

## THE SEARCH OF THE EQUALITY ACROSS EDUCATIONAL POLICIES: SCOPES AND LIMITS

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### 1. INTRODUCTION

Education represents both a right and need, and occupies a central role in the determination of individual standards of living. People's health and happiness, their economic security, opportunities and social status —each are affected by education—. So it is not surprising that one of the dominant ideas in the world for the past fifty years has been that education is a major factor in equalizing both opportunity and economic and social outcomes.

The basis of this idea is rather simple. If individual earnings are a function of the amount invested in an individual's human capital, as measured by years of education, equalizing the distribution of education in a nation's population should produce more equal earnings distribution (Kuznets, 1979). However, we observe that even with more equal distribution of years of education in countries such as the United States or Chile, the distribution of earnings in the past twenty years became more unequal.

Why is this the case? The answer is almost tautological: earnings distribution not only depends on the investment in human capital (years of education), but the actual amount invested in a year of schooling at different levels of education and the *returns* to that investment. The amount invested by private individuals and by the public sector varies greatly by level of schooling. The returns to various levels of education —primary, secondary, and higher— also differ. The differences in the amount invested and the returns can result in more equal or unequal distribution of earnings even as the distribution of years of school becomes more equal.

In the 1970s, the World Bank's George Psacharopoulos thought he had unraveled this problem by arguing that the payoff to lower levels of schooling —namely, primary education— was always higher than to secondary, and to secondary higher than to university (Psacharopoulos, 1989). He made his case by invoking the law of diminishing returns to capital: investment in higher levels of schooling would yield less return than investing in lower levels of schooling. If Psacharopoulos' claims were correct, as governments invested in creating universal primary education and then secondary education, those policies would necessarily equalize earnings. Individuals at the bottom of the income ladder would acquire the years of schooling (primary and secondary) with the highest yield on investment. If, in addition, the amount invested by individuals and governments were fairly similar at different levels of schooling, this would help those with lower levels of schooling to catch up to those with higher levels of schooling.

Yet, it turns out that Psacharopoulos was not correct about the pattern of rates of return to education. The payoffs to university education have risen almost everywhere since the 1970s. As primary and secondary education have become more universal, the payoffs to primary and secondary education have fallen, or at least have not risen. So now we observe in many countries, including the

United States, Brazil, Chile, Colombia, and Argentina, higher rates of return to university education than to primary and secondary schooling (Carnoy, 1995; Carnoy *et al.*, 2001).

There has been considerable debate in the economic literature about the relationship between income distribution and the payoff to higher levels of schooling. In recent years, the debate has been couched in terms of the effect of technology on the relative demand for skilled and unskilled labor and its consequent effect on the distribution of earnings (see Carnoy, 2000, for a review of this debate). Most economists argue that new technology has increased the demand for skills and that this is a major cause of greater income inequality in both developed and developing countries. The new information and communications technology is knowledge-intensive, the argument goes, so favors those in the labor force with higher levels of education (see, for example, Welch, 2004). But there is a strong counter argument that much of the increase in income inequality in the past twenty years in countries such as the United States or Britain has been the result of incomes policies that have stimulated rapidly rising incomes among already high income earners while keeping minimum wages relatively low and putting political pressure on unions to constrain wage demands. In the past three decades, the politics of incomes policies has changed radically toward a more “free market” approach. Incomes of the upper income groups have been released from any moral constraints or government fiscal controls (tax policies), the argument goes, and incomes of middle and lower income groups have been held down or decreased by pressure on unions, weakened welfare (income support and minimum wage) policies, and free trade policies that introduce competition from lower wage competitors. This argument does not deny that increased global competition favors those with higher level skills and hurts those with lower level skills. But the argument also allows for the strong possibility that incomes policies can influence income distribution. Thus, increased global competition and technological change in the past twenty years may have contributed to increased payoffs to university education, but incomes policies associated with neo-liberal policies may also have contributed to increased income inequality (and constrained access to higher education, as in Chile and Brazil, for example, as well as possibly for disadvantaged minorities in the United States in the 1980s). These policies, in turn, reduce the payoff to primary and secondary education and greatly increase the payoff to completed university education, particularly to the high cost faculties that give access to “elite” jobs.

In that sense, higher payoffs to education are not the cause of increased income inequality but rather the *product* of greater inequality. Another way to consider these possibilities is to compare payoffs to higher education in societies such as Korea, Singapore, and Taiwan, marked by major use of new technology, with Latin America countries, where technology use is more limited. Where are the relative rates of return to higher education higher? The best we can say is that higher payoffs to higher education are *associated* with more unequal income distribution, whatever the cause of more unequal income distribution.

Moreover, although the private plus public investment per pupil in primary and secondary education has risen in real terms in Latin America since the late 1980s, the pattern of costs per pupil across levels of school—with some exceptions—has not changed much since Latin America emerged from its major recession in the early 1980s. This means that in most countries, a student who goes to university spends much more or has a larger government subsidy than students who only attend primary and secondary school. Assume that a year of university education costs 3-12 times the costs of primary/secondary education. This means that at three times the cost, without even counting the higher income that a university student foregoes to attend university, the direct investment in four years of university alone is as large as the investment in 12 years of primary and secondary schooling. At

twelve times the cost per pupil (Brazil), university education investment is four times the value of a primary plus secondary education.

Higher (and rising) rates of return (both private and social) to higher education mean that those who get that education are benefited relatively more for their investment in education than those who stop at lower levels of schooling. In most countries, those who get to higher levels of schooling are also those from higher social class backgrounds. So not only do those families with higher social class background have more capital to start with, under these circumstances, they get a higher return to their investments. This is a sure formula for increased inequality in already highly unequal societies.

It is very possible, then, that even as the distribution of years of schooling in the population equalizes, the earnings distribution can continue to become more unequal. Or, put another way, this tells us why, even as countries equalize years of schooling in the labor force, the income distribution continues to become more unequal. *A highly unequal economic and social structure makes it exceedingly difficult to use an integral part of that structure—the educational system—to make the structure more equal.*

Such structural impediments have not deterred policy makers in Latin America and the rest of the world from trying to equalize access to education. They take the view that more equal access to higher education probably can have some positive effect on economic and social equality. In this same vein, reformers have focused on improving the quality of education, particularly the quality of primary and lower secondary education, as a means of increasing the investment in education at lower levels of schooling. This also makes sense, since improving the quality of primary and secondary education *might* benefit those who attend only those levels by better preparing them academically for a more knowledge intensive economy. At the same time, reforms that focus on improving the quality of education—if carried in particular ways—*might* improve access to higher levels of education for lower socio-economic class groups who start out behind and who fall farther behind because of lower quality primary and secondary schooling.

Thus, we can spell out two positions concerning the role of education in equalizing economic and social outcomes:

- The only way to reduce social and economic inequality is to pursue policies that effectively equalize the distribution of income and wealth in the society. In practical terms this means pursuing income policies that shift resources to lower income citizens, where resources can be defined as wages, health care, land, capital (such as credit on easier terms), housing, and, as part of all that, education.
- Improving the quality of education and educational access can have a significant effect on economic and social inequality.

In the rest of this paper, I will assess very briefly the various educational reforms that try to improve the quality of education and how they may or may not be contributing to greater equality of educational distribution, and, in turn, greater economic and social equality.

I hope that the review will not seem cynical or pessimistic. There are bright spots in the educational reform movement, and we have learned a great deal about what seems to work to improve education for disadvantaged children. Yet, it is probably not accidental that government reform policies avoid investing sufficient resources in low-income children to help them get the same kind of health care, nutrition, and educational opportunities afforded higher income children.

## 2. RAISING EDUCATIONAL QUALITY THROUGH “STRUCTURAL” REFORMS

The main efforts to improve educational quality in the past generation have been “market” oriented reforms, specifically decentralization and privatization. The main argument behind these reforms has been that by bringing educational administration closer to the consumer/investor, schools will be more responsive to local needs, will bring in more parent involvement, and will therefore become more efficient and more equitable. In addition to these arguments, the case for privatizing education claims that privately run schools are bound to be more efficient and will also introduce competition into education, extracting more effort and eliminating the most poorly run educational providers.

We have collected a considerable amount of information on the relative impact of structural reforms such as decentralization and privatization on overall student performance in countries such as Chile, Mexico, and Argentina. Latin American countries have also participated in a number of international educational assessments, such as those conducted by TIMSS, PISA, and OREALC (UNESCO). By analyzing the results of the TIMSS, PISA, and OREALC tests using other data collected in surveys of students’ parents and schools attended by the students, it is possible to estimate how much of the differences among test scores among students in the different countries are due to socio-economic differences and to differences in school conditions.

Analysis of these data suggests that private education does no better than public in producing higher student performance, once socio-economic background and peer effects are accounted for (Carnoy, Marshall, and Socias, 2004; Carnoy and Marshall, 2004). This is borne out by other analyses with the same data (Somers, McEwan, and Willms, 2004) and other studies using domestic evaluations in Chile and Argentina (McEwan, 2001a; McEwan, 2001b; McEwan and Carnoy, 2000). Although some groups of private schools (Catholic schools in Chile, for example) do better than public schools and for-profit subsidized private schools, the difference in value added is small (McEwan and Carnoy, 2000). Thus, low quality in LA educational systems is not likely to be solved by subsidizing the expansion of privately managed schools.

In Chile, available evidence suggests that the hoped for increases in efficiency from increased competition among schools and from an increased role for privately managed schools did not make schooling more effective than before the voucher reform (McEwan and Carnoy, 2000; Hsieh and Urquiola, 2001; Bellei, 2001). The one major effect that the reform may have had is to bring more private resources into education, but that came mainly from making families pay a high fraction (70 percent) of the costs of sending their children to university (González, 2001). With new legislation in 1993, it became legal for subsidized private schools to charge tuition. Private contributions for primary and secondary schooling increased over the next eight years, but that contribution is small compared to family investments in higher education. We should remember that even before the 1981 reform, 20 percent of students attended private primary schools, and 6 percent of those were in private paid schools that received no government subsidies.

Privatization in the 1980s may not have lowered or raised overall student performance, but evidence suggests that it may have had a negative effect on low-income students. Indeed, research shows that low-income student performance in non-religious subsidized private schools in Chile, which enroll 21 percent of all basic education students in the country, is significantly lower than in public municipal schools (McEwan and Carnoy, 2000). So structural reforms seem to have made little overall improvement in student performance, and probably had relatively little impact on enrollment

expansion in primary and secondary education, even though privatization may have made it possible to expand university at lower public expense.

Nor does decentralized management of the public system seem to have any discernable effect on student performance. Cuban education is managed in a highly centralized fashion, but so are low-achieving systems such as Honduras'. Argentine primary education has been the responsibility of the provinces since the late 1970s, Brazilian primary education has been run by states and municipalities for decades, and Mexican primary education has been the responsibility of the states since 1993. Chilean public schools are managed at the municipal level, but almost every major educational decision (curriculum, teacher salaries, for example) is made by the central ministry in Santiago. Among developed countries, French and Japanese students tend to do better than American students in math and science, even the French and Japanese attend schools in systems run by higher centralized bureaucracies. Yet, in the PISA evaluation, students in Australia and New Zealand, studying in more decentralized systems, did relatively well.

Even within the same country, decentralization of school management does not appear to have had a significant effect on average student performance. Argentina turned over the management of federal secondary schools to the provinces in the early 1990s with no observable positive effect on test scores (Carnoy *et al.*, 2001). Although no national evaluations exist in Mexico before and after the decentralization to states of education management in 1993, there is little sense that Mexican education is improving after the reform (Paulin, 2002). Chilean educational management was decentralized to the municipalities and schools in 1981. No evidence exists that student performance improved in the 1980s—a decade that saw relatively little regulation of schools by government authorities—. Similarly, decentralization in Nicaragua to the school level appears to have little, if any, effect on student performance (Gershberg, 1999).

This experience suggests that governments are not overcoming relatively low academic achievement and other educational problems in Latin America by decentralizing and privatizing educational management. Furthermore, such reforms probably contribute to greater educational and social inequality. Although most central bureaucracies in Latin America are probably inefficient, so are most local bureaucracies and most school bureaucracies, or even private school organizations. Decentralization usually “penalizes” local organizations with the least capacity to deliver education, since they are given more responsibility for decisions but do not have the knowledge of information to exercise that responsibility effectively. Thus, decentralization reforms generally tend to increase inequalities in student performance, since low-income students tend to attend schools in states, municipalities, and schools with the lowest capacity to take advantage of more control over their resources (McEwan and Carnoy, 2000; Carnoy *et al.*, 2001; Paulin, 2002).

### 3. DIRECT INTERVENTIONS IN LOW-INCOME SCHOOLS

In contrast to structural reforms, targeted reforms—specific programs aimed at disadvantaged groups—appear to have been much likely to succeed in improving academic performance for the targeted groups. A famous example in Latin America is the Escuela Nueva, in Colombia, now found in other countries under other names. The Escuela Nueva targets low-income rural students and seems to have had a positive impact on student performance, largely through providing a support network for rural teachers and increasing their commitment to teaching in isolated rural schools (McEwan, 2000).

Direct financial interventions by central ministries into improving outcomes for low income students were also effective in both Argentina and Chile. The P-900 program, begun in 1990 in Chile and extended to almost 2,500 schools by the end of the decade raised test scores of pupils significantly in low-scoring schools (Cox, 2001; McEwan and Carnoy, 1999). Elements of the Plan Social in Argentina, directed at rural schools and low-income students attending secondary schools, also seemed to have positive effects on student outcomes. Uruguay's direct financial assistance to low-scoring schools (based on the 1996 6<sup>th</sup> grade evaluation) probably contributed to a significant increase in test scores among the countries lowest-income students (Filgueira and Martinez, 2001). A targeted voucher plan in Colombia in the 1990s seemed to have a positive effect on low-income student attainment —students who received vouchers and used them to attend private (religious) secondary schools stayed in school into the higher grades and were less likely to drop out— (Angrist *et al.*, 2000).

One rather expensive reform —Brazil's *Bolsa Escola*— targeted at low-income students is designed to subsidize low-income families to offset the income foregone of their children when they attend school. The objective of the policy is to pay families based on their children's high attendance at school. There is some evidence that the subsidy works to increase student attendance (Gove, 2005). Other research in Honduras and Guatemala suggests that higher student attendance is associated with higher academic achievement (Bedi and Marshall, 1999; Marshall, 2003).

Such equity-driven reforms seem to have been more successful in raising student performance than system-wide reforms, primarily because targeted reforms are usually aimed at groups that receive fewer or lower quality educational resources until they receive special attention. That special attention seems to pay off. It would also seem easier to raise school productivity by bringing existing technology and resources already used for higher income students into a low-income situation than developing new methods to raise productivity throughout the educational system. Similarly, bringing a relatively few low-income students into each of many already existing private schools through a limited targeted voucher program as in Colombia is much more likely to benefit low-income students through "peer effect" than a Chilean-type plan that creates many new for-profit private schools of questionable quality.

#### 4. REFORMS AIMED AT IMPROVING TEACHER QUALITY

Educational analysts have long stressed that improved teaching can have an important impact on student performance. This should be particularly true for low-income students because, as we shall suggest, they are likely to have teachers with the lowest capacity to deliver a high powered curriculum and are likely to be in schools with the highest level of teacher absenteeism and thus, the fewest number of hours of schooling per year.

We know it is possible to achieve high levels of learning in Latin America, because one country in the region, Cuba, appears to be reaching international levels of achievement in mathematics. Even if the test scores in the 1997 OREALC thirteen country survey of Latin American third and fourth graders exaggerate the level of Cuban achievement, there is little doubt that Cuban children are scoring much higher than children in other countries (LLECE, 1999; Carnoy and Marshall, 2004). One of the elements in Cuba's success is the higher average education of parents in Cuba, and the lower level of abject poverty, as reflected in the low proportion of children who work outside the

home. But school factors also play a role. For one, educational expectations are high in Cuba, as reflected in the curriculum and textbooks used in mathematics. Secondly, and this is what I want to focus on here, Cuban teachers with university level education are paid the same (low) salaries that other professionals are paid, so entering teaching as a profession requires little financial sacrifice. Teachers also have the same social status as most other university graduates. Thus, it appears that Cuban schools can implement more demanding curricula in part because even primary teachers have the capacity to teach those curricula.

There are other key factors that distinguish Cuba's schools from schools in other Latin American countries. Teachers in Cuba are unlikely to take frequent absences, excused or unexcused. Cuban primary schools offer more hours of school and even more hours of math per week than schools in most Latin American countries, although this varies among countries (OREALC, 2001:45). And the distribution of "good" teachers in Cuba among rural and urban schools and among schools serving more disadvantaged and more advantaged populations is likely to be more equal than in other Latin American countries. Although we have no hard data on absences or teacher distribution in Cuba, anecdotal evidence suggests that such assertions are correct (Carnoy, 1989).

These differences point to a number of reforms that could serve to improve the quality of education for low-income children in Latin America, hence improve the equality of access to higher quality education, possibly higher levels of attainment, and possibly more equal economic and social outcomes.

- The time per day and per year that teachers actually teach in a classroom is obviously a crucial variable when the total number of hours per year is low. In Argentina, a highly developed country in many respects, primary school students attend school an average of four hours per day, or less than 750 hours per year. However, teacher absences are relatively frequent in many provinces, and many days per year are lost in teacher strikes. At the other end of the economic spectrum, Honduras loses approximately half its already low number of "official" hours of primary schooling per year through teacher absences, mainly but not only in rural areas (Carnoy and McEwan, 1997). Marshall estimated that in rural Guatemala, teachers are absent an average of 30 days in an already short 140-day year (Marshall, 2003). Teacher absence is a pervasive problem throughout Latin America, yet is rarely discussed or dealt with directly. Reforms to improve teacher attendance are politically difficult since they confront either corrupt teacher employment policies (for Mexico, see Bayardo, 1992) or the opposition of the teachers' unions or both. Teacher strikes, which also account for many lost days in some countries, might be reduced by better coordination of reforms and educational policies with teacher organizations, but often reflect wider conflictual politics in the country concerned. Chile has had the luxury of very few lost days from teacher strikes over the past ten years, but this has been mainly the result of a consensual period in Chilean politics, following on the heels of 17 years of military rule (Cox, 2001; Núñez, 2001).
- The distribution of teacher "quality" (as measured by education, experience, and test score on evaluations of teacher knowledge in subject areas) among schools serving lower and higher-income students appears to be highly unequal even in developed states of developed countries, such as New York state in the United States (Langford, Loeb and Wykoff, 2001). This makes logical sense for two reasons: more educated and higher social class teachers are likely to reside in higher income neighborhoods and regions so are more

likely to teach in a school with higher income students; and more able teachers are in greater demand, so may have greater choices in where they work, hence, everything else equal, will tend to shift to schools with better conditions and “easier” students. Since salaries are generally set by salary schedules negotiated at the national or regional level, teachers get paid essentially the same salary no matter where they work. Rural teachers or those working in “hardship” areas (Tierra del Fuego, for example), get higher salaries, but these usually are not high enough to compensate individuals who have normal lifestyle preferences. It has been politically difficult almost everywhere in the world to pay teachers systematically and significantly more to teach in low-income schools, since this represents a transparent shift of public resources to the poor, a move greatly resisted by middle classes everywhere. For example, Chile voucher plan was designed to pay the same amount per child regardless of social class<sup>1</sup>. The effect of these equal payment regimens is that higher-income children not only benefit from their own higher cultural capital, but from a substantial peer effect of attending schools where the other students are also from higher income families, and from being taught by more capable, more experienced teachers.

If we believe that this distribution of resources is efficient, then a more unequal distribution of peer and school resources should produce better average results than a more equal distribution. The Chilean experience suggests that greater inequality in the distribution of students does not produce higher average student performance (Carnoy, 1998; OECD, 2003). Would equalizing teacher resources among schools with lower and higher-income students increase or decrease average outcomes? This is a difficult question to answer. Low-income students would probably do significantly better, but would higher-income students do significantly worse? One argument is that higher-income parents can offset most of the bad effects of a poor teacher, but lower-income parents cannot. But we have no evidence to support this notion. Another argument is that it takes only small increments of high quality resources to produce positive effects at the low student performance end of the spectrum, but much greater increases in resources to produce increases in student performance among already high-performing students. Chilean estimates of cost-effectiveness comparing public schools, subsidized private schools, and paid (high tuition) private schools suggest that students in paid private schools achieve the highest test scores, but that the schools are by far less cost-effective than schools serving much lower-income, lower achieving children (McEwan and Carnoy, 2000). From an efficiency standpoint, some case can therefore be made for resource shifts, but the case is not strong.

But from an equity standpoint, it is more likely that shifting better teachers to lower-income schools should work to equalize outcomes. The question is: how to accomplish such a shift. Incentive pay schemes, such as the SNED in Chile, that reward teachers in schools that beat average test score gains in similar social class schools, have not been evaluated for their effectiveness in systematically improving teaching or shifting good teachers to lower-performing schools. A recent study of the SNED scheme in Chile suggests that schools with more SNED awards actually have a lower value added between 4<sup>th</sup> and 8<sup>th</sup> grade than schools with fewer SNED awards. This suggests that the way that the SNED makes awards has little to do with improving learning across grades. The results are even more

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<sup>1</sup> Holland is an exception to this rule. The Dutch voucher plan subsidizes low-income children with a voucher 25 percent larger than the normal voucher amount.



perverse in that the negative relation between SNED awards and value added is smaller in higher socio-economic class schools (Carnoy, Brodziak, Molina and Socias, 2004).

A more profound problem for most Latin American is the average *level* of capacity in their teaching force. This is not just the result of the quality of teacher pre-service education, which is notably poor (Lockheed and Verspoor, 1988). Nor is it necessarily an issue of the current level of teacher salaries, which are low relative to the pay in other professions in some countries, but relatively high for women teachers in many countries compared to women workers with similar levels of education (Vega, Experton, and Pritchard, 1999; Carnoy and McEwan, 1997; Santibañez, 2001).

Lower comparative salaries for post-secondary educated teachers may create a dilemma for educational reform strategies. Almost all Latin American countries have gradually raised the educational requirements for teachers over the past twenty years. In periods of recession, such as the 1980s, teacher salaries generally fall in real terms. Yet, the relative salaries of teachers compared to workers with similar levels of education probably rise (because public sector salaries are sticky downward compared to private sector salaries). In periods of economic crisis, it is easier to attract individuals into teaching, even individuals with more education than required. This happened in Mexico in the 1980s, when many university graduates trained for other professions chose to go into teaching because of the crisis in the private sector. But in periods of economic growth and rapid expansion of secondary education —characteristic of the 1990s— throughout Latin America, recruiting teachers with post-secondary degrees is more difficult, and might mean a decline in the quality of individuals being drawn into teaching.

This could be mitigated by an increased supply of higher educated women entering the labor market because of changes in values concerning women's work, for example. It also could be mitigated by the much lower cost of obtaining a teaching degree compared to other university degrees. But unless teachers' work is highly regarded on other grounds, countries in which the salaries of teachers with post-secondary education are relatively low compared to those with higher education degrees in other professions, could face a shortage of well-qualified teachers, particularly in secondary education. Many of the most important educational reforms in Latin America in the past ten years and in the next decade concern secondary education.

Chile has increased teachers' salaries more than any other Latin American country in the past decade, and this has had a positive effect on the quality of students entering pedagogical faculties in Chilean universities (OECD, 2003). But the quality of teacher education in terms of what teachers need to know to deliver a demanding curriculum is low, and controlled by autonomous universities rather than the curriculum reformers. Unlike Cuba, where the central government coordinates teacher education and curriculum and student teachers' transition into the classroom and teacher supervision in the schools, in Chile and in other Latin American countries, all these activities are the responsibility of different agents. Subsequently, students in one classroom may get excellent teaching and high expectations, whereas students in another classroom may be drastically shortchanged.

## 5. CONCLUSIONS

We began this paper by suggesting that educational expansion alone has not produced greater educational, economic, or social equality because the value of lower levels of education has fallen and the value of higher education has risen in most countries as the educational system expanded. Since

lower-income children, on average, take less education than higher income children, they are continuously investing in levels of education that are worth steadily less, whereas higher income children are continuously investing in levels of education that are increasing in value.

There are many government policies that could take this reality and alter it to produce greater educational and economic/social equality, or, at worst, reduce the movement toward greater inequality. For example, if Latin American governments were willing to collect progressive income taxes from those who received higher levels of education and spend the revenue from those taxes to improve the lives of lower income children, that would produce greater economic equality. If the state would spend more on education and focus its spending on improving the quality of schools in low-income areas (Escuela Nueva is a good example), that would produce greater educational equality, although not necessarily greater economic equality. If the state would heavily subsidize low-income students to attend university and make higher income students pay tuition, that, too would increase educational equality and possibly greater economic equality.

These are difficult reforms to make in Latin American countries, and, indeed in most developed countries, since they explicitly favor lower-income groups at the expense of higher income groups. Other reforms, such as those aimed at assuring teacher attendance in schools, those aimed at tightly regulating teacher education in universities, and those aimed at supervising teachers in their classrooms, conflict with teacher “autonomy” and with teachers’ organizations, often well-meaning in protecting their members’ rights, but also unwilling to admit that the level of learning even in the “best” Latin American classrooms is far below developed country standards. The main losers in the game that protects these existing interests are the children at the bottom of the social ladder.

The other disturbing fact in thinking about the role of education in equalizing opportunity is that it may be *expensive* to achieve that goal, particularly by means of improving sufficiently the relative quality of education for lower-income children that they can begin competing with higher income children for places in universities and graduate schools. Imagine how much it would cost to improve the nutrition and health care of low-income children to above average levels, then provide early childhood education of equal quality to that received by higher income children, then provide, say, the quality of teaching in upper middle class elementary and secondary schools and the summer and after school enriched experiences enjoyed by those higher social class children. Are Latin American societies willing to undertake such a radical project even for one-third of urban working class and rural children?

It is no accident that educational reforms in the past twenty years have focused on decentralization, privatization, curriculum reform, new pedagogies, and parent involvement. These are relatively inexpensive reforms, generate a great deal of energy, and satisfy political demands that something be done to improve education. Of course, the only thing that they don’t do is to improve the well-being of the children who most need help. I do not mean to say that these reforms are part of a conspiracy to avoid real change, but unless a great deal of political pressure is brought to bear on the state to make some bold moves, greater educational equality is possible, but not in a form that results in greater economic and social equality.

**REFERENCES**

- Angrist, J., Bettinger, E., Bloom, E., King, E., Kremer, M. (2000). *Vouchers for Private Schooling in Colombia: Evidence from a Randomized Natural Experiment*. Washington, D.C.: World Bank (mimeo).
- Bayardo, B. (1992). *Contradictions in the pursuit of professionalism and unionism: A study of public school teachers in Mexico*. Unpublished Ph.D. dissertation, Stanford University School of Education.
- Bedi, A.S., Marshall, J.H. (1999). School Attendance and Student Achievement: Evidence from Rural Honduras. *Economic Development and Cultural Change*, 47, pp. 657-682.
- Bellei, C. (2001). *Ha tenido impacto la Reforma Educacional Chilena?* Proyecto Alcance y Resultados de las Reformas Educativas en Argentina, Chile y Uruguay. Santiago: Ministerio de Educación.
- Carnoy, M. (1989). Educational Reform and Social Transformation in Cuba, 1959-1989. En: Carnoy, M., Samoff, J. *Education and Social Transition in the Third World*. Princeton: Princeton University Press.
- Carnoy, M. (1995). Rates of Return to Education. En: Carnoy, M. (ed.). *International Encyclopedia of the Economics of Education*. Oxford: Pergamon.
- Carnoy, M. (1998). National Voucher Plans in Chile and Sweden: Did Privatization Make for Better Education? *Comparative Education Review*. 42(3), pp. 309-337.
- Carnoy, M. (2000). *Sustaining Flexibility: Work, Family, and Community in the Information Age*. Cambridge: Harvard University Press and Russell Sage.
- Carnoy, M., McEwan P. (1997). La educación y el mercado laboral en Honduras. Tegucigalpa: Secretaria de Educacion, Proyecto ASED.
- Carnoy, M., Cosse, G., Cox, C., Martínez, E. (2001). *Reformas educativas y financiamiento educativo en el Cono Sur, 1980-2001*. Buenos Aires: Ministerio de Educación y Cultura, Unidad de Investigaciones Educativas (mimeo).
- Carnoy, M., Loeb, S., Smith, T. (2003). The Impact of Accountability in Texas High Schools. En: Carnoy *et al.*, (eds.). *The New Accountability: High Schools and High Stakes Tests*. New York: Routledge.
- Carnoy, M., Loeb, S. (2003). Does External Accountability Affect Student Outcomes? A Cross-State Analysis. *Educational Evaluation and Policy Analysis* 24(4).
- Carnoy, M., Marshall, J. (2004). Comparing Cuba Students' Academic Performance with the Rest of Latin America. *Comparative Education Review*. Forthcoming.
- Carnoy, M., Marshall, J., Socias, M. (2004). *How Do School Inputs Influence Math Scores: A Comparative Approach*. Stanford: Stanford University School of Education.
- Carnoy, M., Brodziak, I., Molina, A., Socias, M. (2004). *Do Teacher Pay Incentive Programs Improve Achievement Gains? The Case of Chile's SNED*. Stanford: Stanford University School of Education,
- Castro, C., Carnoy, M. (1998). *La reforma educativa en América Latina*. Washington, DC: Inter-American Development Bank.
- Cosse, G. (2001). *Gasto Educativo, Eficiencia, y Equidad en Argentina, 1990-1999*. Buenos Aires: Ministerio de Educación y Cultura, Unidad de Investigaciones Educativas (mimeo).
- Cox, C. (1997). *La reforma de la educación chilena: Contexto, contenidos, implementación*. Santiago: Programa de Promoción de la Reforma Educativa en América Latina (PREAL).
- Cox, C. (2001). *Las políticas educacionales de Chile en las últimas dos décadas del Siglo XX: Compromiso público e instrumentos de estado y mercado*. Proyecto Alcance y Resultados de las Reformas Educativas en Argentina, Chile y Uruguay. Santiago: Ministerio de Educación.
- Filgueira, C., Martínez, E. (2001). *La Reforma Educativa en Uruguay: Desafíos y tendencias*. Proyecto Alcance y Resultados de las Reformas Educativas en Argentina, Chile y Uruguay. Montevideo: Ministerio de Educación.

- Gershberg, A. (1999). Decentralization, Citizen Participation, and the Role of the State: The Autonomous Schools Program in Nicaragua. *Latin American Perspectives*, 26(4), pp. 8-38.
- Gonzalez, P. (2001). *Estructura Institucional, Recursos y Gestión en el Sistema Escolar Chileno*. Proyecto Alcance y Resultados de las Reformas Educativas en Argentina, Chile y Uruguay. Santiago: Ministerio de Educación.
- Hsieh, C., Urquiola, M. (2001). *When schools compete, how do they compete? An assessment of Chile's nationwide school voucher program*. NBER Working Paper No. 10008.
- Kuznets, Simon (1979). *Growth, Population, and Income Distribution*. New York: Norton.
- Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación (LLECE) (1998). *Primer Estudio Internacional Comparativo sobre Lenguaje, Matemática y Factores Asociados en Tercero y Cuarto Grado*. Santiago: UNESCO.
- Lankford, H., Loeb, S., Wyckoff, L. (2001). *Teacher Sorting and the Plight of Urban Schools: A Descriptive Analysis*. Stanford: Stanford University School of Education (mimeo).
- Lockheed, M., Verspoor, A. (1989). *Improving Primary Education in Developing Countries: A Review of Policy Options*. Washington, DC: World Bank.
- McEwan, P. J. (2000). Escuela Nueva. *Journal of Education and Development*.
- McEwan, P. J. (2001a). The effectiveness of public, Catholic, and non-religious private schooling in Chile's voucher system. *Education Economics*, 9(2).
- McEwan, P. J. (2001b). *Educación Pública y Privada en el Cono Sur: Un análisis comparativo entre Argentina y Chile*. Proyecto Alcance y Resultados de las Reformas Educativas en Argentina, Chile, y Uruguay. Buenos Aires: Ministerio de Educación de Argentina (mimeo).
- McEwan, P. J., Carnoy, M. (1998). *Choice between private and public schools in a voucher system: Evidence from Chile*. Unpublished manuscript, Stanford University.
- McEwan, P. J., Carnoy, M. (1999). *The impact of competition on public school quality: Longitudinal evidence from Chile's voucher system*. Unpublished manuscript, Stanford University.
- McEwan, P. J., Carnoy, M. (2000). The effectiveness and efficiency of private schools in Chile's voucher system. *Educational Evaluation and Policy Analysis*, 22(3), pp. 213-239.
- Marshall, J. (2003). *Build It and They Will Come*. Unpublished Ph.D. dissertation. Stanford University School of Education.
- Marshall, J.H., White, K.A., (2001). *Academic achievement, school attendance and teacher quality in Honduras: An empirical analysis*. Unpublished manuscript.
- Núñez Prieto, I. (2001). *La condición docente en Argentina, Chile, y Uruguay en los '90*. Proyecto Alcance y Resultados de las Reformas Educativas en Argentina, Chile y Uruguay. Santiago: Ministerio de Educación.
- OREALC (2001). *Regional Report*. Santiago: OREALC.
- Organization for Economic Cooperation and Development (OECD) (2003). *Chile. Report on the Educational System*. Paris: OECD.
- Paulin, A. (2001). *The Effects of Educational Decentralization in Mexico*. Stanford: Stanford University (mimeo).
- Psacharopoulos, G. (1989). Time Trends of the Returns to Education: Cross National Evidence. *Economics of Education Review*, 8(3), pp. 225-239.
- Rothstein, R., Carnoy, M., Benveniste, L. (2000). *What Can Public Schools Learn from Private?* Washington, DC: Economic Policy Institute.
- Santibañez, L. (2001). *Teacher Competence, Sorting and Student Performance in Mexico*. Stanford: School of Education, Stanford University (mimeo).

- Somers, M.A., McEwan, P., Douglas, J. (2004). How Effective are Private Schools in Latin America? *Comparative Education Review*. 48(1), pp. 48-69.
- Vega, E., Experton, W., Pritchett, L. (1998). *Teachers in Argentina: Under-(Over-) Worked? Under-(Over-) Paid?* Cambridge: Harvard University and the World Bank.
- Welch, F. (ed.) (2004). *The Causes and Consequences of Increasing Inequality*. Chicago: University of Chicago Press.
- Willms, D., Somers, M.A. (1999). *School Outcomes in Latin America*. Santiago: OREALC.