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Employing a critical-empirical approach to the study of college access, the author explores the role of policy researchers in seeking educational equity.

Finding Social Justice in Education Policy: Rethinking Theory and Approaches in Policy Research

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The primacy of the scientific method in education research should be a source of concern among educators and policy researchers who focus on social justice in education. The U.S. Department of Education has adopted a narrow view of scientific research and experimental design (for example, the No Child Left Behind Act of 2001), an approach to framing research that constrains critical analyses of public policy. Further, the recent release of the Spellings Commission's report on higher education (U.S. Department of Education, 2006) illustrates the NCLB-type policies that higher education could soon be facing in the United States. In this chapter I propose an alternative approach to the use of quantitative research methods in educational policy research that is compatible with traditional quantitative methods but is also a more balanced approach.

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Over the past two decades, I have been engaged in studies of educational policy issues that relate to equal opportunity and desegregation of higher education (for example, St. John, 1981). In recent years I have become concerned about the lack of authentic commitment to equal opportunity in official policy literature—material put out by the U.S. Department of Education and other federal agencies and lobbying organizations—that focuses on academic preparation for college (for example, Choy, 2001, 2002; Berkner and Chavez, 1997; Horn, 1997; Pelavin and Kane, 1988, 1990). Although the new concerns about preparation are no doubt critical, we should not lose sight of the goal of promoting equal opportunity in educational policy. It is therefore important to consider equity indicators along with preparation—often measured by achievement indicators—when examining the effects of reform strategies.

This chapter explores the role of policy researchers in the process of seeking justice in education policy. First, I present the critical-empirical approach that has guided this and other recent policy studies, and compare this approach to the scientific approach advocated in educational research. Second, I summarize the social justice framework that I developed in my recent book, *Refinancing the College Dream* (St. John, 2003), using this approach. I then summarize a case study of the influence of education policy on access to higher education using the new framework. Finally, I reflect on the case study in relation to the two approaches and conclude with some guidance for other researchers.

The Critical-Empirical Approach

In my early career I worked in government agencies and in consulting firms that conducted research on educational policy issues. My research focused on student aid (for example, St. John and Byce, 1982; St. John and Robinson, 1985) and the impact of student aid on student access and persistence (St. John and Masten, 1990; St. John and Noell, 1987, 1989), but it was difficult to address equal opportunity in these official roles. Instead, we were encouraged to release our findings only when they supported the policies advocated by the agencies we worked for or that funded our research. After an eight-year absence, I returned to academe in 1989 so I could begin to explore social equity issues more explicitly and purposefully.

One of my goals has been to develop an approach to framing policy research that allows me to test divergent claims, rather than being constrained by narrowly defined arguments devised by politicians and senior public officials who work for them. Influenced by Habermas's critical approach to social theory (Habermas, 1984), I began to work on defining a critical-empirical method (St. John, 1994, 1995, 1998). I have used this logical approach to explore a range of critical policy issues, often in collaborative projects (St. John and Elliott, 1994; St. John and Hossler, 1998; St. John, Loescher, and Bardzell, 2003; St. John and Miron, 2003; St. John and Paulsen, 2001;

St. John and Ridenour, 2001, 2002). This approach has given me freedom to produce a number of studies that pursue research agendas that emerged from critical reviews of large bodies of research on education problems. The critical-empirical approach is compared to the more traditional “scientific” method in Table 6.1.

The scientific method is commonly used in instrumental and strategic ways in education policy research. Habermas (1984) defined *strategic* action as being goal-oriented, or aimed at achieving a specific end. He argued that strategic action was *instrumental* if it was controlled by others and the actor was the instrument of an external policy or goal, or of the individual or institution promoting the goal. The scientific method as it is commonly used in education research is strategic, by either definition. The researcher reviews research, identifies a specific hypothesis, and designs a study that

Table 6.1. Comparison of the Scientific Approach and Critical-Empirical Approach

<i>Dimension</i>	<i>Scientific Approach</i>	<i>Critical-Empirical Approach</i>
Relation to theory and prior research	Review prior research and theory to develop a “hypothesis” that can be tested in a well-defined research study.	Review competing theories and diverse research pertaining to the policy problem. Identify different, possibly competing claims.
Accepted methods	Quantitative studies allow for accepting or rejecting hypothesis. Experimental designs, including natural experiments, are currently favored. Large-scale data collections and secondary data analyses are also frequently used.	Use methods appropriate for “testing” specific claims; often stated as questions rather than hypotheses. Methods depend on the nature of the theory and claim. May involve quantitative or qualitative research, critical reviews of research, or action experiments.
Role of research	Research is used to confirm and verify claims. Often offered as a “proof” of the theory, claim, or model.	Research is used to build understanding, develop theory, and inform action. Emphasis is on actionable knowledge.
Implications and limitations	Research often used for building rationales for reform. Research tends to be “self-sealing” and to overlook competing views.	Research examines competing views and can be used to open conversation. Research tends to be overlooked in policy forums because of complexity.

can confirm the hypothesis (or can disconfirm the null hypothesis). Although in theory this method is intended to be neutral, it is easily manipulated by funding agencies or by researchers who have agendas of their own.

Education research is especially vulnerable to this type of instrumental manipulation when researchers set out to test their own beliefs in large-scale experiments or when policymakers fund analyses of extant data sources with the intent of generating research that supports their views on policy. In both cases, there is a heavy emphasis on proving the intended hypotheses, which are often tightly linked to policy goals and beliefs held by researchers and policymakers. Research becomes a mission with a goal of proving one's own beliefs and the effectiveness of the ideas, policies, and ideals advocated by the researchers and policymakers.

Critical research, including many qualitative studies, offers a counter-view to the dominant perspective on education that is embedded in the new scientific model. In fact, research using critical social theory can illuminate the limitations of current policies by illuminating resulting inequalities. However, when critical studies work with a single theory, they too can fall into the trap of taking a self-sealing approach to confirming embedded beliefs. Thus, both quantitative and qualitative research can find it difficult to focus on building new common ground unless the claims of multiple positions are taken into account in policy research. In other words, critical research may stop short of informing the reconstruction of policy if it is not open to the possibility that mainstream claims might also be supported by evidence.

Communicative action, according to Habermas (1984), has the intent of *building understanding*. Consequently, the emphasis is on thinking critically about claims from diverse vantage points. Although the critique of social theory was the focus of Habermas's work, his approach can also be used in educational research. Using a philosophical approach that focuses on building understanding allows the researcher to develop studies that test competing claims. The key is to examine a range of claims that relate to a policy problem—claims that relate to our own intuitive position as well as claims that may not seem consonant with our beliefs.

Using the critical-empirical approach, I treat my own hunches as testable claims. It is possible to identify arguments others use as competing claims and design research that tests both types of claims. Often there is some truth—or validating information—related to each perspective. This method has given me the intellectual room and freedom to work with people whose views differ from my own, using research to build new understandings for people even if they hold different ideologies.

There are, of course, some limitations to using the critical-empirical approach. First and foremost, it is easy to deceive oneself by setting up alternative views as “straw men” to be knocked down. I have worked hard to avoid this trap, often reaching conclusions that are not consonant with the views I held when I began my research. For example, I have broadened my views on topics like using direct instruction and phonics in early reading (St. John,

Loescher, and Bardzell, 2003), privatization of higher education (St. John, 1994, 2003), and school choice (St. John and Ridenour, 2001, 2002). I remain committed to social justice, but I realize we need to open our minds to alternative positions if we are going to find new pathways through the puzzles we face in education policy.

Education Policy and Social Justice

Throughout my career, I have been concerned about how changes in educational policy, including public finance policies, influence educational opportunities and whether these policies move us closer to, or further from, the goal of ensuring equal opportunity. Recently I have used the critical-empirical approach as a review method to develop a framework for studying equal opportunity in education. I was interested in addressing gaps between theory in education, economics, sociology, and political science as they informed the policy debates about college access (St. John, 2003).

The model is situated in John Rawls's theory of justice (1971, 2001). This theory was used as a starting point both because it provided a moral basis for thinking about current education policy choices and because Rawls's principles provided a means of finding balance among competing interests in the education debates. He identifies three principles:

- Principle 1 relates to basic rights, which all individuals have in a democratic society. The rights to an education are nearly universally accepted (Nussbaum, 1999; Sen, 1999), and in the United States equal access to college should be a right for those who qualify academically.
- Principle 2 relates to equal opportunity, which argues that if there is an inequality it should favor the most disadvantaged. The historic emphases on equal opportunity in school desegregation and student aid are a few of many examples of this approach in education policy.
- The Just Savings Principle relates to cross-generation equity, which includes the use of taxation to support education. In the current context of majority concern about tax rates, it is important to balance taxpayer costs with concerns about equity and basic rights in education.

Using these principles helps illuminate the various interests in education, a step we need to take before we can find a better balance. Arguments about quality of education and academic preparation are generally framed in relation to achievement indicators—the types of courses students complete, their grades and test scores. These arguments are increasingly framed as basic rights (for example, Pennington, 2003). However, we also need ways to assess the equity effects of policies aimed at improving preparation, including their effects on high school graduation rates. Further, as new remedies are proposed, we need to consider costs of implementation because of the concern about taxes.

However, the theory of justice alone was not a sufficient basis for constructing a framework for educational research. Other areas of theory and research inform this framework:

- Economic theory on human capital and research on price response provide a basis for understanding how individuals respond to prices and subsidies.
- Social theory on attainment and reproduction provides a basis for understanding the tension between cultural reproduction and cross-generation uplift (for example, successive generations having higher levels of educational attainment), long a goal in the African American education tradition.
- Education research provides a way to articulate the linkages between specific education reforms and student outcomes.
- Policy theory and research help us understand that research can inform policy, even if rational policy models have seldom held up.

This framework identifies two sorts of outcomes of K–12 education: achievement outcomes (test scores and pass rates) and equity outcomes (retention and graduation rates). The achievement outcomes link to the “basic rights” claims being advanced by the new conservative reformers who advocated for the NCLB, which promotes testing and curriculum alignment across the United States. Although I do not agree that standardized tests adequately define the nature of basic education rights, as a researcher I can use test scores as measures of achievement, especially if I use them along with equity measures, such as the rates of students passing a grade level (in K–12 education) or students graduating from high school. Finding a balance between equity concerns and the newer claims about achievement and excellence is critical in education research. This sort of balance should be generally expected in policy research because of the ethos of NCLB, which includes an explicit claim about the success of all children and leaves room for using equity measures along with achievement measures in policy research.

My approach provides a way of linking the academic and financial claims about college access into a single framework. This conceptualization allows us to test competing views of college access. The three critical issues considered when using this framework to assess the impact of policies on outcomes are as follows:

- *Identify how policy links to outcomes and which variable should be controlled to assess these linkages.* Recent reviews of NCES studies (Becker, 2004; Heller, 2004) reveal a pattern of omitting crucial control variables and ignoring social theory when interpreting results.
- *Select indicators, or outcome measures, related to both basic rights and equity.* When assessing school reforms, consider measures related to achievement (basic right) and inclusiveness in attainment (retention rates, graduation rates, special education rates). In higher education, it is important to con-

sider the effects of policy interventions on outcomes for the majority and diverse groups.

- *Consider both types of indicators, along with the equity principle, when assessing the costs of alternatives.* The theories of efficiency and cost-benefit analysis borrowed from economics have been problematic because they have generally looked at one cost indicator in relation to one outcome indicator. The costs—the amounts taxpayers invest in education—must be weighed in relation to measures of both equity and quality.

An Example: State Policy and College Access

Over the past two years, I have worked with colleagues on studies that examine the impact of state education and finance policies on access-related outcomes. We created databases on states that included information for each state on population characteristics, education policies, finance policies, SAT scores, high school graduation rates, and college enrollment rates in the 1990s. We used a series of fixed-effects regressions to examine the influence of education policies.

Three analyses are presented as illustrations from the study. We constructed a database that included a record by state for each year between 1990 and 2005. Demographic characteristics of states were derived from census reports. This included the percentage of poverty in the state, the racial-ethnic composition of the state, and the percentage of the populations with bachelor's degrees. SAT participation rates and scores for each state each year were obtained from College Board reports. Information on state education policies was derived from reviews of national education databases. For each year, we examined the following for each state:

- The percentage of high schools offering Advanced Placement (AP) exams
- Whether the state had a policy on advanced, or honors, diplomas for high school graduates
- Whether the state had implemented math standards (most were consistent with recommendations of the National Council on Teaching Math)
- Whether the state required an examination to graduate high school
- Whether the state required three or more math courses for high school graduation (rather than only one or two math courses)
- Local discretion over setting the number of math courses for high school graduation (rather than only one or two math courses)
- K–12 expenditures per FTE

The analyses used fixed-effects regressions, a method that essentially controls for state effects. The analyses considered three outcomes: the average SAT score, the percent of the students in the cohort graduating high school, and the college enrollment rate for high school graduates. This

approach was used to control for the role of state context. For one of the outcomes, college enrollment rates, data were available only for even years, so the number of cases was half the size of that for the other two analyses.

The first analysis (Table 6.2, column 1) examines the impact of state education policies on high school graduation rates. Poverty rates were not associated with high school graduation rates, nor were the percentages of minorities. However, the percentages of the population with bachelor's degrees were negatively associated with graduation rates. (Although there is evidence that parents' education is associated with educational attainment when individuals are studied [Choy, 2002], we should not expect that the percentage of the population with advanced education influences graduation rates, an attainment indicator.) Two types of policies had a positive association with graduation rates: high school exit examinations had a modest association and funding for K–12 schools had a strong association. Although this provides some support for advocates of testing (Finn, 1990; Paige, 2003), it does not support their argument that achievement is unrelated to school funding (see the following section). In addition, requiring more math courses for graduation was positively associated with high school graduation rates. The percentage of high schools in the state offering AP courses was positively associated with high school graduation rates, as it was with the other outcomes. Thus it is readily apparent that the different types of policies related to educational improvement have differential effects on high school graduation. Not all policies are equal, even when the same outcome is considered.

The second analysis (Table 6.2, column 2) examines the impact of state education policies on the state average SAT score, a widely used indicator of academic achievement, controlling for demographics and SAT participation rates in the state (from St. John, 2006). The poverty rate was negatively associated with SAT scores, the percentages of Hispanics and other minorities (mostly Asian) were positively associated with SAT scores, and the SAT participation rate was not significant when education reforms were considered. (In a prior step in the sequential logistic regression analysis, we found that SAT participation rates were positively associated with SAT scores; see St. John, 2006.) Controlling for these demographic characteristics, four of the education policies were positively associated with SAT scores: having implemented statewide standards in math, the percentage of high schools offering AP courses, providing more funding, and mandating three or more math courses for high school graduation. This analysis illustrates that many of the policies being implemented to improve educational outcomes are positively related to achievement, at least as measured by the SAT. The finding that educational funding is positively associated with test scores directly contradicts claims of neoconservatives to the contrary (for example, Finn, 1990; Paige, 2003).

However, these findings differ substantially from the findings on high school graduation rates. The same policies that had a positive association

Table 6.2. State Level Indicators of Academic Policies Predicting State Outcomes, 1990–2005

Independent Variables	High School Graduation Rate			SAT Average			College Continuation Rate		
	Coef.	St. Err.	Sig.	Coef.	St. Err.	Sig.	Coef.	St. Err.	Sig.
Percent below poverty	0.101	0.072		-50.645	28.847	**	-0.551	0.183	***
Percent African American	0.266	0.331		-64.340	148.072		-1.835	0.932	*
Percent Hispanic	-0.408	0.286		190.773	88.242	**	-0.646	0.531	
Percent other	0.134	0.184		-58.591	63.637	**	0.534	0.346	
K–12 expenditures (\$1,000s)	-0.011	0.006	**	4.201	2.260		-0.019	0.000	
Percent adults with bachelor's	-0.153	0.075	*	131.524	29.670	***	0.279	0.185	
Enrollment of ninth-grade class (100,000s)	0.007	0.018		2.610	6.640		-0.077	0.014	*
High school exit exam required	-0.002	0.007		1.130	2.505		0.016	0.017	
State-adopted content standards	-0.023	0.003	***	10.660	1.536	***	-0.004	0.011	
Honors diploma available	-0.006	0.006		-2.372	2.100		-0.003	0.012	
Required to complete three or more math courses	-0.031	0.006	***	4.762	2.071	**	0.019	0.013	
Local district in control of math requirements	0.018	0.012		-6.069	4.409		0.052	0.025	**
SAT participation rate	0.000	0.000		-90.380	0.033	***	-0.213	0.162	
Percent of high schools with AP courses	0.078	0.043	***	15.990	9.252	*	0.136	0.059	**
Observations	491			585			248		
Groups	50			50			50		
F-statistic	33.69		***	40.7		***	10.7		***

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

with SAT scores also had a negative association with graduation rates, further indicating the contradictory nature of some of the education policies that are being widely implemented.

Although the findings on graduation rates indicated that policies had contradictory effects for the same outcome, the findings illustrate that the claims about policy being made by conservatives are not nearly as simple as they make them out to be.

The final analysis examines the impact of the same demographic characteristics and K–12 policies on college continuation rates (Table 6.2, column 3). As expected, poverty and the percent African American were negatively associated with college continuation rates. However, the size of the cohort had a negative association with graduation rates, indicating that large states face some particularly complex issues. The percentage of high schools with AP courses was positively associated with college continuation rates, as it was for high school graduation and SAT scores. In addition, local control of high school graduation requirements, compared to requiring two math courses, had a positive association with continuation rates. Again, some imbalance in policy is evident: excellence policies (that is, standards and state-imposed requirements) do not necessarily encourage all students.

Looking across these three analyses it is evident that education reform is not as simple as assumed by NCLB advocates and the Spellings Commission (U.S. Department of Education, 2006), which promotes a similar ideology. Raising standards and increasing requirements have contradictory effects. Just because policies cause some students to take more advanced courses, it does not mean these policies help all children. These policies could apparently discourage some children from completing high school. At the very least, they induce dropout. This imbalance in K–12 policy is important because the espoused intention of NCLB is to “leave no child behind,” which means to enable more children to graduate high school. The sad irony is that even though the new policies essentially restrict the percentage of children who graduate high school, they do not increase the percentage of high school graduates who go on to college. If one of the goals of school reform is to improve the preparation of high school graduates for college, then there is still more reason to question the current direction of K–12 reform.

Using the critical-empirical perspective to interpret these findings makes it possible to contribute to policy conversation without feeling compromised in my commitment to social equity. Studies like this one clearly illustrate that there are some ways that the new education policies contribute to social progress for diverse groups in American society. At the same time, these studies illustrate some of the serious limitations of the policy course on which we are now embarked. Although the new policies are aligned with improved achievement as measured by standardized tests, they also systematically leave more children behind. It is important to illuminate both outcomes if we are to maintain hope of constructing equitable policy pathways in the future.

These findings are especially important for higher education administrators and researchers given the emphasis on high school performance and accountability in the Spellings report (U.S. Department of Education, 2006). The report advocates heaping more requirements on high schools and imposing greater accountability in colleges. Their argument is based on studies of the high school class of 1992 and overlooked the changes in policy and student outcomes since that time, as is abundantly evident from the analyses reported here. These schemes have not worked well for K–12: buying into accountability schemes to get a few dollars more seems short-sighted. It is time for researchers and administrators in higher education and K–12 education to reflect openly and collectively.

Guidance for Researchers

It is difficult to find social justice in education policy these days. School reform is moving rapidly toward test-driven policies that have detrimental effects on equal opportunity. Also, the most substantial growth in state financial aid programs has been in merit aid (Heller and Rasmussen, 2001), a form of aid that is associated with higher high school dropout rates (St. John, 2006).

If we maintain open minds and use the results of critical-empirical studies, then we must acknowledge the strength of the excellence-driven reforms: they can improve achievement. Yet the goal of leaving no child behind gets more and more remote when these extreme policies dominate, a conclusion that is supported by the research evidence. At the very least, a better balance is needed in both education and public finance policies—equity considerations merit more attention.

Stepping back from these analyses to review the themes introduced at the outset of the chapter, it is apparent that it is possible to use balanced approaches to policy analysis that bring an emphasis on equal opportunity back into education policy research. To do this, I have found it necessary to contend with my own biases if I am to engage in the policy discourse without feeling personally compromised. Being critical *and* constructive makes it less difficult to be involved in policy conversations. There is always a need for external critics, but there is also a need for open-minded people at the policy tables.

The critical-empirical approach offers a way through the puzzle for critical scholars willing to engage in policy conversations. It offers the chance to examine arguments critically, without assuming a side on every specific issue. After all, the goal of equal opportunity supercedes any specific policy position or program feature because it is a guiding principle in moving toward better public policy in education and finance. The basic right to a quality education should also be a guiding value, but it should no longer be the dominant value in education policy.

Both of these values—equal opportunity and quality education—also need to be balanced with concern about taxpayer costs and returns on public investment. The current education and public finance policies encourage large numbers of children to drop out, a troublesome outcome for both conservatives and new liberals. (New liberal democrats have also supported excellence initiatives—such as standards on testing—since the 1980s.) A better economy depends on making better use of tax dollars to ensure equal opportunity for a quality education.

It is also crucial to deal with social conservatives' claims about efficiency. For decades, new conservative reforms have argued that equity costs too much (Finn, 1990). However, as the study summarized here reveals, the excellence initiatives are inefficient because they leave so many children behind.

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