# Structural adjustment and the changing face of education

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The world economy has undergone sweeping changes in the time of a generation. The changes reflect the increased globalization of economic activities, growing competition among nations for markets and the widespread impact of the information and communications revolution. Higher productivity and economic growth are increasingly dependent on the application of knowledge and information to production of goods and services, and such knowledge is increasingly science-based. This is not an entirely new phenomenon, since knowledge has always been a key factor in the organization and fostering of economic growth. But as economies become more complex, consumption becomes more varied and competition increases, knowledge and information are more critical to the production and realization process.

All national economies (and subnational regions, industries and most firms) have had to adjust to this new "structural" reality. In the broadest of terms, this is the meaning of structural adjustment. In one analyst's words, "The main objective . . . is to overcome economic crisis and imbalance caused by internal or external shocks and past mismanagement of the economy" (Woodhall, 1991, p. 10). Structural adjustment is normally associated with the correction of imbalances in foreign accounts and domestic consumption (including government deficits) and with the deregulation and privatization of the economy. It is therefore identified with public sector austerity and as a consequence, in many countries, with growing poverty and an increasingly unequal distribution of income, resulting in "reduced government funding for public education programmes, lower personal incomes and family budgets available for education, and an increased focus on encouraging private education initiatives, which only some can afford" (Reimers and Tiburcio, 1993, p. 14).

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The adverse impact of economic adjustment on education could not have come at a worse time in the history of developing countries. As information – hence education – assumes a crucial importance in the world economy and society only individuals and countries with a high level of education can cope with the enormous changes taking place. In such circumstances, structural adjustment has made the delivery of education even more difficult in developing countries. In their turn, education professionals have been made to bear much of the burden of these growing difficulties, for which they have often also been blamed.

But structural adjustment as practised in most high-income countries of the OECD and in the newly industrializing countries (NICs) of Asia does not display these features. There the focus of adjustment has been on increased exports, reduced domestic demand, various constraints on government spending and some privatization; with a few notable exceptions, it has not entailed policies that greatly increase inequality or poverty. Rather, many of the richer economies have focused on "self-adjusting" mechanisms to rationalize production and the public infrastructure that serves productive and social functions. Their educational systems have not suffered and, in general, their education professionals have made income gains. In the best of cases, education has improved and teachers have participated in making that improvement happen.

This suggests that there are several categories of structural adjustment. It also suggests that the term "structural adjustment" is commonly used not in its broader sense of reorganizing the structure of production in response to very significant changes in the world economy, but for a particular set of policies. The origins of these policies were as much the political and economic conditions prevailing in the United States in the 1970s as the underlying economic problems of developing countries at that time. The combination of the prevailing political views in the United States with the indebtedness characterizing many developing countries and with inefficiency in the public sector resulted in the emergence of a dominant view of how economies in crisis should reorganize to resume growth. When applied, the policies reflecting this view did indeed increase economic inequality and poverty, without necessarily improving the chances of sustainable development. They also usually meant less emphasis on the role of the public sector in economic growth and cuts in public expenditure on services, including education - precisely at a time when the shift to a world information economy called for increased public investment in education and for more rational, and probably extensive, public intervention and mobilization of resources.

The emergence of this dominant view may be attributed to two factors. The first concerns the initial conditions in those countries least able to adjust to the new international economic order. The simplest way to grasp this situation is to observe that the countries best able to self-adjust already enjoyed conditions consistent with world market competitiveness and had the capacity to respond to rapidly changing technology (Amsden, 1989; Castells, 1991; Birdsall and Sabot, 1993). These conditions included the capacity to develop and mobilize the knowledge needed to produce new information-based goods and services and to adopt new methods to produce, and sometimes export, traditional industrial and agricultural products more efficiently; a well-organized public service capable of mobilizing and/or providing the framework for private sector organizational and technological responses to change; public education, workers' training, investment in infrastructure and government investment in research and development; and a reasonable national income distribution which could ensure political stability during a process of change.

The less successful countries did not enjoy all or even, in some cases, any of these conditions. In Latin America, for example, a long history of importsubstitution industrialization based on high levels of protection for domestic industries and other forms of state intervention. coupled with a highly unequal income distribution, made it difficult to sustain corrective economic policies in the 1970s. By the 1980s, when creditor countries raised interest rates sharply to reduce their own rates of inflation and then cut back foreign lending. Latin American countries were overwhelmed by an enormous debt crisis (Iglesias, 1992). Most African countries found themselves in a similar situation, heavily in debt and faced with rapidly deteriorating terms of trade. Their economies suffered a drain on their capital and negative rates of economic growth in the 1980s - and governments were generally ill-equipped to improve infrastructure, support private sector efforts to export and develop new products and processes or attract foreign investment on reasonable terms. The command economies of the Soviet Union, of its east European satellites and of China also began to flounder in the 1970s as the heavy industry/military basis of economic growth and technological change ran out of steam. Only China was able to promote economic decision-making changes that increased economic growth, mainly in agriculture but also in special industrial zones. The countries in deepest trouble in the early 1980s. therefore, were those which lacked a dynamic export-oriented private sector and which were characterized by heavy public debt and inefficient public services.

The second factor giving rise to the dominant view was the distinct paradigm shift away from Keynesianism and toward neo-liberal monetarism that occurred in many developed countries in the early 1980s – particularly in the United States (Harrison and Bluestone, 1988). This economic policy thinking led to a drastic increase in real interest rates to reduce inflationary tendencies in developed countries and to sharp cuts in foreign loans to developing countries to reduce financial exposure (Iglesias, 1992). At the international level, monetarist thinking also became the dominant paradigm at the International Monetary Fund (IMF) and, to a lesser extent, at the World Bank. When these institutions were called upon to help relieve the debt problems of developing countries, they imposed a set of structural adjustment policies (SAPs) on developing countries that reflected this economic paradigm. At the same time, the reduction of public sector spending and of government regulation became an important condition for developing countries to obtain structural adjustment loans. For their part, most developed countries (including the United States) and the most successful Asian NICs did not reduce government spending, government deficit financing or economic regulation, and many did not reduce the share of the public sector in the gross national product in the 1980s.

Besides a general reduction of public expenditure, structural adjustment loans to developing countries required: the reduction of consumer subsidies (both to bring down government spending and to stimulate exports); the elimination of price controls and drastic lowering of tariffs in order to bring domestic prices in line with world prices; the revision of other trade policies to encourage exports; the revision of fiscal, especially tax, policies to reduce public sector deficits and distortions in the private sector; charging users for public services; the privatization of public enterprises and social services; and the institutional reforms required to provide those services (Woodhall, 1991).

Many elements in this particular array of SAPs were necessary to adjust developing economies to external shocks, to mobilize the resources needed to develop under new world economic conditions and to allocate resources more efficiently. But the critical approaches to the size and role of the public sector that characterized these SAPs and which were evident in the conditions they imposed on loan disbursements ("conditionalities") also tended to be detrimental to public services and investment and to the groups dependent on those services and investment. The SAPs' negative impact on education was particularly harmful because an improvement in labour force skills was vital in view of the new goods, services and production processes needed to be competitive and to stimulate growth in the 1980s and 1990s. According to Andrew Noss, writing for the World Bank, conditionalities in several policy areas have had an important impact on the education sector:

Public recurrent and capital expenditures conditionality addresses the size and composition of the public investment program, as well as the recurrent expenditure allocation, in order to reduce the government budget deficit and rationalize the public expenditure program. Wages and employment conditionality focuses on civil service retrenchment and is often implemented through a wage bill or hiring freeze. Subsidies conditionality reduces or removes government subsidies in order to correct price distortions, improve economic efficiency and improve the equity and efficiency of subsidy programs through better targeting. Social policies conditionality protects vulnerable groups from the impacts of adjustment, especially during the transition period (Noss, 1991, p. 2, referring to Kakwani, Makonnen and Van der Gaag, 1990).

However, maintaining public spending growth did not guarantee an end to the growth of poverty. As recent studies of Latin American countries in the 1980s show, debt-ridden economies could have avoided adjustment policies for many years, but could not have avoided increased poverty or greater income inequality as their economies adjusted to the external shock of the balance-of-payments crisis (Lustig, 1995). Moreover, the smaller economies with less bargaining power and fewer intellectual resources with which to respond to IMF/World Bank policy recommendations were bound to agree to that particular set of SAPs. In the words of the former President of Costa Rica, Oscar Arias: "A small country like Costa Rica has little choice in such matters" (Carnoy and Torres, 1994, p. 92).

A number of empirical studies, including those carried out by the World Bank, have shown that policies recommended by the IMF and the Bank, particularly in the early and mid-1980s, were associated with increased poverty, increased inequality of income and wealth and slow (or negative) economic growth (for example, Cornia, Jolly and Stewart, 1987; Bello, 1993; Kakwani, Makonnen and Van der Gaag, 1990). Although it is difficult to separate the effects of IMF and Bank recommendations and lending from those of the internal and external conditions that first prompted the need for short- and long-term financing, and although there may have been some successes, there is persuasive evidence that the conditions imposed for these loans were not the most effective recipe for restarting economic growth or for equitably distributing the fruits of growth. In practice, the recipe took much longer to produce recovery and did so at a much higher cost than its proponents had claimed. Whatever the intention behind the imposition of these conditions, the results were almost certain to be a less equal income distribution and reduced access to and lower quality of education for the poor. The conditions also lowered the chances of the poor to benefit from training and skills development in the most favourable circumstances, thus working against broadly based higher-level training systems (Lucas, 1994).

These largely negative effects of SAPs on the supply of and demand for education had become evident by the mid-1980s. When economic recovery in the OECD countries and structural adjustment policies did not produce the expected rapid economic recovery of debt-ridden developing countries, the World Bank reacted in two ways on the education front. First, it increased the amounts available for lending to the education sector by stepping up sector investment loans (SECILs) and sector adjustment loans (SECALs) as well as the more traditional specific investment loans (SILs). Although there were few of them, the SECALs were specifically designed to implement major structural reforms in education (Thomas and Verspoor, 1994). Second, it promoted a particular set of educational reforms, which focused on raising quality without increasing cost, on reducing the public cost per student at various education levels while maintaining quality and, in the same spirit, on raising the private household contribution to education through increased user fees, especially at the higher levels of education.

The overall aims of these two approaches were to mitigate the most adverse effects of structural adjustment on education and to make the education sector more efficient (and equitable) during a period of declining public spending. However, as Reimers and Tiburcio have pointed out, "such good intentions have rarely been put into practice because stabilization programmes have limited government counterpart funds available for such activities. Financing agencies now tend to postpone decisions on educational projects, pending the results of financial and human resource feasibility studies regarding the absorption and management capacities of the educational agency or institution" (1993, p. 14).

The following pages first take up the types of reforms that have been required of the education sector. Then the important question of their impact on the quality of education is addressed. And finally, the possibility of alternative policies for adjustment is considered.

# Structural adjustment in the education sector

Changes in the world economy have provoked three kinds of response in the education sector: (a) reforms in response to shifting demand for skills in both the domestic and the world labour markets and to new ideas about organizing the production of educational achievement and work skills – these may be referred to as "competitiveness-driven reforms"; (b) reforms in response to cuts in public sector budgets and private company incomes which reduced the public and private resources available for financing education and training – "finance-driven reforms"; and (c) reforms to improve education's important political role as a source of social mobility and social equalization – "equity-driven reforms".

## Competitiveness-driven reforms

The underlying philosophy of such reforms is best captured in the 1992 report of the OECD's ministerial-level Education Committee:

The "human factor" is fundamental to economic activity, competitiveness and prosperity, whether manifest as knowledge and skills or in the less tangible forms of flexibility, openness to innovation, and entrepreneurial culture. All OECD economies are engaged in a process of structural adjustment and rapid technological development. Employment patterns and workplace processes evolve rapidly. Together, these changes exercise a profound impact on the topography of relevant knowledge and skills and hence on the capacity of individuals, young and old, men and women, to participate in economic life (OECD, 1992, p. 32).

In practice, this philosophy translates into organizational reforms of educational institutions in order to raise the "quality" of their output as measured mainly by students' performance on tests that assess what international curriculum standards suggest students should know by a certain age or grade of school. But quality is often also loosely defined by employers' views of how far the education schools produce is relevant to a changing world of work. For example, employers may regard secondary education as low quality if graduates of that level cannot learn job skills.

The organizational reforms aimed at increasing educational quality may be classified in four categories – decentralization, centralization, improved resource management and improved recruitment and training of teachers.

#### Decentralization

Municipalities and, in some places, schools, may be given greater autonomy in decision-making on education. One purpose of decentralization is to pass the control of curriculum and teaching methods to local communities and to the principals and teachers of the schools themselves – the assumption being that increased flexibility and control by these groups enable a better fit between educational methods and the clientele served as well as greater accountability for educational results. Reformers reason that if the local educational authorities see themselves as responsible for the delivery of education – and are seen as such – the quality of education will improve (Hannaway and Carnoy, 1993).

An extension of such reforms is public-school choice and the privatization of education (CERI, 1994b; UNESCO, 1993). Parents' choice is influenced to a great extent by conditions they perceive as desirable or undesirable (for example, the social composition of the school student body or because, for religious or educational reasons, they wish more or less curricular pluralism than is already provided); research shows that in fact "parents and children rarely choose schools on the basis of well-informed comparisons of educational quality" (CERI, 1994b, p. 7). Those advocating greater parental choice argue that the threat of "parent exit" would motivate teachers and principals to improve school quality - but there is no direct evidence that this threat of exit improves school performance. Certain school aims associated with effectiveness, such as the instilling of strong leadership or a sense of mission as well as parent involvement, may suffer if more active parents exit from the school. Nevertheless, a major argument in favour of privatization is its positive effect on competition between schools and on school and teacher accountability, hence on school quality (Behrman, 1993; CERI, 1994b; Psacharopoulos, 1994; Psacharopoulos, Tan and Jimenez, 1989).

#### Centralization

In the United States, for example, where formal education is highly decentralized, reforms have simultaneously called for greater centralization and school restructuring (placing greater control in the hands of teachers and principals). Centralization reforms have focused on higher learning standards, in the narrow sense of "a learning standard that an educational programme aims to help learners attain ..." (UNESCO, 1993, p. 78). In its Goals 2000 legislation (EFRC, 1994), the United States Congress moved towards requiring students everywhere in the United States to meet certain minimum standards for high-school graduation and towards raising average student achievement to the highest world levels in mathematics and science by the year 2000. Although the United States has not yet introduced national or state tests, a systemic reform aims at a national curriculum and centrally imposed requirements regarding academic achievement – on the grounds that in many of the countries where students achieve high academic levels, centrally imposed standards have raised overall performance.

#### Improved management of educational resources

Many proposals for improving educational outcomes rely on the introduction of a new "high-yield" approach to resources – which can significantly improve students' achievement at relatively low cost – and on better management and allocation of existing resources in schools. The introduction of high-yield resources implies universal access to school books in countries where pupils have been without textbooks (Lockheed and Verspoor, 1991), peer tutoring in higher-income countries where school supplies are widely available (Levin and Meister, 1986), and a "third television channel" using the full range of communications media available in a given society, in order to reach the "very large numbers of young people and adults who never had an opportunity to receive formal education of any kind, or who dropped out of the formal system before learning anything of value to themselves or society" (UNESCO, 1993, p. 64).

The main focus of "better management" – as reflected in the "effective schools" literature (see Lockheed and Levin, 1993) – is to increase teachers' efforts and powers of innovation and simultaneously to help teachers evolve effective alternative approaches to teaching (Levin, 1994). The aim is to produce high academic achievement with approximately the same set of physical assets and pupil populations as lower-achieving schools. In their defence of the case for increased privatization, advocates of vouchers in the United States and elsewhere have argued that, compared with public schools, privately managed schools are able to achieve higher academic standards whilst using the same or fewer resources because they have greater flexibility in the allocation of teachers' time (Carnoy, 1993). A similar set of arguments have been used to justify voucher plans in developing countries (Behrman, 1993).

Finally, the World Bank puts forward a strong argument (one which also underpins the thrust of the recommendations made at the 1990 World Conference on Education for All in Jomtien, Thailand) that public education in developing countries should focus on expanding and improving basic education because the pay-off - the "social rate of return" to resources invested at that level - is higher than to resources invested at the secondary and higher levels (Psacharopoulos, 1994; World Bank, 1994; Lockheed and Verspoor, 1991). This implies that there is a greater increase in economic productivity and the social good (as measured, for example, by improved children's health and nutrition and lower fertility rates) as a result of public spending on basic education rather than on higher education. By this argument it is socially more "efficient" to invest scarce public resources in the primary level, taking them away from secondary and (particularly) university education. Although this claim is contested (Ryoo, Nam and Carnoy, 1993), it does form the basis for much of the Bank's policy on the education sector.

#### Improved teacher recruitment and training

According to the OECD, "improving educational quality has become a widespread priority and in this the role of teachers is pivotal ... Successful reform is realized by and through them" (OECD, 1992, p. 79). The OECD focuses mainly on reforms that would improve the recruitment and retention of high-quality teachers to schools and universities, on pre-service training to make them highly effective "knowledge transmitters", and on in-service training to maintain and develop their skills and interest. The "complex components of the profession's attractiveness" (see OECD, 1992, pp. 81-83) include not only teachers' relative salaries, but how teachers are regarded by society as a whole, the relative isolation teachers feel in their work and the degree to which they are treated as professionals by the education authorities. The latest research on the quality of teaching identifies a number of tangible and intangible factors to do with the individual teacher, the individual school and the broader policies of education authorities. The greatest challenge, according to the OECD, is to find the proper mix of variables at the different levels which "complement and reinforce one another, not conflict and compete" (see CERI, 1994a, pp. 113-117).

The ILO and UNESCO have argued that these issues are just as relevant in developing countries as in the industrialized economies of the OECD. Both organizations and the Joint ILO/UNESCO Committee of Experts on the Application of the Recommendation concerning the Status of Teachers (CEART) have also placed major emphasis on the training, working conditions and salaries of teachers (including those in technical and vocational education and training) as well as on their decision-making role in educational change at the national and the local levels; indeed, they consider these to be central to the improvement of quality in education (ILO/ UNESCO, 1989 and 1994).

On the basis of empirical studies relating academic achievement to school inputs and pupils' socioeconomic background (school production function analysis), the World Bank argues strongly that the most effective way of improving pupil learning is to step up teachers' education in their subjects, and to provide less pre-service and more in-service training (Lockheed and Verspoor, 1991; World Bank, 1990). Bank analysts correctly describe current teachers' education programmes in developing countries as being of poor quality and badly in need of reform. Yet few Bank loans have included any requirements to improve pre-service training. Rather, the emphasis has been on recruiting teachers with little or no pre-service training and then giving them in-service training.

### Finance-driven reforms

Of all the international agencies, the World Bank is the main advocate of "finance-driven" reforms. This should surprise no one. The Bank is a financial institution, and its concern with development arises partly because of its interest in reducing the cost of public service delivery. Policies over the past decade have focused on three areas of reform: (a) the shift of public funding for education from higher to lower levels of education; (b) the privatization of secondary and higher education in order to expand those levels; and (c) the reduction of costs per pupil at all levels of education, chiefly through control of the growth of salary costs by lowering qualification requirements, by increasing class size in primary and secondary education where student/teacher ratios are under 45 and/or by a more intensive use of teachers (multi-grade and multi-shift classes) (Farrell, 1993; Psacharopoulos, Tan and Jimenez, 1989; World Bank, 1990). In brief, this involves the following.

#### Shifting public funding from higher to lower levels of education

Higher education involves high costs and basic education relatively low costs. In many countries, public university education costs are heavily weighted toward non-teaching and non-research expenditures, such as student subsidies and administrative costs. Classroom space is often underused and many faculties operate with small numbers of students and diseconomies of scale. All this raises questions about the efficiency of public universities in many of the countries where they receive a high proportion of public resources. Further, in many of these same countries basic education is of low quality and drop-out rates are high. Shifting spending, it is argued, would enhance opportunities for large numbers of primary-school students, rather than subsidize students from an elite group whose families could mostly bear the costs of their university education.

#### The privatization of secondary and higher education

The principal argument for privatizing higher levels of education is that, given projected increases in demand in many countries, public funds will be insufficient to finance the expansion of secondary and higher education. So, for education to expand at those levels, developing nations will have to rely on students' families to finance a high proportion of school costs. This privatization may be carried out in two ways: (a) by allowing the creation of far more accredited private secondary schools and universities; and (b) by limiting the public assistance given to all schools (including public ones) and increasing fees charged to students to cover the gap between the cost per student and public assistance per student. International financial institutions have also focused on increasing community contributions to schools, both pecuniary and non-pecuniary. All these reforms basically advocate increased financing of schooling through user fees, whether the users be the community or individuals. The more privatized the level of schooling, the greater the user fee component in its funding. For efficiency and equity reasons, the World Bank has argued that the higher the level of schooling the greater should be the user-fee proportion of total financing.

### The reduction of cost per student at all schooling levels

The World Bank's key proposals to reduce the public cost of schooling at all levels include: holding down the overall salary bill, increasing class size and making greater use of teaching in shifts. On the basis of a study of a number of school production function estimates relating pupil achievement to a series of school inputs, and taking pupils' socioeconomic background into account. Bank analysts conclude that the pupil/teacher ratio has essentially no effect on pupil achievement when class sizes range from 20 to 45 pupils per teacher (see, for example, Farrell and Oliveira, 1993; Fuller, 1985: Lockheed and Verspoor, 1991: Harbison and Hanushek, 1992: World Bank, 1990). In most developed and many developing countries, the average ratio is well below 45, although class sizes may exceed that ratio in the urban areas of many low-income countries. According to the Bank, countries with fewer than 45 pupils in a class could save significant public resources by increasing class size over time and also by using double or triple shifts. This would reduce the demand for teachers and allow for much more public spending on "high-vield, low-cost" resources (such as books and other supplies, or in-service training) that complement and enhance good teaching. Removing the link between teachers' salary levels and civil-service scales and reducing the requirements on formal qualifications would, it is maintained, free additional resources.

# Equity-driven reforms

The shift of public spending from higher to lower levels of education and many of the competitiveness-driven reforms discussed above have been justified on the grounds of equity. They are also supposed to help education serve as an instrument of social mobility. For example, the Bank has consistently argued (with empirical support) that free public university education is a subsidy for higher-income groups at the expense of the poor (see Psacharopoulos, 1994, for an update on returns to education). A shift of public resources from higher levels of education to primary (basic) education implies favouring low-income groups over high-income groups in the delivery of educational services.

The main equity-driven reforms in developing countries are designed to achieve the following.

(a) To provide the lowest-income groups with high-quality basic education, especially the large number of youths and adults who do not currently have access to basic skills. The 1990 World Conference on Education for All was organized by the United Nations Development Programme, UNESCO, UNICEF, and the World Bank to focus attention on the equity implications of the challenges arising from the need to expand basic education in developing countries (WCEFA, 1990a and b). Some of the reforms proposed were financial, but many sought to improve the quality of teaching, to increase the time teachers spend in schools, to

make school supplies available to children from low-income families and to improve school curricula. Some agencies, including UNESCO, have also recommended special educational programmes, such as distance learning and non-formal education (UNESCO, 1993).

(b) To reach certain groups who lag behind educationally, e.g. women and rural populations. There is particular concern about women's education because of the crucial role that women play in economic development, social change, raising children and decisions about fertility. High fertility rates and low life expectancies at birth are both associated with high rates of female illiteracy (UNESCO, 1993; Carnoy, 1992). Rural populations in developing countries traditionally receive much less education – in terms of both quality and quantity – though most countries would benefit from investing in education to increase agricultural productivity for their continued economic development.

In OECD countries, equity-driven reforms tend to be targeted at particular students throughout the educational system who are "at risk" (i.e. on low incomes) or who have special needs, and to focus on reforms to increase their success at school. These include special programmes aimed at improving retention and student achievement, including special, multicultural and bilingual ones for speakers of minority languages and "head-start" earlyeducation programmes, and programmes for transition from school to work which combine school curricula with apprenticeship training and after-school activities designed to increase pupil motivation and parent involvement. The reforms often include special training for the teachers involved.

## Conflicts between reforms

Whereas all countries have proposed – and sometimes implemented – all three types of reforms in the context of structural adjustment, the OECD countries and most of the Asian NICs have tended to focus on competitiveness-induced reforms. Some OECD countries, such as Australia, Canada, New Zealand, the United States and many European countries, have also emphasized equity-driven reforms. The heavily indebted countries of Latin America and Africa have been obliged to focus almost exclusively on finance-induced reforms.

This holds true even in the case of a specific reform. A good example is school decentralization. In OECD countries, school decentralization reform focuses primarily on shifting management control over schools rather than expenditure cuts. In Africa, Latin America, and even the rapidly growing countries of Asia, the main objective of decentralization is to shift government's financial management responsibility, including the negotiation of teachers' salaries, on to state and local jurisdictions – thus reducing central government spending and public spending in general.

Despite the competitiveness and equity justification for all financedriven reforms associated with structural adjustment policies, such reforms tend to have economic and educational effects which fail to increase (indeed which can even undermine) educational quality and equity. Despite calls to reduce public spending on higher education and increase spending on primary schooling, in practice when incomes have declined the decreased public spending on education in most countries has forced low-income children out of school. A recent World Bank paper refers to Cornia, Jolly and Stewart (1987) in arguing that: "Because SALs focus on correcting imbalances in the economy and laying the foundations for growth rather than on equity, the particular forms taken by cuts in subsidies, real wages, and real education expenditures have high social costs, at least until the economy begins to grow"; referring to Griffin and Knight (1989) it continues with the argument that "in many Third World countries human development programs are 'savagely' cut and long-term prospects for development diminish while inequality and poverty increase" (Noss, 1991, p. 4).

The combination of economic crisis and structural adjustment results not only in public expenditure cuts but usually also in lowered incomes; in the case of SAPs, it tends to reduce incomes unequally, affecting the poor (although not necessarily all subgroups of the poor) more than those with high incomes. And, concerning education, as these drops in income are accompanied by pressures to replace decreased public spending with increased private contributions to schools (higher user fees or lower subsidies, for example), there is a fall-off in the demand for schooling. The declining health and nutrition standards which may accompany structural adjustment can also reduce attendance at school. On the other hand, higher unemployment rates tend to increase the demand for schooling, especially at secondary and tertiary levels, and to involve a corresponding decline in income.

The case for finance-based reforms is persuasive. In many countries, harsh economic reality dictates that public resources are not – and probably will not become - available to provide a full and reasonably high-quality basic education to all children; meanwhile secondary and higher education are heavily subsidized by the public sector. Low-income countries experiencing slow economic growth must find private resources for higher levels of schooling if they are to provide the skills needed in today's world. High-income countries in a slow-growth world economy also have to allocate public resources more effectively if they are to continue to deliver highquality public services. Further, the World Bank makes a good case that freely provided education at university and, in some countries, uppersecondary levels unnecessarily subsidizes students whose families generally could afford to contribute substantially towards their education - this at the expense of poorly funded basic education for the mass of children. The Bank also argues convincingly that other savings could be made through a more efficient allocation of resources in the education sector (Lockheed and Verspoor, 1991).

That having been said, however, World Bank policies may themselves be contributing to the shortage of public resources for education. First, structural adjustment loans require the reduction of public sector spending, and every government views educational expenditures as part of that package. Bank analysis has suggested that higher intensity structural adjustment is associated with greater reductions in educational spending (Noss, 1991). Second, even if the Bank has responded to the undesirable impact of structural adjustment policies on education by greatly expanding its lending to the education sector, its conditions for these loans may mean that the public effort in education is reduced in the long run. Indeed, the combination of these policies, including strong recommendations to privatize, reduces the pressure on governments to raise public spending on education.

A particularly disturbing threat to the enhancement of academic achievement is the World Bank's usually implicit (but sometimes explicit) emphasis on specifically reducing public expenditure on teachers' salaries. From a finance-reform perspective, this follows a certain logic, since salaries represent such a high proportion of total public expenditure on education. Bank policy has retreated from its earlier position that reducing teachers' salaries was the sine qua non of its finance-based reforms. Moreover, by the beginning of the 1990s, its policy on primary education identified good salaries and benefits, working conditions and career advancement opportunities as important factors in teacher motivation. Recent Bank documents seem to reflect a strong commitment to improving teaching through better recruitment and training (Lockheed and Verspoor, 1991; Farrell and Oliveira, 1993). But because of these overall reforms, teachers have borne the brunt of government attempts to reduce costs - and hence are often perceived as the villains and the cause of the increasing difficulties faced by most countries' schools. The Bank's present focus on privatization, freezing salary costs, and increasing class size continues to give the impression to governments that an increase in teachers' workload and a reduction in their qualifications and pay would not have deleterious effects on pupil performance. Indeed, when teachers resist externally imposed reforms that worsen their teaching conditions, their organizations are singled out as the major obstacle to educational improvement.

Most importantly, however, policies that serve to undermine the value of public education and of public-school teachers ignore the fundamental political realities involved in raising the quality of education. Given that teachers continue to work largely unsupervised behind the closed doors of classrooms, if nations hope to increase the cognitive skills of their young people through education they will have to rely on autonomous, motivated and skilled professional teachers trained in public institutions to do so. Teachers' self-perception, the degree of their commitment to pupils' academic success, their willingness to learn to do their job better and their teaching abilities are all key elements in the production of basic and advanced learning in any society (ILO/UNESCO, 1989; CERI, 1994a). In order to obtain teachers' commitment and involvement, the management system must take their needs into account and involve them in improving the quality of education. Improving teaching skills inevitably requires a heavy dose of public sector involvement, and not just at the basic education level. It is well to remember that the immense United States higher education system is 90 per cent public (United States Department of Education, 1994). Almost everywhere in the world, the training, recruitment and professional development of teachers through in-service training are financed and managed by the public sector. If schools are to be improved, it is the public sector that will be largely responsible, with private education acting as a complement not a substitute (ILO, 1991).

# Has the quality of education declined?

Many observers consider that the most important policy concern is whether educational quality declines in countries that cut educational expenditure per pupil. On the basis of case-studies undertaken in Africa and Latin America, Woodhall (1994) concludes that this is indeed what has been occurring. If school production function results are to be believed, however, large increases in class size and reductions in spending on teachers' salaries do not necessarily reduce pupil achievement (Harbison and Hanushek, 1992, cited in Behrman, 1993, who nevertheless points out methodological weaknesses in many of these studies). Such production functions relating school inputs to outputs are estimated with individual pupil data at a single point in time. However, research carried out in the United States on variations in achievement over time suggests that when schools suffer from considerable underfunding – as schools for black children in the southern United States did in the 1940s and 1950s - increased funds lead to improved quality (Card and Krueger, 1992a), and that in turn, such quality changes in education positively affect wages in periods when wages are rising (Card and Krueger, 1992b; Carnoy, 1994).

In the developing countries time series data on school achievement are practically non-existent. The International Educational Assessment has included a number of developing countries, but the data are not available over time. In what represents a rare case, Chile has carried out a longitudinal assessment of its "municipalization" reform of 1980; under this reform, the management of primary schools was turned over to municipalities and a voucher plan implemented, in which the Chilean Government allowed parents to spend for each of their children at a private school the equivalent of the public cost per pupil. This gave rise to large numbers of subsidized private schools. Since that reform and others (e.g. the drastic privatization of the university and secondary levels and its consequent reduction in teachers' salaries) conformed closely with sectoral adjustment conditions imposed by the World Bank, the Chilean assessment can give us some indication of the impact of structural adjustment on school achievement. National examinations in Spanish and mathematics were held for fourth grade pupils in 1982, 1988 and 1990. The Spanish scores rose slightly for middle-class pupils in both subsidized private schools and municipal schools through the

period 1982-88, but fell for pupils in fully private schools (only middle- and upper-socioeconomic classes represented) and for lower social class pupils in both subsidized private schools and municipal schools (Prawda, 1993). In each of the three years, middle-class pupils obtained higher scores in the private subsidized schools and lower social class pupils did as well or better in municipal schools (Prawda, 1993; Tedesco, 1992). Average scores were low by international standards. In mathematics, these tendencies were less pronounced in terms of spreading inequity, but otherwise similar: middleclass students seemed to benefit from the reform, but lower social class students did not (Prawda, 1993; Tedesco, 1992). In any case, the gains were modest, even for middle-class students. Furthermore, according to a task force reporting in 1994 on the state of Chilean education, there had been no significant changes made in the 1980s in the curriculum or pedagogy as a result of the 1980 reform (Comité Técnico, 1994). Since a third of all primaryschool pupils come from families in the bottom 20 per cent of incomeearners, and 56 per cent from the bottom 40 per cent, the decline in test scores for the lowest groups suggests that the reform may have had an adverse effect on the majority of pupils.

A more common (and readily available) indicator of quality change is the proportion of pupils reaching the fourth grade of primary school. However, care must be taken when interpreting this figure, because the success rate can easily be raised by reducing repetition ("staying down") in earlier grades - and repetition is not usually a function of school quality (as many analysts contend) but rather of the number of places available at the next level of schooling. Most countries make their decisions about how many pupils should proceed to the secondary level on institutional and financial grounds, not on whether the achievements of the school-age population at primary level warrant it. Although a rise in the proportion of pupils reaching fourth grade does not necessarily mean an increase in primary-school quality, a decline almost certainly reflects an undesirable trend. Either students' families are facing economic hardship that prevent them from sending their children to school, or the school is raising the financial requirements so much that some children are forced to leave, or yet conditions in the schools are worsening to such a degree that pupils are more likely to repeat and then drop out.

Data for 51 developing countries show that 13 had declining proportions of pupils reaching fourth grade, of which seven were in Africa (UNESCO, 1993, table 5). There is no strict relation between structural adjustment and these changes. Among the 21 African countries for which data were obtainable, in seven (Congo, Côte d'Ivoire, Kenya, Lesotho, Togo, Zaire, Zimbabwe) the proportion reaching fourth grade fell in the 1980s. Three of these countries raised their public spending as a proportion of GNP. In Congo and Côte d'Ivoire, the retention rate declined from the 90-per-cent range to the 80-per-cent range; in other countries, however, the drop was to much lower percentage ranges, indicating that things went from not very good to much worse. Only four countries made substantial gains (Burkina Faso, Ethiopia, Malawi and Niger). The other ten countries held even. Only four of those did so because they already had over 90 per cent reaching grade four (Botswana, Mauritius, Senegal, United Republic of Tanzania). Significantly, three of the four countries making gains were in the group that had increased public spending as a percentage of GNP, and none of the countries in the negative GNP per capita growth plus growth of public spending/GNP group made gains.

Yet the Latin American data suggest that reduced poverty appears to have a greater effect on the drop-out rates from primary school than does increased spending on education. Brazil, Mexico and Venezuela – all countries with substantial increases in the poverty rate (Lustig, 1995) – reported lower retention rates at fourth grade, but a number of countries made large gains in retention rates. Most of them, including Colombia, Costa Rica and Paraguay, lowered their poverty rates during the 1980s. But that was not true of Chile, which nevertheless made a large gain in the proportion reaching the fourth grade.

The available data on the quality of education therefore send a mixed message on the effects of structural adjustment. Financially-driven structural adjustment measures have not improved average educational performance, and there is some evidence that disparities in performance have increased. From the Chilean data, it appears that for pupils from low-income families (who represent a large proportion of all primary-school students), decentralization, cuts in spending and privatization – all ingredients of structural adjustment – have lowered the quality of their education. If data on pupil achievement were available from other countries in Latin America and Africa hit hard by a combination of deteriorating economic conditions and structural adjustment policies, the results would probably be similar.

# Are there alternative approaches?

For many of the countries that began the structural adjustment process in the 1980s the worst is over; economic growth per capita is positive and education budgets are again on the rise in absolute terms. Yet, international agencies committed to public sector austerity continue to push for educational reforms that reflect structural adjustment thinking – and more specifically, public austerity in education. The conceptual legacy of these policies continues and therefore so does its impact on education and teachers – hence the focus in this article on those policies.

The financially-driven educational reform policies responded to certain imperatives of new economic conditions – but did so in a way that tried to "Taylorize" teachers as delivery workers. The reforms met few, if any, of the conditions required to enhance the learning environment in schools. In that sense, they were largely counterproductive to producing and delivering higher quality education.

There is arguably an alternative to that particular model of educational reform. Some countries have reduced public spending as a percentage of

GNP, but because of relatively rapid increases in GNP were able to increase public spending and spending on education. Other countries had (moderate) negative per capita economic growth but were able to maintain per pupil spending in education by allowing their public spending to rise as a percentage of GNP. Many of these countries were able to improve the conditions in schools and to maintain teacher pay while doing so. In those developing countries with positive per capita GNP growth that did not implement traditional structural adjustment policies - mostly in Asia - the main changes that occurred during this period were a lowering of class size. higher teacher salaries, fewer total hours worked per month (Republic of Korea, for example) and increased bonuses for working in rural areas (Indonesia, for example). This is particularly significant because international agencies have given Asian countries as examples of how to deliver high-quality education at low cost per pupil (large class sizes, many hours per month worked by teachers, relatively low teachers' salaries compared to average wages). Indeed, a primary/lower secondary school teacher in the Republic of Korea earned three times the per capita income in 1993 and twice the average income per employed worker. The ratio to average worker income is higher than in most countries in the world, including Japan or the United States (Cox Edwards, 1993; information provided directly by the Ministry of Labour, Republic of Korea). The Republic of Korea and other east Asian countries also reduced their pupilteacher ratios in the 1980s.

Other developing countries are likely to adopt the same approach as the east Asian countries – i.e. to improve material conditions for education workers – once their economies recover from the influence of high capital costs and low commodity prices. In the context of the east Asian NICs, higher pay appears to be part of an implicit arrangement in which workers' rights to strike or bargain collectively are restricted. The model may be regarded as "traditional industrial", with employed teachers rewarded with a higher standard of living from the greater per capita output generated by the economy as a whole, with little effort given to changing the educational process with the improvement in material conditions and a reduction in class size.

With the focus on financially driven reforms in the 1980s, and the resulting major reductions in teacher salaries and educational materials, it is quite possible that economic recovery in Latin America, and Africa, will result primarily in an Asian-NIC-style financial restoration in the 1990s. There is evidence that such financial restoration is taking place in many countries of Latin America and Africa. Public educational expenditures, and with them teacher salaries, are increasing again. Some countries in Latin America, where teacher salaries fell substantially in the 1980s – for example, Chile, Costa Rica and Mexico – have all increased salaries in the 1990s – even though it took court action in Costa Rica and a democratically elected social-democratic government in Chile to obtain the changes. And, following the financial restoration scenario, little else about education is transformed in this process.

Financial decentralization reforms, e.g. in Latin America, could lead to more teacher participation in educational decision-making. However, this will depend upon the teachers' organizations themselves; they must become much more powerful educational actors at the state and local government levels than they have been at the central government level. In Chile, the return to democracy in 1990 led to the restoration of teachers' bargaining rights and an increased role in educational decision-making at the central government level. This has had a significant impact on the role of teachers in negotiation and consultation at the municipal level. In Mexico, it appears that, on the collective bargaining side, some state teachers' union locals are successfully bargaining for salary "add-ons". But beyond that, there is little evidence yet that financial decentralization has had any implications in Mexico for a different, more participative, model of educational management and delivery. Basically, teachers' material working conditions have improved and their work has become less arduous, but what remains unchanged are assumptions of how education should be organized, learning enhanced and teachers trained and employed. And teachers' participation in this decision-making remains limited.

The alternative model does not preclude financial and managerial efficiency. Indeed, it sets out to attain more for a given amount of resources than do structural adjustment models. The latter are mainly concerned with cutting the cost of schooling, assuming – incorrectly – that school quality does not decline with lower teacher salaries and larger classes. And even if that assumption were correct, the structural adjustment strategy effectively places less emphasis on learning improvement than on learning maintenance at lower cost, even in the longer run.

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