear whether or not there is a significant difference between the quantitative measurement of education and education itself. The economic paradigm has both oversimplified and overcomplicated knowledge in education policy. It has paradoxically used complex mathematical models to deny the complexity of causation of achievement and the complexity of the purpose and value of education in the United States.¹⁴

In *The Mismeasure of Man* (1981) Stephen Jay Gould explains how the fallacy of reification, the misappropriation of a measurable and quantifiable thingness to abstract and complex concepts, reconfigured how many psychologists and the public thought about intelligence. As the acceptance of the legitimacy of intelligence quotient (IQ) scores became more widespread, this error led to a number of misguided beliefs and policies, many of them directly impacting and shaping the lives of children. Gould’s historical critique of psychologists’ reasoning and use of statistical methods for measuring intelligence can be extrapolated to the influence of economists and the degree to which they have provided ideological and methodological support for the reification of both teaching, learning, and equality of educational opportunity. By attempting to objectify and quantify the essential educational processes of teaching and learning it has

¹⁴ The economist Richard Rothstein has described the “obsession” (Rothstein, 2004) with raising standardized test scores that the *Coleman Report* catalyzed in education research. He has also criticized the ways in which the response to the report narrowed of the issue of academic achievement to the school alone, even though it is well-known, as the *Coleman Report* and countless research has shown, that the largest predictor of educational achievement is the home.

distorted and weakened the much more complex conceptualizations that previously existed. The economic paradigm made implicit claims about the virtually limitless power of economists and quantitative social sciences to engineer an ideal world.

CHAPTER SEVEN

CONCLUSION

In 1953, Isaiah Berlin published an essay titled “The Hedgehog and the Fox” in which he classified two approaches to understanding the world—one that is singular, universal, and systematic and the other pluralistic, contextualized, and tolerant of complexities and paradoxes. He wrote, “There exists a great chasm between those, on one side, who relate everything to a single central vision, one system, less or more coherent or articulate, in terms of which they understand, think and feel – a single, universal, organising principle...and, on the other side, those who pursue many ends, often unrelated and even contradictory, connected, if at all, only in some de facto way...” (pg. 3).

The rise of the economic paradigm in education policy is a tale of a battle between the hedgehog-like approach advocated by economists and the fox-like approach illustrated in humanistic approaches to knowledge, local governance, and relational approaches to teaching and learning. Empowered by its claims to being scientific, objective, and empirical, economic research provided policy makers with a universalizing, systematic vision that led to the creation of policies that materialized educational purpose and equality of educational opportunity, objectified teaching and learning, and weakened public trust in educators and administrators at the local level. The economist Ben Fine described neoclassical economics as being “unfit for purpose,” because it “reinterprets” unobservable concepts, i.e., cultural, social, moral, historical, and political through a “sorely inappropriate... technical apparatus,” that is, a mathematical model (p. 373). A fox-like approach would take these elements into consideration in education planning.

In *Cents and Sensibility*, Morson and Shapiro borrow Isaiah Berlin's notion of the hedgehog and the fox to argue that the knowledge embodied in the humanities, particularly in great literature, rather than being simply ornamental, has a "crucial role to play in education" (2017, pg. 241). The ability for literature to illuminate psychological and ethical issues makes it an ideal model for educational knowledge. Those in policy, they suggest, should approach the complexity of education, its specificities and its paradoxes, not with the idea that this complexity can be tamed and controlled through a totalitarian system of knowledge like neoclassical economics, but through the lens of the humanities, which can include, but is not limited to, economic analysis. They argue for a dialogue of approaches; it is not the consideration of the economic aspects of education that they find problematic, it is the tendency for the economic view to exclude all other approaches. "The world is complex, and so are its actors. Effective policies demand more than a limited approach can produce" they explain (pg. 23). They insist that three humanistic capabilities: an appreciation of people as inherently cultural, of stories as essential forms of explanation, and of ethics in all its irreducible complexity play an integral role in education decision making. They warn, "Especially when policy recommendations are involved, questions regarding values, meaning, and other topics familiar to humanists are likely to prove dangerous to ignore or to address in purely economic terms" (pg. 40).

A portrayal of the negative unintended consequences that can result from hedgehog-like policy making is found in *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. James C. Scott describes the failures of a specific type of modern state to bring about well-intentioned social improvements using scientific knowledge. He claims that there is an epistemological limitation to knowledge that is extracted from a complex local environment, abstracted and simplified so as to be comprehensible to an outsider, and then used

to engineer interventions. In contrast to this “modern” type of knowledge, Scott provides the ancient notion of *metis*, which he defines as “practical knowledge, informal processes, improvisation in the face of unpredictability” as well as “indigenous technical knowledge,” “folk wisdom,” and “practical skill.” Like Morson and Schapiro, Scott is not opposed to scientific research, but only what he sees as the hubris of those social planners who attempt to disregard complexity and practical knowledge in favor of their own singular idea or method. He argues that what must be curbed is the tendency for formal knowledge to overestimate its own abilities and to underestimate the practical, homespun knowledge of those who actually live and work in the environment being studied. He writes, “I am making a case...for the limits, in principle, of what of what we are likely to know about complex, functioning order” (p. 357).

The researchers Anthony Bryk and Kim Hermanson describe a view of education compatible with the humanistic approach advocated by Scott as well as Morson and Schapiro, “Where the school is seen as a social system where personal interactions are primary, where structural reform often requires changing the values and tacit assumptions that underlie these interactions, and where the primary purpose of new information is to foster and inform sustained discourse about the means and ends of education” (1994, pg. 38). In his article, “Economics against Education” the economist of education Jesse Burkhead insisted that the point of educational planning was to create an atmosphere conducive to the development of the most crucial element in the educational process (what he called “the heart of the matter”): the relationships between teachers and students (Burkhead, 1973, pg. 205).

The turn toward systems as the primary and most significant causal factor in what happens in schools and the outcomes they produce suggests that it is the system, rather than the teachers and students *within* the system, that causes the system to function as effectively or

ineffectively as it does. However, the crucial fact that people have different abilities as well as thoughts, feelings, preferences, values, and cultures that inevitably *interact* with the external structure of the system they happen to be operating within makes pre-determined outcomes on a large scale impossible to achieve. If teachers or students are failing to produce the desired outcomes, it is possible, maybe even probable, that there are reasons for this that do not involve the system itself. Systems attempt to manufacture, through external standards and procedures, what can only be produced by an extremely complex combination of external *and* internal influences acting upon and within teachers and students.

Within this view, teaching is too complex to fit within the confines of the externally imposed, decontextualized system that economists have succeeded in establishing within education policy. While teaching can be nested within systems, it itself eludes systemization because what is most valuable and effective about teaching resides in *intention*. Behavior is not necessarily an expression of intention: one can learn techniques of teaching without ever knowing, or caring to know, whether or not meaningful communication has occurred for the student. According to Bryk & Hermanson, “...schools are places where personal meaning and intentions matter, and this forms the basis of their effects” (pg. 40). Teaching is powerful and transformative when it is authentic and dynamic.

While not holding economists responsible for addressing the ethical issues to which an economic approach to education gave rise, Schultz did state that some mechanism to keep economists “on guard” was necessary, delegating these acts of interpretation and discernment to “poets and philosophers,” (Schultz, 1959, p. 110). What Schultz was referring to was humanistic knowledge, particularly the type of knowledge used in the study of the humanities. Morson and Schapiro encourage humanistic thinkers to recognize their own form of knowledge and to apply

it to areas outside of the study of literature, “If humanists renew their faith in their distinctive ways of knowing, and in the wisdom of great literature, they have much to contribute to areas they have usually overlooked and that have overlooked them” (pg. 41).

A return to valuing and applying humanistic knowledge and sensibility to issues of education policy and governance could help to releasing education from the highly politicized economic paradigm that has dominated for several decades. Educators, policy makers, and the general public must first recognize the limits of the economic approach to education and, indeed, all systematic forms of knowledge, and to accept the incredible complexity and diversity that is public education in the United States today. We must seriously consider historical, cultural, and moral dimensions as we approach education, define problems, and seek change and improvement.

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