EXECUTIVE SUMMARY[*]

Despite some positive experiences, education in the Americas has not responded to the challenges posed by new development models based on international economic competition and by the political, economic, scientific-technological, social, cultural, and moral demands of the 1990s. Today, this lack of response has led presidents and heads of state, the business community, political parties, and the media to make education a new priority in Latin America and the Caribbean. This consensus is based on research findings demonstrating that a good education is closely associated with the development of autonomous, informed, committed, responsible, and tolerant citizens. Research also associates a good education to the expertise, values, and abilities required to adapt or create technological innovations and with the ability to reason and learn independently — in short, the capacity to develop intelligent and productive individuals.

Growing concern about quality and equity in education is reflected in numerous declarations, but has not resulted in effective reforms. The importance placed on education is explicit in the Declarations of the first two Hemispheric Summits of Presidents and Heads of State (Miami in 1995 and Santa Cruz de la Sierra in 1996) and those of the first six Summits of Heads of States of the Ibero-American Community of Nations (1991 to 1996). It was also evident in the Assembly of the Economic Commission for Latin America and the Caribbean (1990 and 1992) and the World Summit for Social Development (Copenhagen, 1995); in the Fourth World Conference on Women (Beijing, 1995); and during the recent conferences on population (Egypt, 1994) and environment (Río de Janeiro, 1992).

The demands currently being placed on education stem from diverse social phenomena. The independence of Anglophone countries in the Caribbean in the 1960s and 1970s, the demise of the de facto regimes of the 1980s, and the advent of democracy in much of Latin America, coupled with contemporary economic development models and rapid technological advancement, demand renewed efforts to compete effectively in the international arena. Initiatives must be taken to overcome extreme poverty, eliminate profound inequalities in income distribution, and prevent social disenfranchisement and urban and rural violence. Socially equitable education can contribute to social integration and stability, to ethnic and racial harmony, to a trained work force, and to the development of a community of informed and responsible citizens. Moreover, an equitable education fosters political tolerance, reduces violence, and, consequently, creates a more propitious climate for national and international investment and social and cultural growth and prosperity.

Although primary education is virtually universal in the region, educational reform policies premised on extending national coverage have been shown to be insufficient. Most Latin American and Caribbean children and youth receive a poor quality education. This is particularly true in public schools in disadvantaged urban and rural areas which serve the poorest children in the region (in these areas, private education is nonexistent due to low income levels.) Haiti's situation is unique in that it has numerous free private schools— thanks to foreign donations— given the low per capita income in the country. Deficiencies in education are observed primarily in high rates of grade repetition and functional illiteracy. Students who remain in school for an average of seven years generally only pass fourth grade and fail to achieve minimum competency in reading and writing. Nonetheless, there are cases in which these deficiencies have been successfully overcome through the adoption of appropriate strategies.

Because problems of quality generally affect certain groups with characteristics that compel them to enter the public education system (the only one willing and required to serve them), equity in education can no longer be measured based on coverage alone. It must instead be gauged in terms of "equity in the quality of education," that is, the number of grade levels passed and the quality (compared to the national average) achieved by students from disadvantaged-urban and the poorest rural sectors, minority ethnic groups, and learning disabled children. This requires a closer look at new aspects of education. If the problem of quality is to be solved, it is imperative to identify the factors impeding learning in certain groups of students. And, while additional resources

and improved resource distribution are necessary, as is often stressed, it is essential to foster initiatives that reshape the methods used in most classrooms at every level of the educational system.

There are factors external to the learning process that influence the quality of education, such as the characteristics of each student, his or her family and immediate environment. Internal factors, inherent to education, also determine whether learning occurs. But these factors operate differentially since, in low income areas, they center on: (i) the most heterogeneous population groups for which the traditional lecture model geared toward an average student is inefficient; (ii) smaller institutions that often do not offer all grade levels; (iii) multi-grade or multi-area classrooms that require individualized attention; (iv) school materials in short supply and not conducive to individualized classes; (v) inflexible curricula unrelated to the students' experience or life situation; and (vi) 40% of teachers lacking degrees and who use memorization and authoritarianism to teach class. It should come as no surprise, then, that three out of four children who leave schools in these areas cannot comprehend what they read from a text.

There are also problems of quality in secondary, post secondary and preschool education which are compounded by pressures to increase coverage at each of these levels. Only one in five college professors has the doctoral training necessary to teach at the university level. The report analyzes at length the degree of inequity caused by the different problems identified. For example, 1,000 learning hours during the school year are generally available to private school students in Latin America; in contrast, many public schools offer no more than 500 to 600 hours annually. In CARICOM countries, conversely, public schools generally offer a higher quality education than private schools, particularly at the secondary level.

Governments consider improving education a political priority in order to overcome their status as developing countries, since education offered in the region is unresponsive to the demands of the current national and international panorama. There is consensus that the region must offer a quality education to everyone, especially at the early levels, in order to achieve social equity and reduce extreme disparities in income. The technical support required to diagnose problems and to define or choose among alternative solutions, however, is not always available.

Governments are convinced that they must offer an education that: (i) equips people with the ability to communicate effectively and to continue to learn throughout their lifetime; (ii) assures them an adequate entry into the workplace; (iii) fosters scientific and technological research for regional development and competitive insertion into the international arena; (iv) eliminates poverty, increases social mobility and leads to a quality of life that ensures social peace; (v) prepares people to become responsible citizens who value peaceful means of resolving conflicts and consensus-building; (vi) is decentralized to the extent that a significant level of community participation in the supervision and administration of local education is possible. Therefore, it is especially important to identify new resources for education, as well as improved distribution of existing resources.

Political priorities and the regional diagnostic make it possible to identify certain long-term strategies. A national consensus to integrate and unify the efforts of all social actors around specifically defined strategies is needed to achieve the primary objective of an educational system responsive to current national demands and conducive to sustainable development.

The following seven strategic suggestions seem to be appropriate for many countries in the hemisphere: (i) build consensus based on sufficient data; (ii) modernize education administration and establish accountability for outcomes, including the adoption of a system of incentives and structures to evaluate and regulate administration; (iii) increase funding from the public and private sectors to reach 6 to 7 percent of the GNP, redistribute resources appropriately and equitably among the different education levels, and focus on fundamental inputs; (iv) develop an individualized, dynamic, and relevant educational model, which means modifying the teacher's role, the curriculum (content and methodology), and educational materials (especially learning guides) in the regular school system; (v) develop realistic plans to train teachers in the regular school system by replacing the lecture style with a curriculum-based approach, consistent with

recommendations, in order to create the capacity to surmount difficulties in learning; (vi) establish doctoral programs to train university professors and to stimulate scientific and technological research and artistic creation; and (vii) invest in the field of science and technology and in selected research institutes.

The policy priorities outlined in Chapter Four and the suggestions for government action found in Chapter Five have implications for the OAS role in education. The most important of these can be synthesized into five courses of action: (i) serve as a clearinghouse to compile and share research; (ii) analyze available data and identify trends in education systems in the region; (iii) compare and evaluate development strategies; (iv)) report on consensus-building processes in different countries; and (v) review and select experiences that can be adapted and applied in other countries.

With this study of the current situation of education in the Americas, the General Secretariat of the OAS hopes to contribute to the new debate over education in the hemisphere during the preparation of the Summit of Presidents and Heads of State which will take place in April 1998 in Santiago de Chile. The Presidential Summit is, indeed, an excellent opportunity to stimulate the joint undertaking of both local and national educational reform in the context of the social development policies of each country in the hemisphere. It is also an opportunity to propose alternatives for cooperative action in the field of education.

* This study was prepared under the direction of the Unit for Social Development and Education of the General Secretariat of the OAS for the II Summit of the Americas. The working group that prepared the study was coordinated by E. Schiefelbein and included P. Schiefelbein, B. Sander, L. Zúñiga, G. Carvalho, B. Edwards, L. Wolff, and M.H. Alleyne.

EDUCATION IN THE AMERICAS
Quality and Equity in the Globalization Process

I. Education and The National and International Panorama

Today, presidents and heads of state, the business community, political parties, and the media are making education a priority in Latin America and the Caribbean. This consensus is based on the sense that there is a wide gap between society's needs and demands and the education offered in the region, despite the fact that progress clearly has been made. The globalization process has contributed to this gap. While globalization offers numerous opportunities to the region, education must improve in order to take full advantage of its potential benefits (ECLAC/UNESCO, 1992; McGinn, 1997a). Even though access to primary education is now virtually universal, persistent problems of quality and equity require more than increased resources. Initiatives must be undertaken to change learning processes in the classroom at all educational levels, including preparatory programs for entry into primary school.

The new development models of the 1990s based on international economic competition, political stability, and personal security, rely mainly on the equitable distribution of knowledge and the intellect of human beings (Thurow, 1996; Birdsall, 1997). These aspects coincide with current political, social and cultural demands. Therefore, to reap the benefits of modern society, today's education system must develop autonomous, informed, responsible, and tolerant citizens. It must cultivate citizens with the values and abilities needed to create technological innovations, the ability to reason and learn independently, and with cultural and artistic creativity. This requires changing the role of the teacher, more time to learn systematically, and educational materials conducive to relevant learning experiences.

The media have reiterated that education is not simply a current issue, but rather a political, economic, and social priority for governments and society as a whole. This is

reflected in the recommendations of the Hemispheric Summits of Presidents and Heads of State in Miami (1994) and Santa Cruz de la Sierra (1996) and in the agenda for the upcoming Meeting in Santiago (1998) in which education features prominently (Gajardo y de Andraca, 1997a). It is also evident in the Declarations of the first six Summits of Heads of States of the Ibero-American Community of Nations. The Guadalajara Summit (1991) acknowledged that education was the main path toward successful international integration and the Madrid Summit (1992) underscored that "knowledge is the major capital of the 20th century." The Salvador de Bahía Summit (1993) recommended investment in education, health, and social security; the Cartagena de Indias Summit (1994) considered education to be key to achieving equitable development; the San Carlos de Bariloche Summit (1995) declared education to be fundamental to economic development and access to employment; and the Santiago Summit (1996) proposed joint efforts to promote education.

The need for educational reform has also been underscored by those in charge of advancing the current economic system (Edwards, 1997). At the 1990 Assembly of the Economic Commission for Latin America and the Caribbean (ECLAC) the region's Ministers of Economy opted for a model of "productive transformation with equity" to reverse traditional development patterns. This model would stimulate productivity through technical progress, and by fostering the convergence of competition and social sustainability (ECLAC, 1990). Later, at their 1992 meeting, the Ministers of Economy recognized that the dissociation between education and knowledge jeopardizes potential progress in development. They suggested intensifying efforts to transform education and training and to increase scientific and technological potential with a view toward developing citizens committed to democracy, equity, and international competition (Londoño, 1995; ECLAC/UNESCO, 1992).

Social analysts also recognize the fundamental role of education. At the 1995 World Summit for Social Development (Copenhagen, 1995) an emphasis on the education of parents, and particularly of mothers, was considered essential to combat the vicious circle of poverty and the academic failure of children, to foster social integration, and to increase productive employment. Similar statements were made at recent conferences on women (1995), population (1994), and environment (1992).

To summarize, consensus on the urgency of improving education in Latin America and the Caribbean stems from the need to develop the region. Improved education is necessary to ensure adequate insertion into the international, political and economic arena, as well as to surmount extreme poverty, low productivity, polarized income distribution, exclusion, social, racial, ethnic, and gender inequality, and social violence. A good education is conducive to a well-trained work force and a community of well-informed, responsible citizens. As the World Summit on Social Development affirmed, access to education guarantees social equity, prevents the rupture of the social fabric, and encourages political tolerance. This, in turn, contributes to a favorable climate for investment and social and cultural advancement (Copenhagen, 1995).

A brief analysis of the key social issues that require improved educational quality in the region will help to pinpoint specific demands for better education.

1. Political Issues

Most of the region's authoritarian regimes ended during the 1980s and progress has been made during the current decade, almost without exception, in consolidating democracy and building consensus to forge long-range policies. Several countries have established lasting accords containing effective and equitable proposals, with the broad-based participation of different social sectors (UNESCO, 1996b). While cases of direct public consultation through plebiscites have multiplied, political parties have been challenged openly and today's youth are visibly apathetic about building a society that guarantees a functioning democracy, respect for human rights, and the search for equity and peace. The presidents of legislative bodies in the region, moreover, are concerned about the "weakening of Parliamentary functions" (Meeting of Presidents, 1997). There is consensus that more needs to be learned about the role and potential of legislative bodies. And it is widely agreed that the public must be aware of, and influence the debate over issues underlying government decisions in a democratic system (Thesing, 1997), since a country engaged in debate and analysis is a vibrant country (Correa,

1997).

All of this suggests that education must cultivate informed citizens willing to participate actively in the democratic process. It must spark the creative potential of the region's inhabitants and ensure a critical approach to information and mass media as well as an ability to build consensus or strike reasonable compromises. In this way, education can encourage citizens to play a protagonist role in government policy decisions.

2. Economic and Labor Issues

To date, the educational level of the work force has increased at a slower pace in the region than in Southeast Asian countries (Graph 1). Current economic models in Latin America and the Caribbean have permitted several countries to experience rapid economic growth which could come to a standstill unless the quality of their human resources improves, as well as the equity of their human resource development programs (Birdsall, Ross and Sabot, 1995; Kim, 1997). The new development model is based on opening national economies to international competition, maintaining a balance at the macroeconomic level, foreign investment, deregulating economies and job markets, technological innovation, and strengthening national capacity to keep the country competitive (ECLAC, 1992; Tokman, 1995; Castro, 1997b). Industries based on intellectual capacity, however, do not have an inherently predetermined geographical location (Thurow, 1996). Therefore, it is imperative that traditional industries make decisions that maximize the opportunities for Latin American and Caribbean countries. This implies that the level of development and competitiveness attained with this type of economic model will depend largely on the efficiency of each production unit and the decision-making power at each level of organization (Tedesco, 1996). In short, development will depend on better trained and equitably distributed human resources able to adapt to technological changes and recognize and assimilate new information and methods. They must work well autonomously, but also be able to work in teams to analyze and implement new ways of organizing functions and tasks (quality circles) rather than relying on rote knowledge and the mastery of specific skills that become obsolete (Rojas, 1997).

Education systems must endeavor to respond to the demands of the workplace and an internationally competitive economy (Levinson, 1995). Adequate insertion into the world economy requires a labor force capable of producing at levels equal to or higher than developed countries. And, society must assimilate values that inspire confidence in commitments made. Productivity has contributed very little to the regional economy (Rojas, 1997) and current productivity levels are far below international levels (Chart 1).

GRAPH 1

Education has a role to play in changing this situation. An analysis of possible solutions must take into account the new debate–already ongoing in developed countries—over how education should respond to the new challenges posed by society as it enters the twenty-first century.

3. Social Issues

The utilization of resources and development produced by the new economic model has failed to improve social equity, which is essential to sustained development (Birdsall and Jaspersen, 1997; ECLAC, 1995). From 1990 to 1994, the poorest 40 per cent of the region's population earned between 10 and 22 per cent of total income compared with 26 to 42 per cent earned by the richest 10 per cent (ECLAC, 1995).   The "increase in per capita income" has failed to address social inequalities —which also are present in industrialized and developing countries— such as: drug addiction, domestic and social violence, pollution, and environmental degradation.   Nor has this increase succeeded in eradicating extreme poverty, reducing skewed income distribution, preventing pandemics such as AIDS, cholera, and tuberculosis, or reducing teenaged pregnancy Timely investment in primary and secondary education is less costly in the long run and benefits society far more than spending to counteract the educational deficiencies of those entering the workplace (Psacharopoulos, 1997). Compensatory educational programs for adults are 1.5 to 5 times more costly than four years of regular secondary school

(ECLAC, 1995). Moreover, current social policies reflect the belief that education is one important factor in surmounting such problems and at a reasonable cost (Psacharopoulos et al, 1997).

CHART 1

4. Technological Issues

Industry-based training constitutes its only sustainable competitive advantage. Rapid technological growth requires the ability to learn throughout one's lifetime and to adapt to change. The scientific and technological revolution is premised on the ongoing discovery of new processes that constantly render existing knowledge obsolete. The existing educational process, therefore, which is essentially based on the transfer and accumulation of knowledge, is incompatible with this historic moment. Memorization of facts and mastery of specific skills has been replaced by the ability to apply them to unexpected situations (Graph 2), adapt to constant technological change, adopt new methods, organize new functions and tasks, and constantly be prepared to assimilate new information and ideas (Haddad, 1997). The profile of the new worker in modern industry includes initiative, responsibility, and additional training in the use of sophisticated, smart tools (Barbee, 1992).

The education system must "teach how to learn" in order to prepare people to meet these new challenges (Thomas and Shaw, 1992; Delors, 1996). It must train people to retrieve information from various data storage systems and equip them to identify alternatives and make decisions. More retraining programs and opportunities for continuing education at different stages of life are also needed.

5. The New Role of Government

New development models and the consolidation of democratic regimes are producing substantive changes in the role of government and public institutions. The role of transnational corporations in the new international development model has directly influenced the role of national governments (Thurow, 1996). The role of government has evolved from a protagonist one of economic administrator or producer to one of creating incentives, stimulating innovations, establishing standards, and guaranteeing genuinely equitable conditions (Braslavsky, 1997). National integration and decentralization —the linchpins of institutional reform (ECLAC/UNESCO, 1992)—call for administrative autonomy and creativity to ensure the effectiveness of the new government role. This can create tensions between the government and the electorate, diminishing the political and institutional effectiveness of the former. Clearly, therefore, it is necessary to strengthen participatory mechanisms that ensure the governability of countries.

In the education field, different actors must play an increasingly dynamic role in administration at the central and regional ministerial levels and, obviously, in schools and classrooms (Delors, 1996). Channels and mechanisms must be available to ensure the input and involvement of parents, who have not been well organized in the past. But most importantly, the school must become the space, par excellence, to encourage participation and make decisions pertinent to the educational community (Noddings, 1996; Sander, 1996a). This constitutes a challenge to rigid curricula and traditional authoritarian educational models.

GRAPH 2

6. The New Role of the Family

Family structure has changed dramatically for numerous reasons including: (i) the decline of the nuclear family and the existence of a significant number of single parent households (usually the mother); (ii) increased urban commuting time; (iii) the audiovisual invasion of homes through television —which leaves less time for personal interaction and often undermines traditional family values and behavioral standards; (iv) the evolution (or mutation) of the traditional male role as income earner and female role as housekeeper; (v) and greater access to consumer credit. As a result, fewer adults are

at home to care for the children and help them with homework and school activities, and children spend more time in the streets.

These changes create demands for greater education coverage, access to consumer credit, greater opportunity to choose how leisure time is spent, and consistency between school and family behavioral standards. The fact that children must spend more time at school—where their activities are supervised and their need for personal and social interaction met while their parents work—has a tremendous impact on the resources needed for education.

7. Demography and Environment

The current decline in population growth is favorable for affirmative action initiatives (serving the poorest sectors). It also means that more resources are available per student. Decreased growth of the younger population, which was registered during the previous decade, (CELADE, 1992) has facilitated universal access to primary education and produced a virtuous circle of development: there is more classroom space available to children and more teaching materials to enhance learning. As the pace of urban migration has slowed, it is no longer necessary to build new classrooms in urban areas while rural classrooms are left vacant. Moreover, it is now possible to turn to the matter of quality. Nonetheless, the population is aging and leaving the labor market (Thurow, 1996), and pressure will soon mount to care for senior citizens.

It is to be expected that a quality education, for women as well as for men and vulnerable groups, can prevent unwanted pregnancies among the poorest sectors, thus alleviating another demographic pressure point. It can also contribute to disease prevention to improve the quality of productive life and reduce health costs. As stated at the Conference on Environment (Río de Janeiro, 1993), environmental education furthers the adoption of measures to safeguard sustainable development. Environmental education can be a catalyst to change citizens' attitude and behavior towards the environment. Existing experiences have shown that the most effective programs are those that adopt a local focus to address concrete issues (Edwards, 1993).

8. Cultural Issues

Our current development models could fail if they do not pay sufficient attention to ethnic and cultural complexities. Although empirical evidence is lacking, there are indications that negligence in this regard could unleash violent conflicts. Cultures that coexist in the region struggle, sometimes at great cost to themselves, to preserve characteristics central to their identity. Some countries, moreover, show signs of growing intercultural intolerance and xenophobia. There is an urgent need to establish new forms of cooperation, exchange ideas, and reach a deeper level of understanding and respect for individual, social, and cultural differences (Pérez de Cuellar, 1996). One important concern in this area has to do with the type of competition that education can encourage without compromising cultural identity and the genuine value of collective human coexistence. Widespread authoritarianism in education, the product of the predominance of lecture style teaching, compounded by the prevalence of vertical, authoritarian institutions in society in general, make it difficult to address these exigencies. Poor outcomes in reading comprehension limit the love of and interest in reading and the ability to understand each other as people or interact with others; a person who cannot read closes a window to the world. Reading and managing information are essential to becoming responsible members of society both nationally and internationally.

Education must pay sufficient attention to all minority groups and foster the principles of pluralism, tolerance, and respect for and acceptance of diversity (Delors, 1996) in order to establish harmonious relationships among different groups within each country and with other countries. Education must stimulate dialogue among cultures and value cultural diversity through a relevant learning process with motivating and contextual subject matter (Mayor and Iglesias, 1995). Group activities contribute to genuine respect among group members and teach the skill of developing commitments that incorporate different perspectives (Pratt, 1989; Veenman, 1995).

9. Moral Issues

The new development model encourages competition of knowledge and skills to participate actively in public life. However, it also requires public integrity, personal security, and confidence in contractual relationships both nationally and internationally. Development creates expectations for a better life, but can also affect peace to the extent that contradictions, errors, and challenges give rise to doubts, confusion, and social conflict.

Society demands a new type of education to resolve these potential conflicts, one which prepares people to contribute to development and consolidate peace even as they assume increasingly complex roles in daily life. Education must teach listening skills followed by the ability to articulate coherent arguments and challenge unfounded assertions without resorting to violence or brute force. Education must also facilitate communication using society's diverse social languages and codes, by understanding the historical processes that define those languages and codes. An "education for peace" makes tolerance, cooperative effort, and understanding a priority since these qualities promote the moral capacity to achieve justice (UNESCO, 1996b).

<center>uuuu</center>

To summarize, the educational demands produced in the nine areas described in this chapter have not been adequately addressed by the education systems of Latin America and the Caribbean. Traditional policies to improve education by focusing on extended coverage are inadequate.

Education must change its current approach by promoting: intellectual autonomy and personal freedom; the ability to analyze and choose alternatives, argue without resorting to force, and understand one's self and others; and, respect for and appreciation of diversity, without seeking passivity, obedience, and conformity. These objectives cannot be achieved through the existing education system, which Paolo Freire described as a "bank pedagogy" limited to the "transfer or deposit of knowledge" to an entire class. Rigid programs that disregard the individual needs of the students must be reformed (Moraes, 1997). Retraining must be provided to teachers who target lessons to the "average" student, evaluate solely the ability to remember facts, require students to listen to them in silence, and do not tolerate differences of opinion (Schiefelbein, 1997c). Contemporary education must offer students the opportunity "to build knowledge through both personal and group activities" because this is the only way to acquire the teamwork skills required by modern business (quality circles). It is, likewise, the only way for students to acquire multicultural sensitivity, and, finally, tolerance and respect for the people around them (De Vries, 1987). Success is possible by building national consensus, just as similar challenges have been met in the past (Pangle and Pangle, 1993). Nonetheless, accomplishing these reforms requires people capable of analyzing broad trends rather than the minutia of daily life (Farrell, 1997a).

Desafíos Nacionales e Internacionales que los Cambios Sociales presentan a la Educación Pública e indicadores que contribuyen a Diagnosticar si las Escuelas responden efectivamente a ellos

Desafíos de la Sociedad	Indicadores para evaluar la respuesta de la Educación
Político: Enseñar una comprensión cívica e histórica de la experiencia del país y Latinoamérica y del rol que les compete como actores activos (no pasivos) de nuestra sociedad.	Participación en los servicios comunales y en elecciones (tasa de abstención), nivel de empleo (cesantía), índice de crímenes juveniles, número de crímenes violentos, individuos atendidos por asistencia pública, individuos inscritos en educación permanente, nivel de

Preparar al alumno para que participe plenamente en la actividad democrática, como un ciudadano que contribuye con su comunidad y sociedad.

Económico: Ayudar al alumno a dominar aptitudes y talentos intelectuales básicos, para que tengan las herramientas que le permitan acceder a un trabajo y a una vida de calidad.

Social: Ayudar a los individuos a lograr una autonomía económica, proveer oportunidades educativas equitativas y crear una atmósfera segura, positiva y saludable para aprender.

Tecnológico: Facilitar la capacidad de recombinar elementos y enseñar aptitudes tecnológicas de punta en materia de comunicación.

Demográfico: Enseñar a todos los jóvenes, independientemente de sus capacidades, las aptitudes necesarias para tomar decisiones responsables.

Cultural: Crear personas que aprendan durante toda la vida, para una diversidad cultural y social.

encarcelamiento y evaluaciones cívicas.

Pruebas estandarizadas de rendimiento, grados universitarios, ingreso per cápita, pruebas de habilidades previas y posteriores, evaluaciones de aptitudes básicas que sean culturalmente equitativas y normadas a nivel nacional, índice de graduación, índice de empleo, índice de escolarización, evaluación de académicos por parte de los alumnos, pruebas para ingresar al mundo laboral, índice de participación estudiantil.

Número de individuos que reciben asistencia (ayuda) social del gobierno, índice de empleo, índice de pobreza, ingreso per cápita, cuentas de ahorro, fondos de becas para asegurar equidad, número de personas que buscan capacitación, índice de escolarización, índice de matriculados en educación superior, índice de graduación, índice de deserción, perfil del maestro, puntaje en pruebas evaluativas, participación de los padres, número de incidentes conflictivos en las escuelas, vandalismo, número de servicios de seguridad usados en las escuelas.

Pruebas computacionales, número de computadores en las salas de clases, uso de experimentos y construcción de conocimientos, realización de proyectos.

Indice de embarazo precoz, índices de enfermedades de transmisión sexual, índice de mortalidad, índice de abusos.

Participación en actividades culturales, número de actividades culturales locales, voluntariado, donaciones de caridad.

Fuente: Stunard, E. Arthur (1997). "The Chicago Forum at the DeVry Institute of Technology. Results of the Forum". Kappan;Vol.78; No.10; pp.774-776.

II. The Diagnostic: Strengths, Problems and Causes

Latin American and Caribbean educational systems have achieved virtually universal access to basic education and are beginning to extend available learning time during the school year. Nonetheless, the quality of public school education is incapable of responding to the demands made by political, economic, and socio-cultural development. And, while private schools offer quality programs, they tend to serve only those in the top fifth of the income scale. Although enrollment has become virtually universal and the numbers of illiterate people (self-defined in population censuses) has stabilized, only half of the population in each age group finishes primary school and most of the rest cannot comprehend what they read on a daily basis; they are, in other words, functionally illiterate. These problems are most acute in rural and disadvantaged-urban areas and essentially are indicative of a lack of equity in the system.

Research has contributed to consensus in terms of the problems facing education, especially for students from families at the lower half of the socio-economic scale. Poor quality is the result of a deficient learning process produced by: passive methods of teacher training; little access to effective educational materials (nearly exclusive reliance on lecture style teaching); a majority of teachers who choose their career due to inability to enter other fields (the education field is less demanding since teachers earn very little); poor administration; and, centralized funding and supervision that encourages absenteeism among teachers in rural areas.

1. Coverage

The fact that countries in the region are concerned about education is demonstrated by universalized access to public education —which particularly benefits the most disadvantaged sectors— and in the increased number of school days per year. Even so, children of under-educated parents are the last to benefit from each improvement (Rojas and Schiefelbein, 1997). In 1991, net school enrollment for children seven to twelve years old was virtually universal (93 percent), and peaked at the age of eight (96.3 percent). This leads to the conclusion that coverage is no longer a problem for the region's education systems. It also accounts for the decrease in absolute illiteracy, which went from 34 percent in 1960 to 13 percent in 1995 (UNESCO, 1968 and 1995); a final push in this regard, however, is still lacking (Gasperini, 1996).

Grade repetition rates in Latin America are among the highest in the world (although the rates for Africa and Asia may be underestimated). Average primary school attendance is approximately seven years, but students pass only an average of four grade levels, meaning that they usually repeat three grades (Schiefelbein and Wolff, 1995).

Coverage has also increased at each educational level. From 1980 to 1991, the percentage of the population enrolled at the four levels of the formal system —preschool, primary, secondary, and university— increased in the region from 91.9 million in 1980 to 119.5 million in 1992 (UNESCO, 1994). During this period, preschool and university enrollment showed the greatest increase in the countries in the region, with average annual increases of 7.9 percent and 8.5 percent respectively between 1960 and 1992; these increases significantly outpace the population growth rate of 2.2 percent. Secondary school enrollment increased by 6.2 percent for the same period.

Preschool

Sixty percent of children between the ages of five and six are enrolled in school, and enrollment for seven-year-olds has reached 95 percent of the population (Table 1). There has been a significant increase in the net rate of preschool enrollment: from 2.4 percent in 1960 to nearly 23 percent in the mid 1990s. Forty percent of all five-year-olds attend preschool as well as 25 percent of four-year-olds. However, few children from rural areas

(except in the Caribbean) benefit from this educational level (Schiefelbein and Wolff, 1995). Preschool education mainly serves children who will start primary school the following year, live in urban areas, and belong to the middle and upper classes which can afford private programs. Preschool programs serve only a minor percentage of the needs of the most disadvantaged groups and working mothers who require care for their children during the work day (Myers, 1995; Fujimoto-Gómez, 1996). Fifty percent of children between the ages of four and six still are not enrolled in the preschool or primary school system because they live in isolated areas, extremely impoverished regions, or indigenous settlements.

LATIN AMERICA AND THE CARIBBEAN: ENROLLMENT									
Age	Preschool	Primary School							
		1	2	3	4	5	6	I	II
0-1	31249	0	0	0	0	0	0	0	0
2	44576	0	0	0	0	0	0	0	0
3	883813	0	0	0	0	0	0	0	0
4	2410537	5239	169	1	0	0	0	0	0
5	4162022	397413	7542	311	30	0	0	0	0
6	2119305	5565576	498519	8120	408	7	0	0	0
7	883926	4836157	3925815	557646	9991	686	9	1	0
8	521879	2615017	3362248	3326494	549623	11697	552	19	0
9	52157	1558430	1994083	2800997	2956420	547072	12485	607	16
10	0	1054555	1305012	1728301	2437944	2611583	537318	17105	573
11	0	688349	864342	1145988	1508035	2154972	2327842	476258	14049
12	0	486399	603373	804866	1039396	1432464	1872462	1969139	408833
13	0	284719	410442	523074	686631	995430	1155478	1582138	166050
14	0	171257	221723	324119	410415	633324	771946	978489	133265
15	0	142079	111928	139099	201023	399837	473431	619458	811736
16	0	74591	81108	78480	109471	257293	272430	351750	468340
17	0	1504	42989	55087	60961	161334	184747	223425	263280
18	0	2632	1966	28973	44218	94131	116699	153669	172342
19	0	28	1164	2083	25102	72511	71146	93108	107311
20	0	19	558	1343	2161	39653	56319	55890	70416
21	0	0	0	654	1342	1875	26722	42305	39010
22	0	0	0	0	626	1200	1800	21386	31115
23	0	0	0	0	0	561	1047	2791	15689
24	0	0	0	0	0	0	458	1598	1950
25	0	0	0	0	0	0	0	715	865
26 y +	0	0	0	0	0	0	0	0	328
Total	11,109,157	17,863,964	13,432,981	11,525,636	10,043,797	9,415,630	7,882,891	6,589,851	5,399,00

Net Enrollment ages 3 a 6:	38.0%	Net Preschool Enrollment (3 a 6):	22.7%	Gross Preschool Enrollment (3 a 6):	26.3%
Net Enrollment ages 5 y 6:	60.0%	Net Preschool Enrollment (5 y 6):	29.5%	Gross Preschool Enrollment (5 y 6)	52.3%
Net Enrollment ages 6	91.4%	Net Preschool	84.9%	Gross Preschool Enrollment	111.4%

a 11:		Enrollment (6 a 11):		(6 a 11):	
Net Enrollment ages 7 a 12:	93.1%	Net Preschool Enrollment (7 a 12):	86.1%	Gross Preschool Enrollment (7 a12):	112.6%
Net Enrollment ages 12 a 17:	63.8%	Net Preschool Enrollment (12 a 17):	36.1%	Gross Preschool Enrollment (12 a 17):	45.8%
Net Enrollment ages 18 a 23:	27.8%	Net Preschool Enrollment (18 a 23):	15.7%	Gross Preschool Enrollment (18 A 23):	16.6%

FUENTE: Nuestras estimaciones con datos del Sistema Regional de Información de la UNESCO (SIRI), para 1990-1996 y población estimada por CELADE para 1991.

Primary School

Latin America and the Caribbean have achieved universal access to the education system, which indicates that the region is serving youth, both male and female, from all cultures and nearly all disadvantaged households. Only children with special education needs or those living in isolated areas remain to be served. It is worth mentioning that the number of students in the six grades of primary school exceeds the population between the ages of seven and twelve years (gross school enrollment exceeds 100 percent). This means that, in most countries, there is sufficient educational supply to serve the entire population of the corresponding school age, barring repetition.
 Moreover, the wide range of ages in first grade, which nearly all students begin at age seven, indicates that almost all first graders aged eight and older are repeaters, as well as a large portion of seven-year-olds. A comparison between the number of first graders (17,863,964) and the population of a single age group (fewer than 11 million) illustrates the elevated number of repeaters (close to 50 percent).

The high repetition rate, and the fact that 33 percent of "primary school programs are only partial" (UNESCO, 1996b), reduces the possibility of completing this level of schooling, particularly in rural areas (30 per cent of the total). It is difficult for students from low income families to be able to finance the trip far from home to attend a school offering additional grade levels. Thus the percentage of elementary schools offering only some grade levels contributes to inequity of coverage.

Secondary School

The increase in primary school graduates has created constant pressure to improve coverage at the secondary level. The entire school system currently serves 64 percent of the population between ages twelve and seventeen, but only 36 percent of this population is actually in secondary school (net secondary school enrollment—the appropriate level for this age group). The remaining 27 percent of this population is enrolled in primary school because of high repetition rates (since there is no age delay in beginning school: Table 1 shows that, 96 percent of the time, entry into primary school occurs between the ages of six and seven). Grades seven through nine have a gross enrollment of 60 per cent which decreases to 30 percent in grades ten through twelve. This indicates that educational reforms in most countries in the region have extended basic education to eight or nine years. Secondary school has been reduced to the last three years and is envisioned as preparation for college or technical education (UNESCO/ OREALC, 1997).

The gross enrollment rate in the 1990s is four times higher than it was in the 1960s due to rapid growth. The average annual increase at the intermediate level (6.2 percent between 1960 and 1991) was twice the population growth rate for the corresponding age group (UNESCO, 1996b). During the 1960s and 1970s, enrollment grew by as much as 7 percent, dropping to a 2.6 percent increase in the 1980s. Substantial expansion of secondary schools has occurred in urban areas as a result of pressure from the middle classes seeking an education similar to that of the ruling elite (Rama, 1986). The demand for secondary education in CARICOM countries, which was prohibited during the colonial period, burgeoned when they achieved independence (Alleyne, 1995).

Despite increased access, a high level of selectivity is evident in secondary school enrollment. Indigenous youth, and those from rural or depressed urban areas have difficulty entering and remaining in secondary school, which is the level offering the greatest potential for upward mobility. Equity is nonexistent for most of this population group.

Currently, there is pressure to offer secondary education to the rest of the population. Policies to expand secondary education have failed in cases where economic development has been too slow to generate sufficient opportunities (Wilson, 1997). However, the high number of unemployed youth (MIDEPLAN, 1997) demands that their time be filled either by social activities or by an education that facilitates the entry of these youth into the workplace. The response of many countries has been to double their secondary school capacity by teaching one group in a morning session and another in the afternoon; this method, however, leaves many young people unoccupied on a regular basis during the "off" session. New strategies, therefore, must take these pressures into account, including: (i) predicted increases in primary school graduation rates; (ii) an expanded concept of basic education (nine to ten years or more); (iii) division into a general studies branch and a technical branch; (iv) increase in overall spending for teachers' salaries; and (v) probable increases in public and private funding (Jimenez and Lockheed, 1995).

Some experiences with vocational/technical education have been successful in other parts of the world, such as Japan's vocational training system and the "dual education system" in Germany, which include on-site student training by corporations (Schiefelbein, P., 1994; Wilson, 1997). Nonetheless, the applicability of these experiences in Latin America and the Caribbean requires a thorough analysis of their real potential. Recent technical and vocational education projects in the region reveal a tendency to combine academic and vocational programs, since the economy is eliminating the division between intellectual and manual labor. The school system must do the same.

Higher Education

Post secondary and higher education have also expanded remarkably with an annual increase of 8.5 percent between 1960 and 1992. Moreover, education at this level has been extended geographically, has become more institutionally diverse, and offers new specialities. Latin America has a broad and diverse system which includes traditional and new universities, professional or polytechnic institutes, and technical training centers to cope with the growing demand for post secondary education (Brunner 1990; Winkler, 1990; Levy, 1997). CARICOM countries offer higher education to 200 young people for each 100,000 inhabitants (World Bank, 1992). This rate is likely to double or triple during the next decade.

Nineteen percent of the population in each age group eventually enters higher education. The high repetition rate during the first two years of higher education tends to be even higher for students who are older when they begin. Students who fall behind at the primary or secondary level tend to have more difficulty completing post secondary studies without repetition (Table 1). The university system in the region, moreover, requires prospective students to choose a career, even though many of them are still unsure about their professional interests. Recently introduced programs similar to the U.S. bachelors degree allow this decision to be postponed (Lolas, 1996).

The Situation of Women

In recent decades, the educational situation of women has achieved parity with that of men in terms of both quality and coverage. Population censuses demonstrate that the wide disparities in schooling between the sexes that was evident in the 1950s has disappeared. A slight discrepancy at the post secondary level, and among certain minorities, persists (Schiefelbein and Peruzzi, 1991; UNESCO, 1995; World Bank, 1995). In several countries, especially in the Caribbean, female enrollment is surpassing that of men at the university level (World Bank, 1992; ECLAC, 1994), although women continue to be disproportionately represented in fields traditionally categorized as feminine (Stromquist, 1996). In many countries, and particularly CARICOM countries, achievement levels are higher for girls than for boys in primary and secondary school

(Steward, 1996). This is not the case for indigenous groups in the region: indigenous women remain at a disadvantage in terms of access to education. It is worth pointing out that increasing young women's access to education will contribute to reduced illiteracy by improving support in the home for future generations of children. And, it will have a positive impact on population growth (reducing the number of unwanted pregnancies).

Special Education

The population between the ages of seven and twelve with special needs was estimated at 6 million in 1991 (10 percent of the total regional population in this age group). Of these children, 14 percent are placed in special schools and an estimated 5 percent more attend regular schools but receive special services. However, nearly 50 percent of students with special needs attend regular schools with no special services, a situation which inhibits their personal and social development. (The remaining 30 percent are not yet in the school system.) Special education services are only available in urban areas and some 27 percent are privately owned (UNESCO, 1996b).

Ten to 20 percent of the total population have learning disabilities such as dyslexia, attention deficit disorder, physiological problems, or low intellectual capacity). Poor nutrition during the first years of life (especially "in utero") or complications during delivery increase this percentage. Available research shows that the ability to learn is directly related to the nutrition and health of the students (Pollet, 1989; Lockheed and Verspoor, 1991). Children lacking sufficient protein or calories in their diets may experience limitations in the development of their motor and mental skills and learning ability (UN, 1990; Gomes-Neto et al, 1992; ICBF/UNICEF, 1992). If these children receive special attention in time, as is the case in developed societies, they eventually may overcome their difficulties. Lack of resources currently precludes such solutions in Latin America and the Caribbean.

2. Quality of Education

Most children in Latin America and the Caribbean receive a poor quality education. Not a single student from Colombia —the only country which participated in the third international study of mathematics and science—appeared in the top ten percentile of the worldwide sample (and Colombia is representative of the Latin American average). The 1992 International Assessment of Educational Progress (IAEP) produced similar results. The emphasis on expanding coverage has resulted in neglect of the educational process itself, and the quality of learning. In Latin America, the quality of education is particularly lacking in the public school system, while in CARICOM countries public schools tend to be better than private schools, especially at the secondary level. In general, public schools serve primary and secondary school students from the poorest sectors of the region and thus do not serve most of the children of public school officials. Now that most countries provide nearly universal access to basic education, there is growing interest in the issues of quality and equity. Attention is now being paid to fundamental learning requirements in order to improve the educational process (Castro, 1996). This implies an education respectful of and sensitive to students' individual differences.

Graph 2 reveals significant disparities in educational quality in seven developed countries. It highlights the distinction between "knowledge of facts" and their application in "new situations" (World Bank, 1996). The region figures at the lower echelons in the first area and probably would descend even further in the other two (Wolff, Schiefelbein and Valenzuela, 1993; Schiefelbein, 1995; Puryear, 1996).

There is still no consensus in the region on measurements of educational quality, although there are indicators suggesting poor quality at every level. The most widely accepted indicator is the incidence of repetition. Nearly 40 percent of students repeat first grade (Schiefelbein and Wolff, 1995). Since most students begin school on time, the broad age range at each level (Table 1) can only be due to high repetition rates (students nine years old and above in first grade, ten and above in second grade, and so on at each consecutive grade level). This age difference makes the teacher's job more difficult and, in part, accounts for poor quality. In order to understand how the average student progress through the school system, it is necessary to examine the age of entry into first grade and then estimate grade repetition levels and drop-out patterns.

Timing of Entry into the School System

In most of the region —except for CARICOM countries where children usually begin school at age five— ninety-five percent of each group of seven-year-olds begin school on time, and at least another 1.3 per cent enter school at age eight (Table 1). This constitutes tremendous progress which should allow teachers to work with a homogeneous group of first grade students. Unfortunately, the large number of students age eight and above in first grade means that most are repeaters (since most began at age seven) who transform first grade into an age-diverse group. This creates a vicious circle of increasing heterogeneity, which can only be broken by programs offering individual attention.

Paradoxically, children who attend preschool experience difficulties when they begin primary school, which sometimes cause adjustment problems during the transition; for example, they are not allowed to work in groups, they are seated in rows, and must remain immobile in their seats since the rigid lecture style of teaching is the predominant method. For this reason, one educational priority is to reform the existing learning process at the primary level in order to reduce or eliminate this hurdle and promote improved education of this sector. Relevant experiences that have been successfully applied in the region will be examined below.

Grade Repetition: Heterogeneous Classrooms

A comparison of total first grade enrollment (17.8 million students) with the population that reaches school age each year (10.5 million) reveals a repetition rate of nearly 7.4 million students (Table 1); in other words, 40 percent of students are repeaters (relative to the total first grade enrollment). In an ideal system, approximately 10.5 million children would begin first grade each year, a similar number would pass and move on to second grade, and a new contingent of 10.5 million would start first grade the following year. It is important to remember that this analysis permits a more accurate estimate of repetition levels; reports by school principals (which are used to prepare the annual statistics for each country) record a student transfer to another school as a "drop-out," even though it often becomes a case of grade repetition when the student enrolls in a new school the following year at the same grade level (UNESCO-SIRI, 1990). In other words, the repetition rates reported by teachers and principals on statistical forms are considerably lower than the actual levels (UNESCO, 1996b). This can also be observed by calculating the difference between gross and net primary school enrollment.

Although there are many reasons for grade repetition, it is a clear indicator of poor quality teaching methods except in the final years of each level when students are preparing for examinations to pass to the next level; this is the case at the end of primary and secondary school in CARICOM countries (World Bank, 1992). Teachers hold back any first grade student who cannot decode a minimum number of words. And, although repetition levels have decreased, they are still considered to be excessively high. In 1980, an average of 50 percent of first graders were repeaters in the region's primary schools; this decreased to 43 per cent in 1990, and currently has dropped to close to 35 percent. If this downward trend continues, the figure could drop to 10 per cent in the year 2020.

Age diversity in the classroom affects the quality of education by limiting the effectiveness of the traditional lecture style of teaching predominant in Latin America and the Caribbean. Language, cultural, geographic, economic, and social diversity also lead to heterogeneous classrooms. Teachers using the lecture style gear lessons toward an "imaginary average student;" this tends to be more effective with homogeneous groups in which there is little difference between the students and the "average student." Nonetheless, this same method is rendered ineffective in low income areas, where diversity of age (students entering school late and repeaters), intellectual ability, time to study, health and nutrition levels, and parental support make it hard to define an "average student" to teach to (Schiefelbein, 1994). This has led to a perceived need to individualize the learning process and adapt curricula to local and regional conditions. When education is not individualized, reading comprehension drops, repetition rates rise, and age diversity in the classroom increases, making it even more difficult to use the lecture style effectively (Thomas and Shaw, 1992). It is not easy to break the vicious circle created by the diversity of age and abilities (Ezpeleta, 1989) without changing the

teacher's role and classroom methods. This is difficult and, in the end, has meant that few students make significant progress in learning.

The School Dropout: An Unfinished Education

Only half of the students who begin primary school actually finish, leaving dropouts without the minimum reading and writing skills and basic competency in arithmetic (UNESCO/OREALC, 1992; de Ibarrola, 1995). But those who drop out of primary school do so after repeating those grades several times (meaning that drop-out at the primary level should not be confused with having spent only a few years in the system). School drop-out in the region begins at ages nine and ten at a low rate (approximately 1 per cent), growing to 3 per cent at age eleven, and 6 per cent at age twelve. Drop-out become more pronounced at age thirteen (7 percent) and fourteen (10 percent), ages at which pressure to enter the workplace increases. Most likely, though, many drop out because both the students and those responsible for them feel that they are not learning (after repeating the same grades several times), that they are wasting their time at school, and that the workplace, on the other hand, offers an incentive (a salary) for their efforts (García and Hernández, 1992; Anker and Melkas; Schiefelbein, 1997b).
 Absenteeism is cause for concern, especially in CARICOM countries such as Jamaica and Guyana, where high absentee rates have a negative impact on the effectiveness and efficiency of education (World Bank, 1992).

Academic Performance Measures

In countries that have conducted assessments, it has been determined that nearly 50 percent of students do not master the minimum objectives of the national curriculum.
 Few indicators are currently available to assess the quality of education. It has been demonstrated, for example, that primary school students in Colombia use mathematical skills mechanically, without reasoning; they can perform basic operations but cannot use them to solve concrete problems (Aldana, 1997).

Only recently have Latin American countries begun to design national systems to evaluate academic performance (Arancibia and Segovia, 1996; Guia Neto, 1997); CARICOM countries, on the other hand, have a longstanding tradition of evaluation dating back to the colonial period. Given that the subjects of mathematics and the official language are considered to be fundamental cultural tools —and their acquisition the minimum objective of any primary education— emphasis has been placed on measuring performance in these subjects as indicators of quality. Thus, it has been determined that the average public school student achieves only half of the performance levels set forth in the official curriculum and that, conversely, private school students attain nearly 100 percent of the desired levels (Schiefelbein, 1995). (The exception to this are CARICOM countries where public schools offer a higher quality education than private schools.)

Appropriate tests to measure quality in mathematics and language have been developed through UNESCO's Laboratory to Measure Educational Quality; preliminary results from eleven countries became available recently. At the same time, five countries have announced their decision to participate in the repeat of the third international study of educational progress in the areas of mathematics and science.

Functional Illiteracy

Functional illiteracy is now being studied as a problem that adversely affects the competitiveness of countries of the region (UNESCO, 1996a). UNESCO is conducting a regional study which has made it possible to develop measurement tools for mastery of reading and writing and applied mathematics. These tools make it possible to develop a profile of the different types of functional illiteracy existing in these countries. Preliminary results indicate that this phenomenon is linked closely to number of years of schooling and the quality of primary education received (Infante, 1997).

The high number of students who do not achieve minimum competency in reading and writing, even after six years of schooling, underscores the urgent need to implement policies to improve the quality of education (Castro, 1997). Countries in the region recognize the need for radical changes in the teaching-learning process, and for

qualitative and quantitative increases in the time available for education.   It is common knowledge that improving quality in education requires decreases (perhaps by a third) in the use of educational methods based on the transfer and rote memorization of information. Instead, the design and implementation of models and materials for an interactive learning process should be emphasized. The identification of appropriate complementary learning models is a gradual (and sometimes controversial) undertaking which must be based on pertinent research and include the education of new teachers as well in-service training. In this context, the Organization for Economic Cooperation Development (OECD) is promoting an International Survey of the Adult Population, with the participation of countries in the region, to measure the ability to understand written information and use it in daily life.

It is important to add that in order to improve the quality of education in the region, strategies for change must be supported by research. Some programs for action which have been implemented —with their respective costs— have failed to achieve their goals due to insufficient information (McGinn and Borden, 1995). One example that was noted involves a policy to reduce class size (teacher-student ratio) —with the attendant 4 to 6 percent cost increase per student, enough money to provide appropriate learning materials to every student in the class— which, to date, has failed to reduce grade repetition. Moreover, teachers are "lectured" about the importance of changing from a passive to an active educational model (to enable real learning to take place); in other words, passive teaching methods are used to instruct teachers to use active ones. These teachers are then required to apply active teaching methods without ever having experienced them first hand.

3. Equity in Education

Latin America has the most skewed income distribution in the world (CEPAL, 1995), as demonstrated by the fact that its education system has more private schools than any other region. Students from families at the "poorest half" of the income scale are concentrated in low quality public schools offering only three to four hours of class time per day. Students from the middle and upper classes attend private primary and secondary schools for five to six hours per day and achieve at significantly higher levels (except for CARICOM countries, as already mentioned). Problems of quality have the strongest impact on the poorest sectors, minorities, and children with learning disabilities. However, when the socio-economic status of the parents is held constant, differences in academic performance disappear (Schiefelbein and Farrell, 1982). Policy-makers usually place their children in private schools and, therefore, are not affected by their own policy decisions. This could mean that the emphasis placed on private education will leave fewer resources and incentives for public education. The perpetuation of current education policies will make it difficult to close the income gap, with unfortunate consequences for economic development (Edwards, 1995; Londoño, 1996; Birdsall, 1997).

Part of the problem is that equity in education has been measured in terms of coverage, which has improved significantly, rather than quality (Farrell, 1998). Low family income, while not a barrier to primary school enrollment, is an effective barrier to adequate academic achievement (ECLAC/UNESCO, 1992; Wolff, Schiefelbein and Valenzuela, 1993; Brunner and Cox, 1995).

Therefore, the concept of equity of opportunity must include equity in academic outcomes. This means that all children —irrespective of their social background— must obtain a good academic education and be able to use it successfully (Farrell, 1998).

Coverage

The majority of socio-economically disadvantaged children are excluded from preschool education and 7 per cent of these children between the ages of seven and twelve are excluded from the primary school system (Table 1). These are children living in isolated or deprived areas, extremely impoverished regions, or indigenous settlements, since the educational supply is concentrated in urban areas. Many of the 7 percent who do not attend primary schools have special needs (approximately 10 percent of the population in this age group presents some type of disability). Their presence in regular classrooms

increases the difficulty for the teacher (since the more costly facilities need to attend to their needs is lacking). An analysis by country reveals that very few serve 100 percent of the population. The region serves 96.3 percent of children at any given time, which indicates that half of all special needs students do enter the school system. Most, however, attend schools that cannot meet their needs.

Certain children who wish to study at the secondary level to achieve upward mobility have difficulty enrolling and remaining in the system due to the scarcity of schools in their sector. This includes poor children, Amerinds from rural areas, some Asians, and children living on remote islands or in depressed communities (See Table 2). These children may feel shunted aside and distrustful of promises of equity or equality in education.

Progress to Higher Grades

Although an overall average of 35 percent of students repeat first grade, the rate for students at the top half of the socio-economic scale is only 5 to 10 percent, while 60 to 65 percent of students at the bottom half of the scale are held back (UNESCO, 1996b). This can be attributed to a particularly substandard school system in rural or urban-disadvantaged zones (which are only served by public schools). High repetition rates in these schools result from serving children of different ages, abilities, and time and support to study. Classroom diversity requires individualized attention. Teachers cannot provide this attention if they rely solely on the lecture style, which must be geared toward an "average" student in order to teach the entire class at once. In addition, teachers of low income students tend to be less thoroughly trained than those serving students from wealthier socio-economic backgrounds and are often unfamiliar with alternative teaching methods that might facilitate learning (Avalos, 1986).

Academic Achievement

Public schools are producing a work force unable to comprehend written instructions, which limits its ability to adapt to technological changes. An analysis of responses to questions regarding reading and writing reveals that two out of five students in the fourth and fifth grades do not understand what they read. The situation is bleaker, however, at the bottom half of the socio-economic scale where "three out of four children in the fourth or fifth grades cannot understand what they read." This means that the performance levels attained by the future labor force will not enable it to contribute to national development (Rama, 1992; Birdsall and Sabot, 1994; UNESCO/ OREALC, 1994; Edwards, 1995; Schiefelbein, 1995). Assessments of academic achievement expose raw inequities in the quality of education. While student achievement overall is barely 50 percent of that required by the official public school curriculum, achievement by students enrolled in private schools approaches 100 percent (Graph 3). In fact, the scores of elite private school students are comparable only to average scores in developed countries (Schiefelbein, 1995). In general, nearly half of those with six or more years of schooling have serious difficulties applying their reading, writing and mathematical skills in the workplace.

TABLE 2

Preventing High Risk Situations

The countries of the region do not offer the intense level of services necessary to successfully serve at-risk children, leaving them predisposed to fail in school. Specifically, the highest percentage of the region's children living in difficult or high risk situations are: child workers, street children, and those living in acutely impoverished or deprived economic and social environments. In such cases, particularly intense services are needed, as well as flexible and varied methodologies, positive attitudes, and a highly motivated and well-trained teaching staff, to ensure that these children attend school and do not drop out. Except in isolated cases, supplementary support programs to alleviate their inordinately harsh living conditions also are absent (Schiefelbein, 1997b).

Equity for Women and Minorities

Equal access to the school system in the sector has been virtually achieved for girls and young women under the age of twenty-five. Nonetheless, illiteracy levels rates among women in rural and indigenous areas—especially those in higher age groups—continue to be notably higher than for their male counterparts. For this reason, the Ministers of Education recommended in PROMEDLAC II (1987) that policies be developed to address this "deplorable situation that impedes women's realization of their full potential." Investment in women's education and literacy is fundamental to improving family health, nutrition, and education. It also has a positive impact on infant mortality, reproduction and, consequently, on the reservoir of human capital (Birdsall, 1997). The International Conference on Women in Beijing (1995) emphasized that the formal and informal education of women has proved to be one of the most efficient means of achieving development and sustained and sustainable economic growth, which has led countries to endeavor to facilitate women's access to education (UNESCO, 1996b). In CARICOM countries, equity for women has reached the point where girls are achieving at higher levels than boys (World Bank, 1992; Steward, 1996). Nonetheless, discrimination against women persists in qualitative areas of education in the following ways: (i) stereotypical educational materials (Michel, 1987); professional segregation —which affects women's participation in scientific and technological advances—; (iii) the role teachers play in perpetuating existing paradigms; (iv) and the presence of women at the supervisory level of education regionally and nationally (ECLAC, 1994; Stromquist, 1996).

GRAPH 3

4. Factors Affecting Quality

Since access to education in Latin America and the Caribbean is virtually universal, most children pass some primary school grades. They do not, however, acquire the knowledge and skills required by modern labor markets. It is important to pinpoint what is keeping children from learning. Therefore, a review of the available research on the relationship between school inputs and the education process is crucial. Research findings from around the world consistently demonstrate a strong correlation between achievement and the socio-economic circumstances of the parents. Research also shows that the factors that most influence learning are: educational materials, time spent on learning (including temporary student absences), teacher training, health, and nutrition.

However, improvements in these areas do not guarantee a better education, as demonstrated by cases observed between 1982 and 1990 during which time all of these factors improved and the quality of education remained constant (Schiefelbein and Tedesco, 1995). This suggests the presence of other determinative factors affecting the "learning process in the classroom" which must be examined; they are addressed in this section. It is common knowledge that school systems of high academic quality demonstrate strong internal consistency between curriculum, teaching methods, testing, and instructional materials (Delannoy, 1997). It is also clear that other factors do not significantly influence quality, such as: class size, teacher-student ratio, and the gender of the teacher (Lockheed and Verspoor, 1991). Other factors affecting the quality of education (but whose relationship to quality is minor or less clear) are: poor physical condition of schools, relatively low teacher salaries, and the presence of teachers lacking professional qualifications. These factors are more pronounced in rural areas. The following background information can be compared to policies implemented in the region, which are summarized in Table 3.

Student Characteristics, Previous Education, and Environment

One of the main factors influencing the learning process are the characteristics of the students and their immediate surroundings. Children belonging to the poorest sectors tend to have difficulty developing intellectually whether because of poor nutrition, lack of family support or resources, or the cultural literacy of the parents (Gajardo and de Andraca, 1988; Fausto and Cervini, 1992; UNESCO/MINEDLAC, 1996).

In terms of the student's family and social situation, those from disadvantaged socio-economic backgrounds living in impoverished-urban or isolated rural areas are particularly affected by the fact that their parents work up to twelve hours daily (Fausto

and Cervini, 1992; García and Hernández, 1992; Fujimoto-Gómez, 1996) and older siblings often care for the younger ones. This is compounded by parents who never finished primary school, are illiterate or speak an indigenous language, and the scarcity or nonexistence of reading material at home. All of these make it difficult for parents to adequately support children with their school work. The fact that many of these children have not attended preschool also has a negative impact on their school performance (Grawe, 1979; Myers, 1992a-b; Palafox et al, 1992). Finally, once they reach a certain age, these children begin to work (sometimes part-time) to help their families, leaving them less time and energy to study.

Table 3
Educational Reform in Seven Countries in the Region 1996

Objective of the Measures	In-country Implementation	
	#	%
Sector Structure		
Increased coverage at the preschool, primary, and secondary levels	6	86%
Restructuring educational levels	1	14%
Establishing links with technical education	2	29%
Extending the school day	4	57%
Reducing drop-out and repetition rates	3	43%
Educational Content		
Curricular reform at the primary and secondary levels	4	57%
Billingual education (incorporating indigenous languages)	2	29%
Reinforced learning of second language (English)	2	29%
Use of information sciences at primary and secondary levels	3	43%
Improved reference materials (books, etc) and infrastructure	6	86%
Evaluation		
Use of systems to measure quality of education	6	86%
Periodic teacher evaluations	1	14%
Teachers		
Increase number of graduated teachers and the level of training	2	29%
Teacher participation in reforms	2	29%
Increased salaries	3	43%
Training programs	4	57%

Selection of beneficiaries		
Initiatives to foster equity in access and quality	4	57%
Targeted supplemental programs	4	57%
Establishing mechanisms to subsidize demand	2	29%
Decentralization		
Increase the efficency of educational units	4	57%
Delegate administrative responsabilities to subnational entities	3	43%
Decentralize the educational environment	2	29%
Promote community involvement in reforms	3	43%

Note: The seven countries are: Bolivia, Colombia, Costa Rica, Chile, Paraguay, Perú, and Uruguay. Differences in degree of   implementation of the measures are not recorded.
Source: United Nations/ECLAC (1997). "La Brecha de la Equidad. América Latina, El Caribe y la Cumbre Social." Sao Paolo,   Brazil.

Level of Urban Development

Most students with poor academic performance levels attend school in rural areas (Wolff, Schiefelbein, and Valenzuela, 1993). Lower income families and unqualified teachers are highly concentrated in these areas, as are small schools —which may not offer all grades and use multi grade classrooms—, and non-individualized teaching methods.

The concentration of lower quality resources in rural areas affects equity of quality. One in five of all preschool and primary school teachers lacks a teaching degree. But these teachers are concentrated (40 percent) in schools serving the lower half of the socio-economic scale, while at the top half of the scale, all the teachers have degrees. This undoubtedly contributes to the lower quality of education offered in disadvantaged and rural areas. And, although unemployed teachers with degrees are living in urban areas of many countries, they are unwilling to teach in rural areas because of the low salaries. In these cases it would be useful to experiment with gradual salary increases until licensed teachers begin to apply for these positions.

Multilingualism affects education in the classroom, especially in rural areas. Children belonging to minority ethnic or cultural groups often have difficulties because they must learn in a different language and cultural context (Tedesco, 1990; EEC, 1992; Rojas, 1995). There is increasing awareness of the need to take into account the native language and cultures that children bring to the school system when examining the relevance of curricula.

Time Available for Learning

The length of the school day has hovered between 3 and 4.5 hours for decades. High rates of teacher absenteeism and excessive time spent on administrative and bureaucratic tasks, coupled with the salaries needed to cover increased teacher hours and the "availability of educational spaces," have limited the potential for increasing quality by lengthening the amount of time each day available for learning (Ezpeleta and Weiss, 1994). Nonetheless, the amount of time available to learn must be extended: Latin American public schools offer between 500 and 800 hours (150 three-hour days and 170 four-and-one-half hour days) compared to 1,200 hours offered by private schools or schools in industrialized countries (Schiefelbein, 1995). A comparison of the two

systems must allow for the days spent on strikes in the public school system (Graph 4). Countries that try to extend the school day have increased educational spaces and rescheduled already allotted spaces (such as physical education and music). The idea of multi grade classes usually is associated with substandard academic performance. However, there is no empirical evidence that multi-grade or multi-area classrooms interfere with students' learning (Veenman, 1995). Moreover, it may be that they contribute to the students' social development and emotional health (Pratt, 1986; Miller, 1990). Current poor academic performance in these classrooms could be attributable solely to the use of methods incompatible with teaching several groups of students in the same classroom.

GRAPH 4

Quantity and Quality of Educational Materials

Research has found a positive correlation between access to educational materials and student achievement (Purves, 1973; Schiefelbein and Clavel, 1977; Costa 1977; Husen et al, 1978; Jamison et al, 1981; Farrell and Heyneman, 1989; Pogrow, 1996). But this correlation may depend on the methods associated with their use; in other words, it is not enough to provide materials without simultaneously reforming the learning process itself (Colber, 1987; Schiefelbein and Tedesco, 1995). Appropriate methods, as well as the educational materials to implement them, are needed for an effective learning process. Many textbooks are too long, boring, full of banalities, unchallenging, devoid of substance, and ineffective in terms of developing reasoning skills (Schiefelbein, 1994; Eyzaguirre and Fontaine, 1997). Texts should offer authentic, motivating situations, stimulate the use of context, provide options, create opportunities for family participation, include constructive evaluation, encourage group work, and contain clear instructions to optimize the student's learning experience. Computers can provide another strong incentive for reform (Miller, 1996; Ochoa and Monazo, 1997).

Teacher Characteristics

Studies indicate that the professional education of teachers (Costa, 1977) and their subsequent professional experience (Purves, 1973; Min. Educ, 1992; Psacharopoulos et al, 1994) have a positive influence on learning in children. Although the total number of primary education teachers increased substantially between 1980 and 1991 (UNESCO, 1996b), problems in the quality of education persist. Unfortunately, in-service teacher training has not been a significant factor in improving quality (Warwick et al, 1991; Harbison and Hanusheck, 1992; Raudenbush et al, 1992; Navarro, 1997). The problem lies, then, in the initial education of teachers which continues to rely on a single methodology (Gajardo and de Andraca, 1992) and precludes the use of alternative methods. Countries have recognized that in order to improve the quality of education, they must upgrade the preparation of their educational agents by offering them worthwhile opportunities for professional training, sometimes with the active cooperation of teachers' associations and unions (OREALC, 1990).

The high number of teachers educated and trained in the region means that the cost of improving their salaries and training is difficult to finance through traditional sources. As a result, it has also been difficult to recruit good candidates to the teaching profession because of the poor quality of training programs, and low salaries. In real terms, salaries for teachers are lower in the 1990s than they were in the 1980s (Carnoy and Castro, 1996). Moreover, in many countries of the region, teachers earn little more than street cleaners and, in some areas, they earn even less (Ellison, Johnson, and Tamayo, 1997). This explains why candidates choosing the field of education often are those lacking the means to enter other more lucrative fields. Lastly, the low levels of satisfaction and prestige and lack of incentives to strive for excellence that were detected in a six-country survey (Schiefelbein et al, 1994), compounded by deteriorating teacher salaries and living standards in recent years, has led many education professionals to leave the field. This has led teachers' unions to prioritize acceptable salaries over the potential to improve educational outcomes which, despite the strikes (Graph 4), discourages society from opting to raise teacher salaries (Schiefelbein, 1994).

Poor quality is also apparent among academics at the university level except in

CARICOM countries. Fewer than 20 percent of academics have doctoral level training and 50 percent have outside jobs, including many who have additional "full-time" jobs (Altbach, 1997).

Educational Methods

The traditional lecture style of teaching-learning is the predominant model in the region at the primary, secondary and Post secondary school levels although, fortunately, its negative impact decreases at the higher levels due to greater homogeneity of the student body. When the teacher presents materials to the entire class, he or she adjusts the complexity and pace of learning to the level of an "average" student. This can be fairly effective with homogeneous groups of children (of the same age and comparable abilities), in other words, in cases where there is little "variance" (Slavin, 1997). Unfortunately, this educational model is associated with poor quality, especially in low income sectors where the student body is more diverse (Schiefelbein, 1994). One study revealed that rural schools applying individualized teaching models to multi grade groups, using interactive pedagogical techniques, obtain better outcomes than traditional rural schools (Psacharopoulos et al, 1993).

Three characteristics that limit the quality of education can be observed in the lecture style: (i) student participation is low since, in a one hour class (forty-five minutes of actual teaching) with thirty students, each student has only one minute to speak if everyone is to participate; (ii) the professor has to struggle to maintain silence so that his or her voice can be heard (which absorbs from 25 to 40 percent of class time) thereby limiting the actual teaching time available (Galvez et al, 1981; Filp et al, 1987; Fumagalli, 1990; Rodríguez, 1990); (iii) the teacher is the principal source of knowledge and (at the end of the twentieth century) often remains at a disadvantage compared to television, radio, newspapers and magazines. In this authoritarian educational structure, there is no discussion among students to achieve consensus and there is only one right answer, the teacher's. This model has other inherent weaknesses, such as: (i) students are not allowed to make decisions since the teacher is in charge at all times; (ii) written expression is discouraged since the teacher does not have time to correct assignments during school hours; (iii) memorization and passive learning are encouraged —despite the fact that learning occurs through "interpretation" rather than "memorization" (Mevarech and Kramarski, 1997); (iv) group work to identify problems or explore the diversity of approaches and outcomes is limited, although good teachers tend to modify the lecture style by incorporating these types of activities. It is helpful to remember that students have different intellectual strengths (Gardner, 1991 and 1993; Moraes, 1996), and group activities provide opportunities to integrate the different strengths that converge in this type of educational method.

Relevance of the Curriculum

Deficient performance also correlates to the content relevance of teaching materials and to the tradition of "transferring the subject material" rather than encouraging significant learning experiences. The long list of standardized content in the curriculum precludes focusing on substantive issues (especially with the predominance of the lecture teaching style). A typical curriculum is geared toward "geniuses" and administered to regular students by poorly trained professors, with predictably poor results (Castro, 1996). In countries that measure performance, teachers focus on "preparing for the test" rather than for life (Alleyne, 1995). This mechanical curriculum implementation precludes adjusting content based on the student's experience, as well as the adoption of new methodologies that ensure effective learning.

The pressure to "transfer" an overly extensive curriculum (and the accompanying text books) prevents inclusion of the student's experience and imposes contexts that relate exclusively to students from upper or (upper middle) class backgrounds. Consequently, students from poor rural areas do not identify with the subjects and examples found in the curriculum. Young people never have time to systematically discuss their experiences and problems (Hevia, 1997). This situation can change, since UNESCO and UNICEF have developed self-paced learning guides that enable students to bring their own individual context into the learning situation. This motivates students to consider their own vital experiences and examine the basic needs of their respective communities (UNESCO/ UNICEF, 1993a,b,c; UNESCO/UNICEF/ CIDE, 1995). And while these

guides were developed for rural schools, they have since been used with equal success in elite private institutions.

A difficult situation arises when classroom activities are divorced from reality. At the earliest levels, for example, students study sentences with little meaning ("my mom mollifies me" or "Susi salts the soup") and they wrestle with arithmetic problems unrelated to those found in daily life. This wastes the opportunity to emphasize a generalized learning style based on problem-solving, which produces a more useful body of knowledge than rote memorization (Muñoz-Izquierdo, 1990). Further, there is little interest in, or effort to take advantage of, students' prior experiences or family culture as a dynamic part of the learning process, although these aspects tend to be prime motivators of students (Schiefelbein, 1994; Tenti, 1997). The same occurs at the highest educational levels, where contemporary ethical issues are not addressed and the technology offered in the classroom is totally outdated compared to that present in many households, offices, and entertainment centers (information revolution, role playing, and the Internet/cyber space).

Educational Management

Many Latin American countries (and Caribbean countries to a lesser degree) have begun to privatize or decentralize the education system, with results that are as yet unclear (Prawda, 1993; McGinn, 1997a). Privatization has made private sector input possible, but has not succeeded in improving the level of quality when socio-economic level is held constant (Schiefelbein and Tedesco, 1995; Carnoy and McEwin, 1997) except in the case of schools operated by religious groups (Swope, Celedón, and Latorre, 1997; Neal, 1997). Decentralization alone also appears insufficient to alleviate existing administrative problems because: (i) there are no central or local systems in place to evaluate educational outcomes; (ii) procedures to track successful local initiatives using information technology have not been developed; (iii) there are no procedures to evaluate methods underlying valuable experiences that teachers would find useful as they make decisions; (iv) there are no concerted initiatives to reduce inequalities; and (v) with few exceptions, there are no policies to encourage innovations (Sander, 1996a; Amaro, 1997).

The United States has a decentralized system and has not achieved high level of equity in education. Its public school system differs from that of most other industrialized countries and Latin America in that it is essentially administrated and supervised locally. Efforts to decentralize Latin American educational systems must study the tension between local and federal oversight in the United States and its implications for equity in school. School systems are administrated by locally elected school boards based on a budget that is largely financed by local taxes. Since U.S. neighborhoods are highly segregated based on the income level of the residents (as well as by race), and since school districts are drawn along residential boundaries, there is significant variation in school financing. Moreover, since the presence of better schools increases the property value in a given sector, a vicious/virtuous circle of action is created. Figures show that in New York, for example, public spending on the districts of the richest 5 percent of the sector is U.S. $7,571 higher per student annually than what is spent on the poorest 5 percent of the income scale (Biddle, 1997).

In Latin America, information and evaluation systems in education are generally deficient, making it impossible to monitor student performance or the quality of teaching (Puryear, 1996). The lack of access to research findings, and the dearth of indicators to identify problem areas, prevent the implementation of appropriate innovative policies. Learning cannot occur without institutional memory and, therefore, having a data base to consult would lead to decision-making based on successful experiences. Moreover, decision-makers are not informed in a timely manner about effective ways of eliminating deterrents to improvements in education (Schiefelbein et al, 1997) and specialized staff often rotate with each change of ministers (Graph 5).

There are successful examples of administrative reform that have positively influenced quality in education (Farrell, 1997a). Parental involvement in supervising rural teachers and the selection of competent school principals seem to be the most relevant factors for successful decentralization (Swope, Celedón, and Latorre, 1997). For example, in El Salvador, the government took the risk of transferring funds for education from the

Ministry of Education to School Board Councils comprised of parents and community groups in rural areas through a program called Education with Community Participation. They have had very promising outcomes through a system of locally administrated and supervised school systems. Something similar occurred with the Community Foundations, which contract Community Instructors through the CONAFE program in Mexico (BID, 1996; UNESCO, 1996b). And Brazil has succeeded in channeling more funds to the public school system (Souza, 1997). These programs are similar to several others recently introduced in New Zealand.

GRAPH 5

Funding for Education

Fewer public funds are assigned to education in the region than in developed countries, although CARICOM countries make more effort in this regard than other developing countries (World Bank, 1992). The disparity between the percentage of the Gross National Product spent on public education in developed countries and in Latin America and the Caribbean (5.3 percent versus 4.6 per cent) affects the potential for educational development in these countries. Although public spending for education decreased during the 1980s, from U.S. $95 per capita in 1980 to U.S. $71 in 1985 —the same rate that the economic crisis reduced government spending— the student population increased as did the total number of primary school teachers (UNESCO, 1996b). Between 1980 and 1985 the average cost per primary school student decreased from U.S. $164 to U.S. $118 (Wolff, Schiefelbein and Valenzuela, 1993) and although spending is now rising to 1980 levels, it still represents one tenth of the amount spent per student in developed countries (U.S. $1,089 versus U.S. $143 in 1993). This has caused a decrease in teachers' salaries and a reduction in average class size (even when research has shown that this type of reduction does not necessarily improve the quality of education). The priority placed on education in recent years has led Latin American governments to increase spending to U.S. $124 per capita in 1996 (UNESCO, 1994; UNESCO, 1996b), but the impact on salaries has been less pronounced, as the average percentage continues to decrease. Even though increased resources do not guarantee better education (Hanusheck, 1992), as long as investment in education continues to be lower than that of developed countries, the working conditions and social status of Latin American and Caribbean teachers will continue to be relatively poor (Reimers, 1994).

Different formulas to increase national spending on education are being identified and tested (Table 4). The idea is to spread the burden throughout the different levels of the public sector (federal, state, regional, municipal and local) and the private sector to better serve high risk populations . In some countries, incentives have been used to encourage private sector participation through subsidies comparable in size to the public sector, or by making private contributions tax deductible. The net impact of increasing private funds relative to public spending (as well as the impact on the quality of public education) remains to be seen.

There is also growing international involvement in education since research has shown that it plays a crucial role in overcoming poverty and inequity (Birdsall, 1995). More than half of regional investing in education is externally funded. Regional educational projects obtained funding in excess of U.S. $1.1 billion between 1990 and 1994 (McMeekin, 1995) which creates the risk of instituting overly ambitious educational reforms (while discarding simpler and less costly alternatives).

To summarize, innovation is required in addition to new resources; in other words, greater efficiency and equity in allocating available inputs (affirmative action) are needed, as well as making full use of the comparative advantage offered by different public and private, national or international institutions. Although more resources are needed to lengthen the school day, increase preschool coverage, or fund doctoral training, the priority of reforming the learning process in the classroom requires political will and national consensus (Brunner, 1994; Honduras, 1997) as well as decision-making based on pertinent research (Castro, 1997a). Simultaneous reforms in related areas could be a critical element of designing strategies for change (Tables 3 and 4). Because the learning process includes many interrelated components, the absence of one of them could limit the overall impact (Slavin, 1997). For example, in order to obtain the desired impact, it might be necessary to modify simultaneously the time available for learning,

teacher training, design of materials, and the types of questions used on national assessments.

Table 4

**Proposals for Reform of Educational Funding Sample Bibliography
Proposed Reforms**

Authors	Proposed Reforms				
	Increase teachers salaries	More spending on goods and services (not salaries)	Emphasis on Primary Education	Teacher Education and Training	Decentralization and Local Administration
Ziderman & Albrecht (1995)	X (p. 160)	n.d.r	Referencia (p. 10)	n.d.r	X (p. 4, 32, 157)
Lockheed & Verspoor (1990)	X (p. 10, 102)	X (p. 49, 53)	X (p. 227)	X (p. 95, 99, 225)	X (p. 222)
Jiménez (1987)	n.d.r	X (p. 90-01)	X (p. 77, 84-85)	n.d.r	n.d.r
Jiménez, Lockheed & Paqueo (1991)	n.d.r	Referencia (p. 214)	n.d.r	Referncia (p. 213)	Referncia (p. 216)
Psacharopoulos (1986)	n.d.r	X (p. 1, 2, 12)	X (p. 1, 4, 7-10, 17-20)	n.d.r	X (p. 2, 3, 33-40)
Tsang (1994)	X (p. 36-37)	X (p. 36-37)	X (p. 36-37)	X (p. 36-37)	n.d.r
Hecht, et al (1995)	n.d.r	X (p. 12-13, 28)	X (p. 7)	X (p. 28)	X (p. 3-5, 16)
Birdsall & James (1990)	n.d.r	n.d.r	X (p. 10, 32)	n.d.r	n.d.r
McMahon (1988)	n.d.r	n.d.r	X (p. 135, 137)	n.d.r	n.d.r
Wolff, Schielfebein & Valenzuela (1993)	X (p. 72, 87, 99, 100)	X (Capítulo p. 97, 99, 100)	X (Capítulo VII)	X (p. 85)	X (p. 103)

Note: n.d.r. = no direct reference. Source: Arcia, G., C. Alvarez and T. Scobie (1997). "Education Finance and Education Reform.   A Framework for Sustainability." Inter-American Development Bank, Washington, D.C.

III. Policy Priorities

Education in the region, as described in the diagnostic, has failed to respond to the demands of the new national and international panorama. Governments are recognizing

that they must offer a good education to everyone and that better quality for only a few is not enough. This entails increased coverage at the preschool level and greater equity in basic education (Loera, 1995). This recalls principles set forth in the charter of the OAS which states that "education must be oriented toward justice, liberty, and peace." In addition to developing reasoning and independent learning skills in youth, it is also necessary to ensure their ability to select and utilize appropriate technology to compete in a global market. And, everyone should achieve the minimum competency necessary to participate in the modern job market, rather than only a chosen few. Moreover, education must promote a society of active, responsible and critical citizens (education for peace). This means finding a balance between "education" [educación] understood as the development of an individual capable of creating, together with others, a livable social environment, and "education" [formación] understood as the individual acquisition of the practical skills and aptitudes necessary for personal development.

However, governments wishing to transcend their status as developing countries have not been able to translate these political priorities into effective strategies. This is true, in part, because policy makers assisting government ministers lack the academic training required to tap into available research findings from the region and around the world (Schiefelbein, et al 1997). It is also due to the inability to spark public debate over the future of public schools (Rose and Rapp, 1997). Therefore, countries never achieve the consensus needed to implement fundamental reforms in classroom methodologies and the role of the teacher (UNESCO/OREALC, 1996; Schultze-Kraft, 1997).

1. A Quality Education for Everyone

The region must ensure acceptable levels of quality for everyone, leading to social equity and, in turn, greater social stability and economic productivity. Needed reforms include: (i) increased access to preschool (as Table 1 shows, only 23 percent of the population between the ages of one and six attends preschool); this entails serving rural areas and public spending or subsidies for private, preschool education; (ii) timely entry into the public elementary education system and individualized attention and (iii) increased time available for learning.

The care and education of preschool-aged children is the foundation of any policy to increase equity (Delich, 1990). Early stimulation fosters the child's intellectual development, reduces the trauma associated with entering primary school, and gives mothers the opportunity to study or work. Efforts in this area include evaluating the quality of preschool programs and choosing among diverse models (formal and informal), both in terms of pedagogical focus and the degree of maternal and community involvement (Myers, 1995).

Making primary education available to everyone entails serving the 5 percent of the population in the corresponding age group who remain excluded and ensuring that school-aged children start primary school on time. Late entry and the low quality of primary education are the principal causes of excessive grade repetition (and eventual drop-out), as well as the high rate of functional illiteracy or the inability to apply effectively reading, writing, and mathematics skills. The ability to use these skills in daily life is essential to becoming a functioning, productive citizen in today's society. Therefore, classroom learning processes must be improved in order to redefine equity in education in Latin America. This entails affirmative action for the poorest sectors.

2. Education and Productive Employment

Education must enable countries to participate in economic globalization and prepare each person to achieve success in an increasingly competitive job market (including people from different countries). Those entering the job market each year must be able to understand what they read, express themselves in writing, and execute basic mathematical operations upon completion of six or more years of school. Education, especially at the secondary and post secondary levels, must allow the flexibility to choose (at the appropriate time) courses that facilitate entry into the workplace. This means replacing the encyclopedic approach and the predominance of lecture- style transmission of knowledge unrelated to the productive sector with an emphasis on developing the student's reasoning and critical thinking skills and the capacity to manage

information (Clinchy, 1996). The educational system must encourage the student to explore new ideas systematically, to take intellectual risks, and to take on long-range tasks that may even have negative outcomes (Meier, 1996) and lead to new activities (Bertrand, 1997). To reach these objectives, initiatives must be undertaken to reform the secondary school curriculum, as has already occurred in several countries in the region. Innovations of this sort attempt to combine academic education and technical training consistent with the demands of the technological world which already has discarded the traditional dichotomy between intellectual and manual labor (Corvalán-Vásquez, 1989).

3. Research, Technology, and University

Despite the recognized importance of scientific and technological research for the region's development and competitive insertion into the international sphere (Sander, 1996b; Haddad, 1997), emphasis is still placed on traditional academic education and accepted knowledge, rather than on fostering the ability to refine theories and to be creative. The use of obsolete technologies, outdated texts, and lecture-style teaching which makes the teacher the primary source of knowledge, should be avoided (Schiefelbein, 1994). These should be replaced in the classroom setting by a receptiveness to modernity and contemporary forms of expression that stimulate the academic and productive growth of teachers and students (Muñoz, 1990). Emphasis must be placed on efforts to incorporate modern information science into secondary education at the administrative and educational levels. The system should encourage and publish research, not only in public universities but in all institutions of higher education in the region (Castro et al, 1996). These problems are part of a broader issue, the importance of promoting the development of science and technology (Mayorga, 1997), which is outside the scope of this work.

4. Education to Overcome Poverty and Improve the Quality of Life

Adequate education levels contribute to the eradication of poverty and access to a standard of living that ensures social peace. It appears that there is no more efficient means than education to combat extreme poverty and ensure greater economic growth, which is generally associated with reduced levels of inequity (Birdsall, 1997; Kim, 1997; Psacharopoulos et al, 1997). Overcoming poverty and improving the standard of living imply respect for people and the environment as well as the capacity to prevent illness and contribute to the common good. Political freedom and social equity are essential to improving the quality of human life and overcoming poverty and discrimination (Sander, 1990).

The eradication of functional illiteracy and the promotion of intellectual development are conducive to a skilled labor force, committed citizens aware of their social rights and responsibilities, and families capable of cooperation and working toward a common goal. Designing an education system capable of offering a quality education to everyone, however, (with the percentage of the GDP that a country can reasonably allocate to education based on the experience of developed countries) requires genuine agreement among leading opinion makers (Schultze-Kraft, 1997).

5. Education for Long-Lasting Democracy

Broad social consensus is needed to respond effectively to contemporary social demands: international competition, democracy-building, environmental protection, promotion of peace and human rights, raising the standard of living, and responding to rapidly evolving technology, particularly in the information field. Only broad national agreements can surmount the slow pace of structural reform of education (Carnoy and Castro, 1996). Education must prepare people to vote responsibly, tolerate differences of opinion, understand political issues, encourage participation, understand laws and regulations, know their political leaders, and be politically informed (Carvalho, 1997a).

At each educational level —including the education of specialists at the highest academic level— value must be placed on humanistic precepts, in other words, on teaching people to understand themselves and others, and to understand what is happening in the world (Einstein, 1952). Unfortunately, attempts to instill values and change the attitudes of young people are occurring in a lecture-style context in which the teacher, rather than the

student, is the principal actor; this denies students the right to participate in relevant learning processes. Young people are told to behave properly even as the doors to an education with options are closed to them, job opportunities are unavailable, and the street remains the only venue for social interaction. Young people cannot be asked to respect social values that lack validity in the classroom and in society. Education must guide youth to evaluate critically and to work in small groups to share their doubts and fears (which can lead to violence if they are not dispelled). Educational models must reverse the gradual process of curricular obsolescence which offers students learning experiences that are increasingly divorced from those needed to function effectively in modern society (ECLAC/UNESCO, 1992). In this regard, it is important to promote team work, the application of individual experiences in a creative atmosphere, and the development of leadership skills essential to innovation (Carvalho, 1997b).

6. Managing an Efficient and Equitable Education System

The changes brought about by the fall of the Berlin Wall and contemporary development models give a new role to government. This includes an administrative style focused on creating incentives, promoting innovation, establishing new parameters for action, and encouraging decentralization. The rebirth of democracy has permitted a critical look at the rigidity and inefficiency of centralized systems, spurring increased delegation of functions and local autonomy with more community participation, in order to increase resources, efficiency and quality in education (Aghón and Edling, 1997; Schaeffer, 1997; Winkler, 1997; Sander, 1996a and b). New links must be forged between political decision-making and the public in the education field. Therefore, students, parents, and staff —now largely uninvolved in education at a regional or school level (ECLAC/UNESCO, 1992)— must be included as actors in the educational process. In order for decentralized educational administration to function efficiently, deficiencies must be addressed by professionalizing school leadership and oversight of individual school administrations and classroom learning processes in This aids in reducing the corruption observed in different countries (ghost teachers, appointment of friends and relatives, and teacher transfers to non-teaching positions). It also must be recalled that rapid growth and diversification of higher education has led to pressure for public regulation of developments at this level. This must be examined carefully since such controls can become an insurmountable obstacle to urgently needed reforms.

Problems with Educational Systems in the Region and Suggested Changes
Inappropriate educational models are prevalent.
Ethnic, social class and gender inequity persist.
Accountability for failure in the system is lacking, and actors capable of innovating and applying new models are scarce.
Cooperation between parents, teachers, labor leaders, political leaders and the business community must be encouraged.
National conceptual framework on the role of education in a democratic society must be established in order to share an "educational culture."
It is imperative to endow local groups with both the power and the means to implement educational reforms.

> The private sector can and must play an
> important role in educational reform, as this
> sector benefits the most from an educated
> population and has the most to lose when
> workers lack basic competency.
>
> Centralization can impede the development of
> diverse educational models and discourage
> local support and involvement.
>
> Multinational organizations, such as NGOs and
> the private sector, must coordinate to establish
> complementary policies and create
> mechanisms to exchange successful strategies
> and models.
>
> Positive changes and innovations are difficult,
> but they are possible, as some countries have
> already demonstrated.

Source: de Cerreño, A. and C. Pyle (1996). "Educational
Reform in Latin America." Studies Depatement Occasional
Papers Series No. i. Council on Foreign Relations. New York,
U.S.A.

7. Joint Public and Private Funding for Education

It is not equitable to deliver public resources to economically affluent students. Public
resources must instead be targeted towards those with the greatest educational needs,
specifically, students from low-income families. But increased resources in these areas
must be used to substantially improve academic outcomes in the school system and
guarantee universal coverage, rather than to further the status quo. The inefficiency of
the system, as demonstrated by poor achievement levels and high repetition rates, leads
to the conclusion that available resources must be better utilized. This means adopting
thoroughly evaluated programs that ensure successful innovative approaches, in the
classroom such as changing the teacher's role and developing interactive, individualized,
and group learning experiences (Thomas and Shaw, 1992; UNESCO/OREALC, 1996).
 Additional resources are also needed to expand preschool education (Myers, 1995),
raise the number of hours for primary and secondary school—including actual work
time—, and promote research in science and technology.

IV. Suggestions for Action in Education

In order for education in the region to impart traditional national values and the abilities
and skills conducive to innovation, long range strategies must be established based on
national consensus and the involvement of all sectors of society (Farrell, 1997b). The
following are some suggestions for action —based on relevant research— which should
be considered in the process of consensus building consensus: (i) modernize
administration through information systems, professionalizing the responsibilities of
school principals, evaluating decentralization and targetting of the activities of the Ministry
of Education; (ii) increase income using public and private resources to improve equity in
the quality of education; (iii) professionalize the learning process in the classroom, using
carefully evaluated materials that ensure individual or group learning —this is especially
necessary for more heterogenous population groups, particularly those at the lower end
of the income scale; (iv) establish policies for initial teacher education and in-service
training for primary and secondary school teachers that are conducive to individualized
and group-oriented learning models; (v) develop postgraduate programs to improve the
education of university professors; and (vi) invest in scientific and technological research
(Loera, 1995).

1. Consensus-Building Based on Adequate Information

Since the poor quality of education is a given, the performance of education systems in Latin America and the Caribbean must be measured in order to build national consensus around desired goals (Schultze-Kraft, 1997). It would then be possible to design well-researched innovations, evaluate outcomes and compare them with the rest of the world based on unified goals, and garner the strong political support necessary to implement reforms (Puryear, 1997). This would contribute to surmounting the current problem of educational policies which, since they are supported solely by the government in power, change with each government. (Braslavsky, 1997; Wilson, 1997). As a result, schools are constantly changing their priorities (Elmore, 1996) and do not always incorporate the best methods available.

The actors in the education field, to be involved in national consensus-building around goals and strategies for reform include: professors, academics, students, their parents, teachers' associations and unions, the productive sectors of society, local authorities, legislators, and administrators of public resources. These sectors must have the relevant background and research at their disposal to nourish discussion and make decisions. Consensus on goals enables long-range objectives to be established, together with lasting agreements with broad and fair proposals that involve all social actors (Mayor, 1995; Farrell, 1997a).

There are no tried and true recipes for educational reform, nor are there formulas for technical cooperation to support the process of designing and implementing policies and reforms (Farrell, 1994; Sander, 1996a). In accomplishing objectives, however, it is worthwhile to support innovations that have demonstrated success in terms of the educational level achieved by countries and associated costs (Castro, 1997a). It is also important to adopt methods and materials that have already been tested, such as those that include group and cooperative learning methods (Mevarech and Kramaski, 1997; Slavin, 1997). Using research findings and informing the public can contribute to improved educational administration, information exchange, and international cooperation in the education field. Premising initiatives on successful experiences reduces the risks associated with innovation and avoids errors in their implementation (McGinn, 1997b). An assessment of the effectiveness and impact of previous innovative experiences allows teachers to try them with full knowledge of the facts (Wise and Liebrand, 1996). It is useful, therefore, to evaluate experiences and use interactive systems through national and regional networks. Future policies must support innovations with demonstrated capacity to produce desired outcomes based on the educational level reached by the countries and the financial impact (Mayorga, 1997).

TABLE

The following are some of the successful experiences that can be adapted to different situations: the televised transmission of preschool programs like Sesame Street—which have a positive affect on children's ability and subsequent success in primary school—and primary school projects such as EDUCO in El Salvador, Community Instructors in Mexico (Public Education Secretariat, 1996), Chile's "900 schools" (Guttman, 1993), and the "New School" program in Colombia which was launched during the 1980s and has been successfully evaluated on several occasions (Lavín, 1996). At the secondary level there are other alternatives to increase access for the most isolated sectors: for example, the use of long-distance mass media such as the "telesecondary school" in Mexico, Argentina's "TELAR," and "Enlaces" in Chile. There is growing evidence that long-distance education, especially the use of radio and television, can serve disadvantaged groups at a lower cost than formal education and, in some cases, can improve learning. In Latin America and the Caribbean, several Brazilian alternative secondary school programs have proved to be cost effective, as have radio education programs in Nicaragua, Venezuela and Costa Rica, and the Open University in Venezuela and Mexico. It would be important to have objective evaluations of many other experiences. One such experience is Argentina's "alternating" system for grades seven through nine, in which students alternate between a week at school and a week at home where they work on a "project" with detailed instructions based on a learning guide. They subsequently finish the project with the teacher at school.

Countries in the region must recognize how vital "transparency" is to the process of

improving the quality of education. It is important to take into account negative outcomes, since they offer important information about the strengths and weaknesses of the curriculum and different educational methods. In fact, many countries in Latin America and the Caribbean have launched evaluation programs and the initial findings have been used to compare the region's performance with that of the rest of the world. These serve to bring the official curriculum and the one actually implemented closer together as well as to improve texts, teacher training, classroom methods and learning processes. Evaluations or statistical analyses can also be used to target additional resources to schools identified as having greater needs, to identify specific actions or targets that might effectively raise students' academic achievement, and to reduce extreme inequity in academic achievement.

Tools to measure educational achievement include: (i) evaluations measuring what children learn in school; (ii) statistical analysis to determine drop-out and repetition rates; (iii) measures of school inputs including a definition of minimum resources that each school should have; (iv) measures of classroom processes and (v) measures of performance of school graduates in the workplace. There is a need for financial and institutional support for academic research on the factors that influence learning as well as on cost-effectiveness. Research must employ modern analytical techniques to identify causal relationships.

To ensure that evaluations, statistics, and research influence national education policy as well as classroom behaviors, researchers, advisors and evaluators should: (i) establish consensus about the research objectives; (ii) widely disseminate and debate research findings; and (iii) inform public opinion to ensure effective public involvement. Consensus is difficult because the issue is one of modifying trends that have long been part of the Latin American educational system, especially those having to do with learning process and teaching methods (changing from a "transfer of knowledge" model to one of "constructive, active, group learning"). It is not easy to build consensus around reform of educational methods and pedagogical content, and the attendant training for teachers. Reliable, timely information can ease the transition.

2. Incentives for Positive Initiatives and Accountability for Outcomes

Education ministries should create incentives for teachers and administrators to adopt better educational methods and replicate positive experiences (Elmore, 1996; Chhibber, 1997; Pradhan, 1997). In this context, they must adapt to the framework produced by decentralization, the market economy, and pressure to increase equity. And, they must be prepared to be accountable for outcomes (Ter-Minassia, 1997). This new role at the ministerial level involves establishing new public or autonomous institutions to: evaluate students, subsidize research through competitive project proposals (with outside evaluators), accredit institutions, manage information systems and data bases, and facilitate the exchange of research findings (Tedesco, 1987; Braslavsky, 1997). Although efforts to decentralize education in the region have not yet met their stated goals, nor brought about real improvements in the quality of education (Prawda, 1993), it is probable that the delegation of functions to the local level will continue to the point of school-based management (Winkler, 1997). In any case, a balanced distribution of functions among central, regional, and local levels must be achieved. All of these activities require qualified personnel in fields such as administration, information sciences, evaluation and measurement of achievement, and research. It is also important to forge long-term stable teams to manage the education sector (Braslavsky, 1997).

Efficient operational autonomy for schools must include the principal agents of the process (IDB, 1996; Fujimoto-Gómez, 1996; Bastías, 1997). Citizens (parents, students, and community) must be directly involved in school organization, financing, and administration —including the selection and supervision of school personnel—, and there must be educational leadership of school principals (Schaeffer, 1997; Winkler, 1997). The success of projects like "EDUCO" (El Salvador), Community Instructors (Mexico), "Support for School Communities" (Nicaragua), Social-Educational Plan (Argentina), "School Councils of Minas Gerais and Paraná" (Brazil), and "Institutional Educational Projects [PEI]" (Colombia) and "Partners for Change" (Jamaica) shows that it is advisable to involve parents in administration. Students and parents who are adequately informed can choose objectively among existing educational alternatives, thereby introducing an element of quality control into each unit of the system. Eventually, indicators must be

established to evaluate progress in each type of educational context and identify the most successful strategies and models in the region.

Professionalization of education in schools requires improved training for principals of educational institutions so that they can effectively guide the learning process at the classroom level. More than simply establishing performance standards for teachers — which do not stimulate autonomy and creativity— it is necessary to: develop the ability to guide and motivate teachers, encourage innovation, and undertake jointly the imrovement of the educational establishment. In Minas Gerais and Paraná (Brazil) participatory methods of selecting principals have been implemented (Mello and Wey, 1995; Gadotti and Barcellos, 1996). And principals have been key to the success of "Fe y Alegría" programs in several countries (Lavín, 1996; Swope, Celedón, and Latorre, 1997). Moreover, although it is generally agreed that it is useful to reward the most effective teachers, up until now it has not been possible to design effective models (Hatry, Greiner and Ashford, 1994; Mizala, 1997).

3. Acquiring New Resources and Targeting Existing Resources

New resources must be obtained through public and private funding. These must be allocated according to priorities established through national consensus and targeted to vulnerable groups.

Effective reforms require social consensus on the amount of publicly and privately administered resources to finance education as well as on the allocation of these resources. The countries in the region must build consensus to increase public and private involvement in education at the national level. It will be much easier to accomplish this given that through the year 2015 the "dependency ratio" will have decreased in Latin America and the Caribbean —in other words, the number of children and retired persons will have decreased relative to the economically active population. This will open a "window of opportunity" since there will be an increase in national public funds for social spending. And if economic growth continues, it will be possible over time to increase the percentage of GNP investmed in education. It will then be feasible, for example, to raise the percentage of the GDP from the current level of 4.5 percent to 6 or 7 percent and maximize spending efficiency (including financing from international agencies which accounts for more than half of total investments to improve education). Increased spending requires improved coordination and communication among these sectors and agencies (national and international networks) to maximize efficiency and effectiveness (UNESCO, 1996b).

In terms of national resources, funds must be allocated for key policies to bridge the quality gap in education. (see box on "Policy Priorities by Level"). Poor resource distribution must be corrected and additional resources acquired to expand some areas of the system, introduce innovations, and improve operations. Excessive resources often are allocated to administrative facilities leaving few available for textbooks and other teaching materials (IDB, 1996). In most Latin American countries, teacher salaries absorb at least two-thirds of public spending for education, while no more than 1 percent is used for educational materials (UNESCO, 1991; Schiefelbein and Wolff, 1995). Significant resources have not been available for effective educational materials despite research showing that such materials have a positive influence on learning (Pogrow, 1996). At the same time, simply increasing educational inputs may not improve the quality of education. For example, secondary education did not improve despite significant spending for laboratories and libraries during the 1970s and 1980s. Surely this investment would have yielded greater returns if work guidebooks and young assistants or teachers had been provided to ensure their effective utilization. Adopting innovative methods requires additional resources and better use of existing resources, and should be based on studies demonstrating the feasibility and efficiency of implementation (Slavin, 1997).

Targeting resources to improve equity in education requires "affirmative action" to serve high risk populations. Universal coverage in primary education should extend to the most isolated areas of the region; nonetheless, serving isolated areas is more expensive and preschool coverage remains partial (Myers, 1995). Costs rise, however, when the goal is to elevate the standard of living of preschool and primary school students living in extreme poverty who lack nutrition and health services. In these cases the family,

community, and school must work together.

High levels of failure demand attention to what is occurring in the school and in the classroom, without disregarding factors external to education (nutrition, health, or parental education level) which also influence student learning (Slavin, 1997). Therefore, resources to improve equity in the quality of education for the most disadvantaged sectors must include programs to extend coverage to localities of extreme poverty (reinforcing factors that contribute to increased quality). There should also be socio-economic support programs for students coming from the most disadvantaged sectors, through free public education, nutrition, health, distribution of textbooks, and scholarships to prevent children in this social sector from dropping out early (Schiefelbein, 1997b).

Extending the school year (to approach that of industrialized countries) is one example of affirmative action. Since most countries in the region have the infrastructure in place to achieve these levels of schooling, it is feasible to increase the school day gradually to a length comparable to developed countries.

Political Priorities by Educational Level

Basic education must be the highest priority since the higher levels (secondary and university) are the "result" of what is achieved at the elementary level.

The priorities for public spending on *basic education* are: (i) extend the school year to approach that of developed countries; (ii) extend access to early education and preschool with resources targeted toward poor and at- risk children (affirmative action). Since this educational level is costly, emphasis should be placed on seeking low cost alternatives through public or private programs; (iii) facilitate access to school textbooks and educational materials, especially appropriate self-paced learning materials, and, to the extent possible, provide computers, software programs, and trained staff to use them effectively in the learning process; (iv) increase teachers' real salaries, but this increase should include agreements to guarantee extending the minimum length of the school day and the 180-day school year, reduction of teacher strikes (and a commitment to compensate for time lost), breaking the vicious circle of poor candidates who become poor teachers, and allocating a portion of the salary increase to incentives and awards for the best teachers; (v) reform initial education of teachers and in-service training to encourage new approaches in the classroom and to offer individualized attention --focus on the students' multiplicity of basic needs-- (Wolff, Schiefelbein, and Valenzuela, 1993); (vi) use affirmative action to allocate funds to at-risk schools, especially in rural and disadvantaged-urban areas, and provide awards and incentives to teachers working in these areas; (vii) use mass media to launch campaigns to encourage early parental stimulation of children and expand

---

preschool coverage; and (viii) undertake research and evaluation and improve statistical information (analytical studies are inexpensive relative to the overall cost of education and the benefits in terms of learning and reducing dropout levels can be substantial, resulting in a positive cost-benefit ratio).

Given low *secondary school* enrollment in Latin America and the Caribbean, substantial investment is also needed at this level, in order to compete with countries who produce similar goods. In many of these countries, at least 50% of the corresponding age group is enrolled in secondary schools. As with elementary education, there must be greater spending to improve quality. Subsidies can be provided for students served by private schools to reduce costs and promote diversity.

It is also necessary to invest in *higher education:* in technology, so that students at this level have access to computers and the Internet as early as possible, and in research and postgraduate training. Given high costs and the bias toward elite groups, a growing portion of funding for higher education should come from the private sector. At the same time, the type of public funding must change. To date, governments have provided funds based on "per capita subsidies", number of academics, and direct bargaining with the institutions. Direct government support should decrease in a new funding system. Government spending should concentrate on: scholarships and loans for needy students, certain areas of higher education, such as research and postgraduate studies, which offer additional benefits in terms of promoting development, and less prestigious institutions or those in underdeveloped regions. Government support for institutions should be based on formulas and incentives that promote increased efficiency, quality and equity and on open competition for postgraduate studies and research projects. Investment in technology and higher education should be linked with cost recovery and more emphasis on institutional accountability for outcomes (Reisberg, 1997)

Four groups specifically require substantial support in order to achieve acceptable levels of quality and equity in education: (i) children from disadvantaged-urban and rural areas; (ii) indigenous and minority groups; (iii) street children; and (iv) special needs children. In each of these cases, teaching methods must be changed radically to meet individual needs. Appropriate strategies should: create methods that stimulate active learning (individual and group); respect diversity by adapting education to the specific needs of each student (children with disabilities); and, offer learning opportunities related to the students life experience and reality (Schiefelbein, 1997b).

Four groups specifically require substantial support in order to achieve acceptable levels of quality and equity in education: (i) children from disadvantaged-urban and rural areas;

(ii) indigenous and minority groups; (iii) street children; and (iv) special needs children. In each of these cases, teaching methods must be changed radically to meet individual needs. Appropriate strategies should: create methods that stimulate active learning (individual and group); respect diversity by adapting education to the specific needs of each student (children with disabilities); and, offer learning opportunities related to the students life experience and reality (Schiefelbein, 1997b).

Poor academic performance associated with multilingual education has led to programs in Ecuador, Guatemala, Mexico, Paraguay, and Peru which give political and legal recognition to the different cultures living in the region. This recognition must now be incorporated into the school system by offering native language education when it differs from the language used at school. The education and training of child workers and street children deserves special mention. Three areas of action are required: public information, mobilizing funding sources, and cooperation (MacPherson-Russell, 1995; UNESCO, 1995b).

Support is also needed to open schools that mainstream many children requiring special education. Because alternative education programs are only available to students with specific disabilities, many other students with less severe learning impediments remain in regular classrooms without special services to address their individual needs. Many countries in the region have founded "integrated or mainstream schools" in which all the students learn together, regardless of their personal, social, or cultural circumstances. These schools use an individualized and group approach accessible to all of the children and their diverse needs.

In sum, these varied categories and types of students have both shared and individual educational needs. In some cases, educational services that differ from those provided to most students are required, either temporarily or permanently. In all cases, it is important to change the role of the teacher, provide self-paced and group learning materials, and develop a flexible curriculum that offers alternatives (in terms of time and difficulty level) to the students (Thomas and Shaw, 1992; Slavin, 1997; Tenti, 1997).

4. Changing Pedagogical Practices

An individualized, dynamic and relevant learning process is needed. Very few relevant learning experiences occur in Latin American classrooms (especially in public schools), although any educational method can work when students have substantial support at home, and help from parents or tutors to solve learning problems, when they attend class regularly, and when books and electronic equipment are available. This is not the case for public school children in high risk areas. In these cases, creating quality learning experiences involves shattering myths and taking initiatives that diverge from the expectations created by "popular wisdom." Classroom methods currently emphasize the oral transfer of information (lecture-style teaching followed by rote memorization) in heterogeneous classrooms. As a result, some students are unable to keep up the pace at which information —which is often far removed from their own experience— is "deposited."

Like other types of major change, improving schools that use the lecture style of teaching will not be easy (Schiefelbein and Tedesco, 1995: UNESCO/OREALC, 1996). To begin with, it is important to examine and identify alternative teaching methods that eventually could replace the lecture style (at least some of the time) and produce the desired increase in quality (Senge, 1991; Calvo, 1996). It is feasible to do this: some schools serving low income students achieve significantly higher performance levels than other similarly situated schools (Muñoz, 1992). Research suggests that it is possible to improve quality if students spend their time on relevant learning experiences (Mevarech and Kramarski, 1997).

A high quality education occurs when students: (i) are motivated to participate in meaningful learning experiences and draw on their previous knowledge (Iran-Nejad, McKeachie and Berliner, 1990); (ii) interact and discuss planned activities among themselves (Slavin, Madden, and Stevens, 1990); (iii) have sufficient time to learn a subject or participate in an exercise; (iv) engage in activities related to their daily life or expectations (Roda, 1984; Langer, 1990; Mamchur, 1990); (v) receive formative

evaluation to enable them to work through problems encountered during planned learning activities (Slavin, 1997); (vi) are asked to prepare written reports (Adams, 1990); and (vii) realize that they are learning (relevant knowledge and meta-cognizance) along with their teachers. In these cases, students learn for themselves, building knowledge independently or in groups through learning activities designed and explained in a text (manual, guide, or script). This leaves the teacher with enough time to help the students solve problems and express their feelings and concerns, (given that many learning problems have emotional roots).

Several barriers must be removed in order to implement these suggestions. First barrier: group activity areas must be created by pushing two to four tables together, since the traditional classroom is organized in rows for lecture style teaching (unless the benches or seats are fixed to the classroom floor). Second barrier: students who finish their work must silently read books of "their" choosing, without interrupting the work of slower students (this fosters love of reading) (Tenti, 1997). Therefore, each classroom should have a stocked bookcase —a classroom library. A third barrier is the scarcity of appropriate educational materials conducive to good learning. Since textbooks play an important role in traditional classrooms, one possibility is to adapt them (Weiss, 1992) into effective learning guides. Such materials (paradigms and guides) not only serve as lesson plans, but allow the teacher to make useful adjustments (although it is likely that 40 percent of teachers in rural areas will not make many changes since they lack degrees). Experiments with using self-paced learning guides in Colombia and Chile demonstrate that teachers are interested in using materials that help them avoid repeating rote instructions (Schiefelbein et al, 1992).

There are several ways in which the use of self-paced learning methods train teachers: (i) teachers observe how students interpret and investigate as they follow instructions developed by experienced teachers (it takes time and resources to produce well-designed learning guides), and come to accept that there may be "more than one correct answer" to questions or problems; (ii) they listen to the children's questions, which tend to be simple, and realize that they can easily address them or, they recognize that it is sometimes necessary to say "I don't know but we can find out together;" and (iii) they realize that it is more pleasant to accompany the children in a discovery process than to work in the traditional mode of information transfer (Kulic et al, 1990; Schiefelbein, 1994). As these paradigms motivate students to investigate, the teacher will begin to join in changing his or her role. The development of effective self-paced learning paradigms is a demanding, long, intense and, therefore, costly process. But when these paradigms are carefully designed and teachers use them critically, they can change a passive learning process into an active one. Paradigms for a successful classroom lesson at the secondary or university level usually include: (i) previous distribution of certain written materials or texts and subsequent opportunities to ask questions arising from the reading; (ii) written instructions explaining the activities to be carried out by the participants, enabling them to understand (and master) the planned learning activity; (iii) evaluative and practical application exercises in order to finish with a constructive evaluation; and, (iv) distribution of materials to be studied before the next session.

Lastly, it may be necessary to modify and adapt the curriculum to fit the students' basic needs (Aguiar, 1996; Tenti, 1997). Excessive standardized content in the curricula used in the countries of the region allows little flexibility to: develop lasting skills, study in more depth subjects of interest to the students, incorporate local characteristics, and relate the material to the students' life experiences. Curricula should de-emphasize content and place greater emphasis on increasing intellectual skills and should evolve through the use of learning guides and texts.

Initial Teacher Education and In-service Training

Quality in education depends on excellence in the teaching profession. Evaluations in the region reveal that the present-day education of teachers is mainly text-based, passive, and lecture-oriented. It should come as no surprise, then, that teachers go on to reproduce the same model with their own students, with attendant poor scholastic achievement. It is not easy to improve teacher training when academics in the field do not practice what they preach to future teachers (Tenti, 1997). Spontaneous change is unlikely in the context of low salaries and the predominance of the "do-it-yourself" model, whereby each teacher must develop learning activities, without the benefit of those

designed by experts in the field (a result of misconceptions about their role). Low teacher salaries create a vicious circle of candidates entering the teaching field by default, resulting in generations of unmotivated and poorly trained teachers. Moreover, the traditional role of the teacher —which places him or her at center stage— requires a level of creativity that many teachers lack. It also increases the time needed for class preparation (based on the erroneous supposition that they have free time outside the classroom) resulting in poorly planned lessons limited to lectures presented by the teacher. This has a detrimental effect on teachers who experience the constant pressure of giving lessons that do not meet expectations, and failing to improve student performance.

An untapped strength revealed in numerous studies is that teachers are interested in keeping up-to-date and want to respond effectively to the demands of modern society (Braslavsky and Birgin, 1994; Farres and Noriega, 1994; Gatti et al, 1994). Teachers are aware that their lessons do not motivate students nor promote learning. In-service training is essential, therefore, but through active learning methods whereby teachers learn through an experiential process in order to break the vicious circle of passive education. This requires a departure from the traditional lecture style of teacher training (Alexander, 1995).

There are successful examples in the region, such as the teacher training offered by the "New School" (Colombia), which use the workshop setting to experiment with learning materials and modifying the teacher's role (Vera, 1984; Lavín, 1996). In addition to this approach, a data base compiling diverse learning activities, from which teachers could select those most relevant to his or her class, would make the teacher's job easier and help improve the quality of education. The task of designing effective learning activities corresponds to highly qualified teams or "creative" teachers, but must also involve classroom teachers in order to refine and adapt materials periodically.

Encouraging teacher effectiveness increases public awareness of the capacity teachers have to improve education and strengthen cultural identity. This can set in motion a virtuous circle resulting in better teacher salaries and less time wasted on strikes (Graph 4).

Training University Academic Staff

The professional background of university professors must be raised substantially if the region is to be able to select, adapt, and eventually create the science and technology it requires (to complement appropriate changes at the other levels). The profession of university professor was only established in Latin America in the 1970s (Schwartzman, 1990). University faculties previously consisted of professionals whose principal source of income came from their practices, business offices, industrial facilities, and law offices. The teaching profession must be consolidated in Latin American universities through permanent funding to offer competitive salaries as well as opportunities for updating and career development. The number of doctoral-level professors capable of asking the questions that open doors to new frontiers must be at least doubled (Yentzen, 1997). And, while academics have exhibited interest in career development and specialization, facilities are not available to accommodate most of them. New policies must offer today's academics the opportunity to receive doctoral training. Funds are needed to: (i) develop doctoral programs in fields of national and regional importance that effectively meet the needs of professors; (ii) allocate resources to higher education facilities in order to contract substitutes for professors working on their doctorates; (iii) make funds available for doctoral research; and, (iv) provide the infrastructure necessary to hold or attend conferences or for other research-related activities (publications, edited works, exchanges, and access to data bases). These activities must be supplemented by relationships with developed countries offering scholarships and international agencies that offer similar benefits including the OAS, UNDP, UNESCO, UNICEF, the World Bank, the Inter-American Development Bank, the Organization of Iber-American States, and assistance agencies in developed countries. All of these activities must be linked to quality in education at all levels and to strategies to develop a national system for research and innovation (Mayorga, 1997).

5. Investment in Research, Science, and Technology

Latin America and the Caribbean spends about 0.4 percent of its GNP on research and development (much less than the developed world or Asian competitors) and private spending in this area is only 0.25 percent. University research continues to be unrelated to the productive sector. Today many exemplary institutions are under-funded and doctoral-level training in universities is minimal. Public spending for research and development could include: (i) doubling the number of academics with doctoral training; (ii) expanding doctoral programs in fields critical to the region and (iii) increased funds for research. Besides increased funding in these areas, a new system of incentives should be created as well as a structure for research and development. Government policies should encourage private investment in the field, which is currently very low. Public spending should be based on: competitive, transparent funding for research proposals, support for institution-based projects (which can be renewed based on performance) and priority accorded academic research related to the productive sector. It should be recognized that not all institutions of higher learning should be research-oriented. The workplace requires that higher education diversify, with significantly more two-year technological training programs and institutions focused primarily on education; only a small number of these institutions can become specialized in international research.

The rapid expansion of science around the world, the exponential increase in computer power, and decreased communication costs have important repercussions for education in the region (Haddad and Method, 1997). First, Latin American and Caribbean children must understand and be familiar with the technology that will define their adult life.
  Secondly, modern technology (long distance education or computers) will broaden the horizons of education and improve quality (Ochoa and Monroy, 1997). Lastly, countries in the region will need to strengthen their capacity for research in order to understand, adapt and, in some cases, initiate scientific and technological advances.

In the developed world, computers have increased the capacity for logical reasoning, creativity, and education in specific disciplines. They have helped change the role of the teacher from one of provider of knowledge to one of administrator of learning —there are already examples of this in the region (Miller, 1996). In the future, technological tools will offer even better alternatives for learning, such as the Internet. This will create a revolution in learning at least in higher education. In contrast to the developed world, few homes in the region currently have access to computers or the Internet. Therefore, the public sector must undertake a series of initiatives to ensure understanding of the role technology plays in their lives. The region must invest in this area, while keeping a perspective on its own limitations in terms of resources and the diverse role technology plays in each society. This is particularly key at the secondary and postsecondary levels as well as in primary school (Haddad, 1997).

Investment in technology for schools and universities could be relatively costly. For example, the annual cost per student of an experimental computer program at the secondary school level in Latin America ranges from US$40 to US$100, compared to current costs per student at the secondary level which approach US$300. Technology in the schools can be justified economically if a greater number of graduates obtain jobs with better salaries and greater technological demands. In practice, however, it will be important not to discard alternative methods of improving quality —such as additional libraries, laboratory equipment, and teacher training— and to ensure that the economic means to develop access to technology are identified.

At the university level, upgraded technology can be combined with improved cost recovery or greater institutional accountability for outcomes. Once consensus has been reached, some of the keys to successful implementation, which include the use of mass media and the introduction of computers into the school system, are: (i) implementation in phases and modest start-up investment; (ii) intensive teacher training programs; (iii) strong leadership and administration; (iv) accountability and dedication at the local and school level; (v) adequate and ongoing funding to cover costs (including a limited charge to the consumers); and (vi) feedback through evaluations.

V. The Role of the OAS

The policy priorities discussed in chapter four and the suggestions for action in chapter five have implications for the work of the OAS (McGinn, 1990). "The OAS is no longer merely an assistance-oriented institution but has become an entity which promotes

international cooperation. It is increasingly willing to work closely with other Inter-American institutions such as the IDB, with the United Nations system, the World Bank, Andean Finance Corporation, and cooperative agencies of member countries and observers, as well as with private foundations and nongovernmental organizations" (Gaviria, 1997). The main activities generated by this new role can be synthesized into five courses of action: (i) serve as a clearinghouse to compile and share research; (ii) analyze available data and identify trends in education systems in the region; (iii) compare and evaluate development strategies; (iv) report on consensus-building processes in different countries; and (v) review and select experiences that can be adapted and applied in other countries. These suggestions should be analyzed in the context of increasing globalization which also brings with it problems such as environmental degradation, organized crime, migration, and pandemics that require stronger regional institutions (Brauer, 1997).

1. A Clearinghouse to Systematize and Share Research

Systematic access to research findings is crucial to designing effective educational policies (McGinn and Borden, 1995). It is not easy for each specialist advising the authorities of each country to have access to relevant research findings regarding important issues in education. Policy-makers are unlikely to have exact information defining the parameters of verified information as opposed to issues about which contradictory information or inconclusive findings exist. The OAS can prepare and distribute periodic reports on the state of the art in each area of interest to governments. This information could be very useful for rigorous analyses that incorporate the main components of an affective analytical method. Reports should differentiate clearly between opinions and statements based on rigorously objective data. This type of analysis must be undertaken by institutions that are not involved in funding education projects (McGinn, 1997a) in order to avoid an excessively close relationship between recommendations based on the analyses and policies funded by International Banks.

2. Analyze Available Data and Identify Trends

A second work area has to do with designing models to analyze available data (Farrell, 1997a). It has become increasingly difficult for each country to design, on its own, relatively sophisticated methods of data analysis. These methods can correct inconsistencies in statistical information by introducing reasonable hypotheses, or distributions, that show a range of possible outcomes based on the hypotheses used to correct the inconsistencies. It is unlikely that experts in each country will be in a position to dedicate the time necessary to refine these methods for use once a year, while an individual or team of people who successively analyze different sets of data from countries in the region can invest the time needed to produce a good analysis. Since it is evident that available data is currently used only rarely (Schiefelbein, 1997a), this constitutes an ideal way for the OAS to contribute to making full use of the immense amount of information available in different countries that is currently being wasted.

3. Compare and Evaluate Development Strategies

Models to systematically analyze existing data also are useful to compare regional and subregional education systems and their underlying development strategies. Countries can better appreciate progress made (and failure to progress) by comparing their situation with what has been accomplished in other countries in the region with similar levels of development.   It is important to remember that there are no institutions in the region which carry out this kind of activity in-country. The region still lacks the resources and staff necessary to undertake periodic, systematic comparisons of developments in the education field. This makes it difficult for a country to learn from the experiences of other countries in time to influence its policy-making. It has been impossible to detect inefficient policies such as, for example, reducing the student-teacher ratio, while also substantially reducing teacher salaries. The ability to note these changes early on would have made it possible to reorient the policy and retain the higher student-teacher ratio which, in turn, would have allowed teacher salaries to remain stable or even increase significantly. Access to pertinent studies would have shown that reducing class size does not significantly affect performance, while low salaries strongly influence the ability to recruit future teachers.

4. Report on Consensus-Building Processes

Each country has used diverse strategies to achieve national accords. It would be useful to compile and process these experiences systematically in order to identify methods that have been most successful in achieving agreements. It is important to recognize the advantages and disadvantages associated with parliamentary debate, educational conferences, pluralistic presidential commissions or concentric circles of discussion from the local to the central level. The OAS can enjoy a comparative advantage in tasks ranging from examining attempts to reconcile competing interests to reporting on specific development strategies that unify opinion-makers and the various currents of thought held by different actors. The OAS can contribute in this way to developing strategies for hemispheric cooperation in monitoring the implementation of accords (Gajardo and de Andraca, 1997b).

5. Review and Select Successful Experiences

Latin America and the Caribbean have clearly expressed interest in improving quality and equity in education and many efforts have been undertaken to respond to this challenge. The OAS is in a position to identify, review and evaluate these initiatives so that they can be analyzed by other countries facing similar problems. Eventually, different experiences can be adapted and tested, and their outcomes examined, in order to make a growing body of expertise available to others addressing similar problems. This helps to assure ongoing progress in the region. Fostering the exchange of information about innovative and successful educational projects and encouraging horizontal cooperation between countries is one of the most effective roles that international agencies can play to improve education in the region (Farrell, 1997b).

REFERENCES

Adams, Marilyn Jager (1990). "Beginning to Read: Thinking and Learning about Print". Bradford Books/MIT Press. Cambridge, MA, USA

Aghón, G. y Edling, H. (editors) (1997). "Descentralización Fiscal en América Latina: Nuevos Desafíos y Agenda de Trabajo". CEPAL/GTZ. Proyecto Regional de Descentralización Fiscal. Santiago, Chile.

Aguiar, Márcia Angela (1996). "Parametros Curriculares Nacionais e Formacao do Educador: A Reforma Educacional Brasileira em Marcha". Educacao & Sociedade; Revista Cuadrimestral de Ciencia de la Educación; Año.XVII; No.56; pp.506-515. CEDES. Sao Paulo, Brasil.

Aldana Valdés, Eduardo (1997). "Casos de Reforma. La Medición del Logro Educativo en Colombia". Formas & Reformas de la Educación. PREAL; No.3; Trimestre 1. \

Alexander, A. (1995). "Una Educación Básica de Calidad: La Evolución del Rol del Docente". Boletín No.36 del Proyecto Principal de Educación de UNESCO. Santiago, Chile.

Alleyne, Michael H. (1995). "Nationhood from the Schoolbag. A Historical Analysis of the Development of Secondary Education in Trinidad and Tobago". OEA. Washington D.C., U.S.A.

Altbach, P.G. (editor) (1996). "The International Academic Profession. Portraits of Fourteen Countries". The Carnegie Foundation for the Advancement of Teaching. Princeton, New Jersey.

Amaro, Nelson (1997). "La Descentralización en los Países Unitarios de América Latina y el Caribe en la Actualidad: Cuatro Dilemas Gerenciales". Estudios Sociales de la Corporación de Promoción Universitaria (CPU); No.92; Trimestre 2; pp.95-134. Santiago, Chile.

Anker, R. y Melkas H. (1995). "Economic Incentives for Children and Families Intended to Eliminate or Reduce Child Labor". ILO. Geneva, Switzerland.

Arancibia, V. y C. Segovia (1996). "Sistemas Nacionales de Medición de la Calidad de la Educación en América Latina y Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación". OREALC. Santiago, Chile.

Arcia, G., C. Alvarez y T. Scobie (1997). "Education Finance and Education Reform. A

Framework for Sustainability". Inter-American Development Bank.

Avalos, Beatriz (1986). "Enseñando a los Hijos de los Pobres: Un Estudio Etnográfico en América Latina". IDRC. Ottawa, Canada.

Barbee, D. (1992). "Educación y Empleo en la Era de la Informática y de las Nuevas Tecnologías". Revista Interamericana de Educación de Adultos; p.61. CREFAL/OAS. México.

Bastías, Manuel (1997). "Foro Educativo". CIDE. Santiago, Chile.

Bertrand, Sara (1997). "Jóvenes con Mentalidad Ganadora". El Mercurio; Economía y Negocios; 28 de septiembre; p.D22. Santiago, Chile.

Biddle, Bruce J. (1997). "Foolishness, Dangerous Nonsense and Real Correlates of State Differences in Achievement". Kappan; Septiembre, 1997; p.10.

Birdsall, N. y E. James (1990). "Efficiency and Equity in Social Spending: How and Why Governments Misbehave". Policy Research and External Affairs. Working Papers 274. World Bank. Washington D.C., U.S.A.

Birdsall, N. y F. Jaspersen (editors) (1997). "Pathways to Growth. Comparing East Asia and Latin America". Inter-American Development Bank. Washington D.C., U.S.A.

Birdsall, N., D. Ross, y R.H. Sabot (1995). "Inequality and Growth Reconsidered: Lessons from East Asia". World Bank Economic Review.

Birdsall, N. y R.H. Sabot (1994). "Inequality, Exports and Human Capital in East Asia: Lessons for Latin America". Organization for Economic Co-operation and Development. Paris, France.

Birdsall, N. y R.H. Sabot (1995). "Virtuous Circles: Human Capital Growth and Equity in East Asia". Mimeo. Inter-American Development Bank. Washington D.C., U.S.A.

Braslavsky, C. y A. Birgin (1994). "Quienes Enseñan Hoy en la Argentina". Boletín No.34 del Proyecto Principal de Educación de UNESCO; pp.18-35. Santiago, Chile.

Braslavsky, C. y G. Cosse (1997). "Las Actuales Reformas Educativas en América Latina: Cuatro Actores, Tres Lógicas y Ocho Tensiones". Documentos de PREAL; No.5.

Brauer, Dieter (1997). "The United Nations Urgently Need Reform". Editorial de la Revista Development and Cooperation de la DSE. Berlin, Germany.

Brunner et al (1994). "Los Desafíos de la Educación Chilena frente al Siglo XXI". Comisión Presidencial. Editorial Universitaria. Santiago, Chile.

Brunner, J.J., C. Cox (1990). "Educación Superior en América Latina: Cambios y Desafíos". Fondo de Cultura Económica. Santiago, Chile.

Brunner, J.J., C. Cox (1995). "Dinámicas de Transformación en el Sistema Educacional de Chile" editado por J. Puryear y J.J. Bruner "Educación, Equidad y Competitividad Económica"; Vol.II of the OAS. Washington D.C., U.S.A.

Calvo, Gloria (1996). "Enseñanza y Aprendizaje. En Busca de Nuevas Rutas". Documentos de PREAL; No.6.

Carnoy, M. y C. Castro de Moura (1996). "Improving Education in Latin America: Where to Now? A Background Paper for the Inter-American Development Bank". Seminar in Educational Reform. Buenos Aires, Argentina.

Carnoy, M. y Mc Ewan (1997). "The Effects on Student Achievement of the National Education Voucher Plan in Chile". Documento preliminar. Standford University. U.S.A.

Carvalho, Getulio (1997a). "Educação e Ciudadania Democrática". Atualidades, Opinião. O Tempo; 28 de abril; p.6. Belo Horizonte, Brasil.

Carvalho, Getulio (1997b). "Liderança Grupal". Atualidades, Opinião. O Tempo; 6 de abril; p.6. Belo Horizonte, Brasil.

Castro, Claudio de Moura (1996). "O Desafío: Montar um Curso de Negócios e Tecnologia de Escritório". Inter-American Development Bank. Washington D.C., U.S.A.

Castro, Claudio de Moura (1997a). "América Latina: La Batalla entre Importación y Creación". Perspectivas-Ciento Uno; Revista Trimestral de Educación Comparada; Vol.XXVII; No.1; pp.119-134. UNESCO.

Castro, Claudio de Moura (1997b). "The Three Cycles of Literacy Programs in Brazil". Inter-American Development Bank. Washington D.C., U.S.A.

Castro, C. de Moura, D.C. Levy y A. Bernasconi (1996). "Higher Education in Latin America and the Caribbean: A Strategy Paper". Social Programs Division of the Inter-American Development Bank. Washington D.C., U.S.A.

Castro, C. de Moura y D.C. Levy (1997). "Higher Education in Latin America: Myths, Realities, and How the IDB Can Help". Social Programs Division of the Inter-American Development Bank. Washington D.C., U.S.A.

CEE (1992). "Educación Indígena y Países Pluriétnicos y Multiculturales." Revista Latinoamericana de Estudios Educativos; Vol.XXII; No.4; pp.5-10.

CEPAL (1990). "Transformación Productiva con Equidad. La Tarea Prioritaria del Desarrollo de América Latina y el Caribe en los Años Noventa". Vigésimo Tercer Período de Sesiones de la CEPAL. Caracas, Venezuela.

CEPAL (1992). "Recomendaciones de la Reunión de Ministros de Economía". Vigésimo Cuarto Período de Sesiones de la CEPAL. Santiago, Chile.

CEPAL (1994). "Hacia una Estrategia Educacional para las Mujeres de América Latina y el Caribe". Sexta Conferencia Regional sobre Integración de la Mujer en el Desarrollo Económico y Social de América Latina y el Caribe. Mar del Plata, Argentina.

CEPAL (1995). "Panorama Social de América Latina". ONU. Santiago, Chile.

CEPAL/UNESCO (1992). "Educación y Conocimiento. Eje de la Transformación Productiva con Equidad". ONU. Santiago, Chile.

Clinchy, Evans (1996). "Reforming American Education from the Bottom to the Top. Escaping Academic Captivity". Kappan; Vol.78; No.4; pp.269-270.

Colbert de Arboleda, V. (1987). "Universalización de la Primaria en Colombia: El Programa de la Escuela Nueva". Editado por la Fundación para la Educación Superior (FES) en: "La Educación Rural en Colombia: Situación, Experiencias y Perspectivas". Bogotá, Colombia.

Correa, Enrique (1997). "En la Defensa del Modelo". Temas de La Epoca; 28 de septiembre; p.2-3. Santiago, Chile.

Corvalán-Vásquez, O. (1989). "Trends in Technical-Vocational and Secondary Education in Latin America". La Educación; No.104; pp.1-14. OAS. Washington D.C., U.S.A.

Costa, M. (1977). "School Outputs and the Determinants of Scholastic Achievement". Ph.D. Thesis. Standford University, U.S.A.

Cox, Cristián (1997). "La Reforma de la Educación Chilena: Contexto, Contenidos, Implementación". Documentos de Preal, No.8.

Chhibber, Ajay (1997). "El Estado en un Mundo de Transformación". Finanzas & Desarrollo; Vol.34; No.3; pp.17-20. World Bank.

de Cerreño, A. y C. Pyle (1996). "Educational Reform in Latin America". Studies Department Occasional Papers Series No.1. Council on Foreign Relations. New York, U.S.A.

de Ibarrola, María (1995). "Dinámicas de Transformación de los Sistemas Educativos" editado por J.M. Puryear y J.J. Bruner "Education Equity and Economic Competitiveness in the Americas", Vol.II of the OAS. Washington D.C., U.S.A.

Delannoy, Francoise (1997). "Casos de Reforma. Tendencias Mundiales y Educación Secundaria en Asia del este y el pacífico". Formas & Reformas de la Educación. PREAL; No.4; Trimestre 2.

Delich, Francisco (1990). "Agenda Educativa para una Década". La Educación. La Revista Interamericana de Desarrollo Educativo; Año.XXXIV; No.106; pp.41-54. OAS. Washington, D.C. U.S.A.

Delors, Jacques (1996). "La Educación Encierra un Tesoro". Informe a la UNESCO de la Comisión Internacional sobre la Educación para el Siglo XXI. UNESCO. Paris, France.

de Vries, Rheta (1997). "Piaget's Social Theory". Educational Researcher; Vol.26, No.2; pp.4-17. Chicago, U.S.A.

Edwards, B. (1993). "Linking the Social and Natural Worlds: Environmental Education in the Hemisphere". La Educación; No.115; p.250. OAS.

Edwards, Sebastián (1995). "Crisis and Reform in Latin America: From Despair to Hope". Oxford University Press. New York, U.S.A.

Edwards, Sebastián (1997). "Reformas Incompletas Perjudican a los Pobres". El Mercurio; Economía y Negocios; 16 de agosto; p.D3. Santiago, Chile.

Einstein, Albert (1952). " Educación para una Independencia en el Pensar". New York Times. U.S.A.

Ellison, K., T. Johnson y J.O. Tamayo (1997). "Latin America's Schools". The Miami Herald; July 27 to 29. Miami, U.S.A.

Elmore, Richard (1996). "Getting to Scale with Good Educational Practice". Harvard Educational Review; Vol.6; No.1; pp.1-26.

Encuentro de Presidentes (1997). "Carta de Modernización Parlamentaria Iberoamericana". Valparaíso, Chile.

Eyzaguirre, Barbara y Loreto Fontaine (Editoras) (1997). "El Futuro en Riesgo. Nuestros Textos Escolares". Centro de Estudios Públicos. Santiago, Chile.

Ezpeleta, J. (1989). "Escuelas y Maestros: Condiciones del Trabajo Docente en Argentina". UNESCO/OREALC. Santiago, Chile.

Ezpeleta, J. y E. Weiss (1994). "Programa para Abatir el Rezago Educativo. Evaluación Cualitativa del Impacto. Informe Final". Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional; Departamento de Investigaciones Educativas (DIE). México.

Farrell, Joseph P. (1994). "Education Cooperation in the Americas: A Review". OAS-Interamerican Dialogue Project: Education, Equity and Economic Competitiveness in the

Americas: Vol. I. OAS. Washington D.C., U.S.A.

Farrell, Joseph P. (1997a). "A Retrospective on Educational Planning in Comparative Education". Focus on Educational Planning. Comparative Education Review; Vol.41; No.3, pp.277-313.

Farrell, Joseph P. (1997b). "Why is Educational Reform so Difficult? Similar Descriptions, Different Prescriptions, Failed Explanations". Review Essay; Ontario Institute for Studies in Education. University of Toronto, Canada.

Farrell, Joseph P. (1998). "Changing Conceptions of Equality of Education: Forty Years of Comparative Evidence". En Prensa: edited by R. Arnove and C. Torres in "Reframing Comparative Education: The Dialectic of the Global and the Local". (Rowaman & Lettlefield, 1998).

Farrell, J.P. y S.P. Heyneman (1989). "Textbooks in the Developing World: Economic and Educational Choices". EDI World Bank Seminar. Washington D.C., U.S.A.

Farrés, P. y C.Noriega (1994). "Ser Maestro: Decisión o Destino. Las Condiciones de Permanencia dentro del Magisterio". Boletín No.34 del Proyecto Principal de Educación de UNESCO; pp.44-53. Santiago, Chile.

Fausto, A. y R. Cervini (1992). "O Trabalho e a Rua. Criancas e Adolecentes no Brasil Urbano dos Anos 80". Centro Brasileiro para a Infancia e Adolecencia de UNICEF-FLACSO. Sao Paulo, Brasil.

Filp, J. C. Cardemil et al (1987). "Control Social, Disciplina y Cambio: Estudio de las Prácticas Pedagógicas en una Escuela Básica Popular". CIDE working document. Santiago, Chile.

Fujimoto-Gómez, Gabi (1996). "Las Políticas en Desarrollo Infantil Temprano: Diagnóstico, Recientes Estudios, Aportes de la No Escolarización". Revista Interaméricana de Desarrollo Educativo; Año XL; No.123-125; pp.91-104. Washington D.C., U.S.A.

Fumagalli, I. (1990). "Uso del Tiempo en la Escuela Media". Tesis de Maestría. FLACSO. Buenos Aires, Argentina.

Gadotti, M. y E. Silva Barcelos (1996). "Construyendo la Escuela Ciudadana en Paraná". Revista Latinoamericana de Innovaciones Educativas; AñoVIII; No.23; pp.11-48.

Gajardo, M. y A.M. de Andraca (1988). "Trabajo Infantil y Escuela. Las Zonas Rurales". FLACSO. Santiago, Chile.

Gajardo, M. y A.M. de Andraca (1992). "Docentes y Docencia. Las Zonas Rurales". OREALC/FLACSO. Santiago, Chile.

Gajardo, M. y A.M. de Andraca (1997a). "La Cumbre de las Américas y la Iniciativa para la Educación. Avances en su Implementación". PREAL. Santiago, Chile.

Gajardo, M. y A.M. de Andraca (1997b). "La Iniciativa para la Educación y la Cumbre de las Américas. Situación Actual y Perspectivas". PREAL draft document. Santiago, Chile.

Gálvez, G., E. Rockwell, R. Paradise y S. Sobrecasas (1981). "El Uso del Tiempo y de los Libros de Texto en Primaria". DIE. Mexico City, México.

García, M. y Hernández, C. (1992) "¿Tiempo de Jugar?". CEPLAES. Quito, Ecuador.

Gardner, Howard (1991). "The Unschooled Mind. How Children Think & How Schools Should Teach". Basic Books; a Division of Harper Collins Publishers. New York, U.S.A.

Gardner, Howard (1993). "Multiple Intelligences. The Theory in Practice". Basic Books; a Division of Harper Collins Publishers. New York, U.S.A.

Gasperini, Lavinia (1996). "Nel Villagio Globale degli Analfabeti". Avenimenti; 19 de septiembre; pp.28-31.

Gatti, B.S, Y.L. Esposito y R. Neubauer de Silva (1994). "Características de los Profesores de Primer Grado en Brasil: Perfil y Expectativas". Boletín No.34 del Proyecto Principal de Educación de UNESCO; pp.136-43. Santiago, Chile.

Gaviria, César (1996). "Diálogos". Revista Interaméricana de Desarrollo Educativo; Año XL; No.123-125; pp.243-250. Washington D.C., U.S.A.

Gomes-Neto, J.B., E.A. Hanushek, R.H. Leite y R.C. Frota-Bezzera (1992). "Health and Schooling: Evidence and Policy Implications for Developing Countries". Working Paper No. 306 of the Rochester Center for Economic Research.

González Brito, A.I. (1997). "Evolución del Principio de Equidad en la Política Educativa de Latinoamérica: El Caso de Chile, 1965-1990". Estudios Sociales de la Corporación de Promoción Universitaria (CPU); No.92; Trimestre 2; pp.135-156. Santiago, Chile.

Grawe, R. (1979). "Ability in Pre-Schoolers, Earning, and Home Environment". Working Paper No.322 of the World Bank. Washington D.C., U.S.A.

Guia Neto, Walfrido (1997). "La Reforma Educativa en Minas Gerais". Edited by Castro de Moura y Carnoy en: "La Reforma Educativa en América Latina". Department of Social

Programs and Sustainable Development, Social Programs Division of the Inter-American Development Bank.

Guttman, C. (1993). "Todos los Niños Pueden Aprender. El Programa de la 900 Escuelas para los Sectores Pobres de Chile". UNESCO. Paris, France.

Hanusheck , Eric A. (1992). "The Trade-Off between Child Quantity and Quality," Journal of Political Economy 100 (1): 84-117.

Haddad, Wadi D. (1997). "La Globalización de la Economía: Repercusiones en la Educación y en la Formación de Competencias". Perspectivas-Ciento Uno; Revista Trimestral de Educación Comparada; Vol.XXVII; No.1; pp.33-40. UNESCO.

Haddad, W.D. y F. Method (1997). "The Global Learning Technologies Consortium". Draft Concept Note. UNESCO. Washington D.C., U.S.A.

Harbison, R.W. y E.A. Hanusheck (1992). "Educational Performance of the Poor". Oxford University Press and World Bank. New York, U.S.A.

Hatry, H.P., J.M. Greiner y B.G. Ashford (1994). "Issues and Case Studies in Teacher Incentive Plans". The Urban Institute Press. Washington D.C., U.S.A.

Hecht, R. et al (1995). "Brazil: Policies to Improve the Financing of Education". División de Recursos Humanos. Latin America and the Caribbean Regional Office of the World Bank. Washington D.C., U.S.A.

Hevia, Renato, S.J. (1997). "La Hermana Radio". Editorial del Boletín Bimestral de la Campaña por la Vida Buena; No.20.

Honduras (1997). "Estudio Sectorial". Secretaría de Educación. República de Honduras.

Husen, T., L. Saha, R. Noonan (1978). "Teacher Training and Student Achievement in Less Developed Countries". Staff Working Paper No. 310 of the World Bank.

ICBF/UNICEF (1992). "Evaluación de los Hogares Comunitarios de Bienestar". Informe Técnico Final. Santafé de Bogotá, Colombia.

IDB (1996). "Progreso Económico y Social en América Latina. Cómo Organizar con Exito los Servicios Sociales. Informe 1996". Inter-American Development Bank. Nueva York, U.S.A.

Infante, M. Isabel (1997). "Acerca de los Resultados Preliminares de la Investigación Regional sobre Analfabetismo Funcional de UNESCO/OREALC". Paper Presented at the Reunión Técnica Regional de REDALF. Brasilia, Brasil.

Iran-Nejad, A., W. Mckeachie y D. Berliner (1990). "The Multisource Nature of Learning: An Introduction". Review of Educational Research; Vol.60, No. 4; p. 511.

Jamison, D., B. Searle, S.P. Heynemann y K. Galda (1981). "Improving Elementary Mathematics Education in Nicaragua: An Experimental Study of the Impact of Textbooks and Radio on Achievement". Discussion Paper No.81-5 by the Population and Human Resources Division of the World Bank.

Jimenez, Emmanuel (1987). "Pricing Policy in the Social Sectors: Cost Recovery for Education and Health in Developing Countries". Johns Hopkins University Press. World Bank. Washington D.C., U.S.A.

Jimenez, E y M.E. Lockheed (1995). "Public and Private Secondary Education in Developing Countries. A Comparative Study". Discussion Papers No.309 of the World Bank. Washington D.C., U.S.A.

Jimenez, E., M. Lockheed y V. Paqueo (1991). "The Relative Efficiency of Private and Public Schools in Developing Countries". Research Observer; Vol.6, No.2. World Bank.

Kim, W.T. (1997). "Educación, Cultura y Desarrollo Económico: El Caso Coreano". 1er Encuentro: Corea y América Latina, Instituto de Estudios Internacionales, Universidad de Chile. Santiago, Chile.

Kulic, C., J. Kulic y R. Bangert-Drowns (1990). "Effectiveness of Mastery Learning Programs: A Meta Analysis". Review of Educational Research; Vol.60, No.2; pp. 265-299.

Langer, J. et al (1990). "Meaning Construction in School Literacy Tasks: A Study of Bilingual Students". American Educational Research Journal; Vol.27, No.3; p.465.

Lavín, Sonia (1996). "Educación y Desarrollo Humano en América Latina y el Caribe". Convenio Andrés Bello. Santafé de Bogotá, Colombia.

Levinson, Marc (1995). "Latin America: The Next Generation". Conference Report. Council on Foreign Relations. New York, U.S.A.

Levy, Daniel (1997). "Brecha Innegable entre Sueños y Posibilidades". La Prensa. 19 de agosto; p.18. Buenos Aires, Argentina.

Lockheed, M. y A. Verspoor (1991). "Improving Primary Education in Developing Countries". Oxford University Press. New York, U.S.A.

Loera Varela, Armando (1995). "Los Indicadores de la Educación Básica en México: Bases para Conformar un Sistema". Secretaría de Educación Pública. Distrito Federal de México.

Lolas, Fernando (1996). "Los Estudios Generales, la Sociedad Ilustrada y la Universidad Chilena: Un Comentario y una Experiencia". Separata del Centro de Estudios Públicos; No.64. Santiago, Chile.

Londoño, Juan Luis (1995). "Pobreza, Desigualdad, Política Social y Democracia". Departamento Técnico de América Latina del World Bank.

Londoño, Juan Luis (1996). "Poverty, Inequality and Human Capital Development in Latin America, 1950-2025. Latin American and Caribbean Studies of the World Bank. Washington D.C., U.S.A.

MacPherson-Russell, P. (1995). "Strengthening the Rehabilitation Programme of the Correctional Services". The University of West Indies-UNESCO/Kingston.

Mamchur, C. (1990). "But ... the Curriculum". Kappan; Vol.71; No.8; p.636.

Mayor, Federico (1995) "Prólogo" de: Una Nueva Oportunidad. El Rol de la Educación en el Desarrollo de América Latina. Editorial Santillana; Aula XXI. Buenos Aires, Argentina.

Mayor, F. y E. Iglesias (1995). "La Urgencia Etica, Económica y Política de la Reforma Social". Declaración Conjunta del Director General de UNESCO y del Presidente del Inter-American Development Bank en la Cumbre Mudial para el Desarrollo Social. Copenhagen, Denmark.

Mayorga, Román (1997). "Closing the Gap". Social Programs Division of the Inter-American Development Bank. Washington D.C., U.S.A.

McGinn, Noel (1990). "Economic Integration within the Americas: Implications for Education". La Educación. La Revista Interamericana de Desarrollo Educativo; Año.XXXIV; No.106; pp.55-70. OAS. Washington, D.C. U.S.A.

McGinn, Noel (1997a). "El Impacto de la Globalización en los Sistemas Educativos Nacionales". Perspectivas-Ciento Uno; Revista Trimestral de Educación Comparada; Vol.XXVII; No.1; pp.41-58. UNESCO.

McGinn, Noel (1997b). "Towards an Alternative Strategy for International Assistance to Education". Prospects; Vol.XXVII; No.2.

McGinn, N.F. y A.M. Borden (1995). "Framing Questions, Constructing Answers. Linking Research with Education Policy for Developing Countries". Harvard Institute for International Development. Harvard University Press. U.S.A.

McMeekin, Robert (1995). "Coordination of External Assistance to Education in Latin America and the Caribbean". UNESCO. Santiago, Chile.

McKinsey Global Institute (1994). "Latin American Productivity". Washington D.C., U.S.A.

Meier, Deborah (1996). "Supposing that ...".; Vol.78; No.4; pp.271-276.

Mello, G.N. y V.L. Wey (1995). "Estado de Mina Gerais: En Busca de un Nuevo Modelo de Gestión Institucional". Revista Latinoamericana de Innovaciones Educativas; Año VII; No.21; pp.99-152.

Mevarech, Z.R. y B. Kramarski (1997). "Improve: A Multidimensional Method for Teaching Mathematics in Heterogeneous Classrooms". American Educational Research Journal; Vol.34, No.2; p.356-394.

Michel, Andrée (1987). "Fuera Moldes. Hacia una Superación del Sexismo en los Libros Infantiles y Escolares". Ediciones de les Dones y UNESCO. Barcelona, España.

MIDEPLAN (1997). "Situación del Trabajo Infantil en Chile, 1996". La Epoca; 21 de septiembre. Santiago, Chile.

Miller, B.A. (1990). "A Review of the Quantitative Research on Multigrade Instruction". Research in Rural Education; Vol.7, No.2; pp.1-8.

Miller, Errol (1996). "Partnership for Change: Using Computers to Improve Instruction in Jamaica's Schools". University of the West Indies. Technical Paper 2, USAID. Washington D.C., U.S.A.

Ministerio de Educación Nacional (1992). "Sistema Nacional de Evaluación de la Calidad de la Educación: Primera Fase de Evaluación, Estructura, Avances y Resultados". Santafé de Bogotá, Colombia.

Mizala, A., M. Peña y P. Romaguera (1997). "Sistema de Evaluación del Desempeño de Establecimientos Educacionales Subvencionados". Informe Final SNED. Centro de Economía Aplicada del Departamento de Ingeniería Industrial de la Universidad de Chile. Santiago, Chile.

Moraes, Maria Candida (1997). "O Paradigma Educacional Emergente". Papirus Editora. Sao Paulo, Brasil.

Muñoz Izquierdo, C. (1990). "La Transformación de los Sistemas Educativos Latinoamericanos ante los Nuevos Requerimientos de las Economías de la Región: Tendencias, Retos y Espacios para la Cooperación Internacional". La Educación. La Revista Interamericana de Desarrollo Educativo; Año.XXXIV; No.106; pp.25-40. OAS. Washington, D.C. U.S.A.

Muñoz Izquierdo, C. (1996). "La Transformación de los Sistemas Educativos Latinoamericanos ante los Nuevos Requerimientos de las Economías de la Región". La Educación; No.106; pp.25-44. OAS. Washington D.C., U.S.A.

Myers, Robert G. (1992a). "Early Childhood Care and Development in Latin America: Towards an Investment Strategy". A View From LATHR No.32, Technical Department, Latin América and the Caribbean Region of the World Bank, Washington D.C., U.S.A.

Myers, Robert G. (1992b). "The Twelve Who Survive". Routledge. New York, U.S.A.

Myers, Robert G. (1995). "La Educación Preescolar en América Latina. El Estado de la Práctica." Documents from PREAL.

Naciones Unidas/CEPAL (1997). "La Brecha de la Equidad. América Latina, El Caribe y la Cumbre Social". Sao Paulo, Brasil.

Navarro, J.C. (1997). Comments on "Education in the Americas: Quality, Equity and Citizenship" in the OAS - October 28th Seminar; Washington D.C., U.S.A.

Neal, Derek (1997). "Measuring Catholic School Performance". The Public Interest; pp.81-87.

Noddings, Nel (1996). "Rethinking the Benefits of the College - Bound Curriculum". Kappan; Vol.78; No.4; p.286.

Ochoa, M.L. y B. Monroy (1997). "¿Pueden Contribuir las Redes a la Modernización de la Escuela? La Red de Investigaciones Rurales del Tolima (Colombia). Perspectivas- Ciento Dos; Revista Trimestral de Educación Comparada; Vol.XXVII; No.2; pp.229-308. UNESCO.

ONU (1990). "Food for Thought - Nutrition and School Performance". SCN News, No.5.

OREALC (1990). "Participación de las Organizaciones de Docentes en la Calidad de la Educación". Santiago, Chile.

Pangle, L.S. y T. Pangle (1993). "The Learning of Liberty. The Educational Ideas of the American Founders". Kansas University Press, U.S.A.

Pérez de Cuellar, Javier, et al (1996). "Nuestra Diversidad Creativa". Informe de la Comisión Mundial de Cultura y Desarrollo de UNESCO. Paris, France.

Pogrow, Stanley (1996). "Reforming the Wannabe Reformers. Why Education Reforms Almost Always End Up Making Things Worse". Kappan; Vol.77; No.10; pp.656-663.

Pollit, E. (1990). "Malnutrition and Infection in the Classroom". UNESCO. París, Francia. Editado por Pollit, Haas y Levitsky (1989). "International Conference on Iron Deficiency and Behavioral Development". The American Journal of Clinical Nutrition; No.3.

Pradhan, Sanjay (1997). "Aumentar la Capacidad Institucional del Estado". Finanzas & Desarrollo; Vol.34; No.3; pp.24-31. World Bank.

Pratt, D. (1986). "On the Merits of Multigrade Classrooms". Research in Rural Education; Vol.3, No.3; pp.111-115.

Prawda, Juan (1993). "Educational Decentralization in Latin America: Lessons Learned." International Journal of Educational Development; Vol.13; No.3; pp.253-264.

Psacharopoulos, G., J. Valenzuela y M. Arends (1993). "Teachers' Salaries in Latin América: A Comparative Analysis". Working paper No. 1086, Technical Department, Lain America and the Caribbean, The World Bank.

Psacharopoulos, G., J.P. Tan y E. Jimenez (1986). "Financing Education in Developing Countries: An Exploration of Policy Options". World Bank. Washington D.C., U.S.A.

Psacharopoulos, G. C. Rojas y E. Velez. (1994). "Achievement Evaluation of Colombia's Escuela Nueva: Is Multigrade the Answer?". Comparative Education Review.

Psacharopoulos, G. et al (1997). "Poverty and Income Distribution in Latin America. The Story of the 1980's". Technical Paper No. 351 of the World Bank. Washington D.C., U.S.A.

Purves, A. (1973). "Literature Education in Ten Countries". Almqvist and Wiksell. New York, U.S.A.

Puryear, Jeffrey (1996). "La Educación en América Latina: Problemas y Desafíos". Documentos de PREAL; No.7.

Puryear, Jeffrey (1997). Comments on "Education in the Americas: Quality, Equity and Citizenship" in the OAS - October 28th Seminar; Washington D.C., U.S.A.

Rama, German (1986). "Estilos Educacionais". Dermeval, S. et al Editores. Editora Autores Associados y Cortez Editora. Brasil.

Rama, German (1992). "¿Aprenden los Estudiantes en el Ciclo Básico de Educación Media?". CEPAL. Montevideo, Uruguay.

Raudenbush, S.W., S. Eamsukkawat, I. Di-Ibor, M. Kamali y W. Taoklam (1992). "On- the-job Improvements in Teacher Competence. Policy Options and their Effects on Teaching and Learning in Thailand". Policy Research Working Papers No.889 of Education and Employment of the World Bank.

Ravitch, Diane (1996). "Estándares Nacionales en Educación". Documentos de PREAL.

Reimers, F. (1994). "Educational Finance in Latin America". J. Puryear y J.J. Brunner Editores. "Education, Equity and Economic Competitiveness in the Americas: An Inter-American Dialogue Project";Vol.I; pp.29-65. Key Issues. OAS. Washington D.C., U.S.A.

Reisberg, Liz (1997). "New Paradigms in Ecuador". The Boston College Center for International Higher Education; No.8; pp.14 and 15. U.S.A.

Roda M. Becher (1984). "Parental Involvement: A Review of Research and Principles of Succesful Practice". National Institute of Education. Washington D.C., U.S.A.

Rodríguez, N. (1990). "La Educación Básica en Venezuela". Escuela de Educación de la Universidad Central. Caracas, Venezuela.

Rojas, E. (1995). "Factores Condicionantes del Nivel de Escolarización de Guatemala". Boletín No. 37 del Proyecto Principal de Educación en América Latina y el Caribe, pp.53-61.

Rojas, E. y Schiefelbein, E. (1997). "Factores Condicionantes del Nivel de Escolarización en Siete Países de América Latina".

Rojas, Patricio (1997). "Determinantes del Crecimiento en Chile". Centros de Estudios Públicos, Puntos de Referencia; No. 194. Santiago, Chile.

Rose, L. y D. Rapp (1997). "The Future of the Public Schools. A Public Discussion". Kappan; Vol.78; No.10; pp.765-768.

Sander, Benno (1990). "Educación, Administración y Calidad de Vida". Editorial Santillana. Buenos Aires, Argentina.

Sander, Benno (1996a). "Educational Management in Latin America. Construction and Reconstruction of Knowledge". INTERAMER 57; Educational Series de OEA. Washington D.C., U.S.A.

Sander, Benno (1996b). "Nuevas Tendencias en la Gestión Educativa: Democracia y Calidad". Revista Interamericana de Desarrollo Educativo; Año XL; No.123-125; pp.29-40. Washington D.C., U.S.A.

Schaeffer, Sheldon (1997). "Local Support to School Management: The Key to Successful Education Reform". Documento presentado en el Regional Seminar on Identifying Issues and Priorities on Education Management, Policy, and Information by UNESCO. Bangkok, Thailand.

Schiefelbein, E. (1994). "Estrategias para Elevar la Calidad de la Educación". Revista Interamericana de Desarrollo Educativo of the OAS; No.117. Washington D.C., U.S.A.

Schiefelbein, E. (1995). "La Reforma Educativa en América Latina y el Caribe: Un Programa de Acción". Boletín No.37 del Proyecto Principal de Educación of UNESCO. Santiago, Chile.

Schiefelbein, E. (1996). "The Chilean Academic Profession: Six Policy Issues" in "The International Academic Profession. Portraits of Fourteen Countries" edited by P.G. Altbach. The Carnegie Foundation for the Advancement of Teaching. Princeton, New Jersey.

Schiefelbein, E. (1997a). "Mejorar la Estadística es un Requisito para el Desarrollo de la Educación en América Latina. En Busca del Eslabón más Débil". CIDE. Santiago, Chile.

Schiefelbein, E. (1997b). "School-Related Economic Incentives in Latin America: Reducing Drop-Out and Repetition and Combating Child Labor". Innocenti Occasional Papers; Child Rights Series by UNICEF; No.12. Florence, Italy.

Schiefelbein, E. (1997c). "La Gestión de una Escuela Adecuada para el Siglo XXI". Revista de la Confederación Interaméricana de Educación Católica-CIEC; No.131; pp.9-28. Santafé de Bogotá, Colombia.

Schiefelbein, E., C. Braslavsky, B.A. Gatti y P. Ferrs (1994). "Characteristics of the Teaching Profession and the Quality of Education in Latin America". No.34 del Proyecto Principal de la Educación para América Latina y el Caribe. UNESCO. Santiago, Chile.

Schiefelbein, E., y C. Clavel (1977). "Stability Over Time of Educational Input-Output Relationships". Programa ECIEL del PIIE-Depto. de Economía de la Universidad de Chile. Santiago, Chile.

Schiefelbein, E. et al (1994). "Las Características de la Profesión de Maestro y la Calidad de la Educación en América Latina". Boletín No.34 del Proyecto Principal de Educación de UNESCO. Santiago, Chile.

Schiefelbein, E. y J. Farrell (1982). "Eight Years of Their Lives". IDRC. Ottawa, Canada

Schiefelbein, E. y S. Peruzzi (1991). "Oportunidades de Educación para la Mujer: El Caso de América Latina y el Caribe". Proyecto Principal de Educación; Boletín No.37 del Proyecto Principal de Educación de UNESCO. Santiago, Chile.

Schiefelbein, E. y J.C. Tedesco (1995). "Una Nueva Oportunidad. El Rol de la

Educación en el Desarrollo de América Latina". Editorial Santillana; Aula XXI. Buenos Aires, Argentina.

Schiefelbein, E. y L. Wolff (1995). "Repetición y Rendimiento Inadecuado en Escuelas Primarias de América Latina: Magnitudes, Causas, Relaciones y Estrategias". Proyecto Principal de la Educación en América Latina y el Caribe No. 24 de UNESCO/OREALC. Santiago, Chile.

Schiefelbein, E., L. Wolff y P. Schiefelbein (1997). "La Baja Formación de los Planificadores de la Educación de América Latina Limita el Mejoramiento del Sector".

Schiefelbein, Paulina (1995). "Eigenschaften und Bewertung der Berufsakademien in Deutschland am Beispiel Baden-Würtemberg sowie die Übertragungsmöglichkeiten auf Chile". Zentralstelle für gewerbliche Berufsförderung. Mannheim, Alemania.

Schultze-Kraft, Markus (1997). "Educational Policy and Reform in the Aftermath of Structural Adjustment in Latin America with Special Reference to the Cases of Chile, Nicaragua and Venezuela". St. Anthony's College. Oxford, Inglaterra.

Secretaría de Educación Pública (1996). "Programa de Desarrollo Educativo 1995-2000". Ciudad de México, México.

Slavin, Robert (1997). "Salas de Clase Efectivas, Escuelas Efectivas: Plataforma de Investigación para una Reforma Educativa en América Latina". Documentos de PREAL.

Slavin, R., N. Madden y R. Stevens (1990). "Cooperative Learning Models for the 3 R's". Educational Leadership.

Souza, Paulo Renato (1997). "Resolusao No.03, de 04 de Marco de 1997". Ministerio da Educacao e do Desporto Fundo Nacional de Desenvolvimento da Educacao Conselho Deliberativo. Brasilia, Brasil.

Steward, Lucy (1996). "Factors Affecting Girls' Education in the Caribbean. UN-ILO. Gender, Educational Development. Turin, Italy.

Stromquist, N. (1996). "Gender Dimensions in Education in Latin America". OAS. Washington D.C., U.S.A.

Stunard, E. Arthur (1997). "The Chicago Forum at the DeVry Institute of Technology. Results of the Forum". Kappan; Vol.78; No.10; pp.774-776.

Swartzman, S. (1996). "América Latina: Universidades en Transición". OAS. pp.120-122. Washington D.C., U.S.A.

Swope, J., F. Celedón y M. Latorre (1997). "Evaluación de la Eficiencia Interna de las Escuelas Primarias de Fe y Alegría". Informe Preliminar. CIDE. Santiago, Chile.

Tedesco, Juan Carlos (1987). "El Desafío Educativo: Calidad y Democracia". GEL. Buenos Aires, Argentina.

Tedesco, Juan Carlos (1990). "La Educación Intercultural Bilingüe en América Latina". Prospects; No.75. Paris, France.

Tedesco, Juan Carlos (1996). Editorial de la Revista Perspectivas; Vol.XXVI; No.4; pp.673-678. Bellegarde, France.

Tenti Fanfani, E. (1997). "Escuela y Cotidianeidad". Conferencia pronunciada en el marco de las Jornadas sobre Educación y Vida Cotidiana de la Feria del Libro en su edición de 1997. Argentina.

Ter-Minassian, Teresa (1997). "Descentralización del Estado". Finanzas & Desarrollo; Vol.34; No.3; pp.32-35. World Bank.

Thesing, Josef (1997). "Democracy in Latin America. Political Stability and Social Conflict". Development and Cooperation de DSE; No.4; pp.17-19.

Thomas, C. y C. Shaw (1992). "Issues in the Development of Multigrade Schools". Technical Paper No.172 of the World Bank. Washington D.C., U.S.A.

Thurow, Lester C. (1996). "El Futuro del Capitalismo. Cómo la Economía de Hoy Determina el Mundo de Mañana". Javier Vergara, Editor. Buenos Aires, Argentina.

Tokman, V. (1995). "El Problema de la Competitividad en América Latina y el Caribe". Trabajo en Revista de la OIT; No.11.

Tsang, Mun C. (1994). "Cost Analysis of Educational Inclusion of Marginalized Populations". Fundamentals of Education Planning; No.48. International Institute of Education Planning. UNESCO. Paris, France.

UNESCO (1968, 1978, 1979, 1994 y 1995a). "Statistical Yearbook". Paris, France.

UNESCO (1991). "World Education Report 1991". Paris, France.

UNESCO (1995b). "Working with Street Children. Selected Case-Studies from Africa, Asia and Latin America". Publishing/ICCB.

UNESCO (1996a). "Educación, Democracia, Paz y Desarrollo". Recomendación de MINEDLAC VII. Séptima Reunión de Ministros de Educación de América Latina y el Caribe. Santiago, Chile.

UNESCO (1996b). "Situación Educativa de América Latina y el Caribe, 1980-1994". Proyecto Principal de la Educación. Santiago, Chile.

UNESCO/MINEDLAC (1996). "Educación para el Desarrollo y la Paz: Valorar la

Diversidad y Aumentar las Oportunidades de Aprendizaje Personalizado y Grupal". Sexta Reunión del Comité Regional Intergubernamental del Proyecto Principal de Educación en ALC. Kingston, Jamaica.

UNESCO/OREALC (1992). "Situación Educativa de América Latina y el Caribe, 1980-1989". Santiago, Chile.

UNESCO/OREALC (1994). "Medición de la Calidad de la Educación Básica. Vol.III: Resultado de Siete Países". Santiago, Chile.

UNESCO/OREALC (1996). "La Profesión Docente y el Desarrollo de la Educación en América Latina y el Caribe". Boletín No.41 del Proyecto Principal de Educación de UNESCO; pp.5-6. Santiago, Chile.

UNESCO/OREALC (1997). "La Educación Secundaria en América Latina y el Caribe: Objetivos, Expansión, Demandas y Modalidades". Boletín No.42 del Proyecto Principal de Educación de UNESCO; pp.5-6. Santiago, Chile.

UNESCO/SIRI (1990). "Situación Educativa de América Latina y el Caribe, 1980-1987. Santiago, Chile.

UNESCO/UNICEF (1993a). "Guías de Aprendizaje para una Escuela Deseable". Santiago, Chile.

UNESCO/UNICEF (1993b). "Adaptación de Guías de Aprendizaje: dos Casos Exitosos". Santiago, Chile.

UNESCO/UNICEF (1993c). "Nuevas Guías de Aprendizaje para una Escuela Deseable". Santiago, Chile.

UNESCO/UNICEF/CIDE (1995). "Guías de Aprendizaje para Iniciación a la Lecto-escritura, 1o y 2o Grados". Santiago, Chile.

Veenman, Simon (1995). "Cognitive and Noncognitive Effects of Multigrade and Multi-age Classes: A Best Evidence Synthesis". Review of Educational Research; Vol.65, No.4; pp.319-321.

Vera, R. (1984). "La Lógica y la Experiencia en Talleres de Educadores". PIIE. Santiago, Chile.

Warwick, D.P., H. Naunman y F. Reimers (1991). "Teacher Training and Schooling Effectiveness in Pakistan". Development Discussion Papers No.397, Educational Series, HID. Harvard University, U.S.A.

Weiss, E. (1992). "La Calidad de la Educación Básica: Investigación y Política Educativa". Instituto Politécnico Nacional. Congreso Internacional sobre Calidad de la Educación, Universidad de las Américas. Puebla, México.

Wilson, David N. (1997). "Reforma de la Educación Vocacional y Técnica en América Latina;" Documentos de PREAL.

Winkler, Donald R. (1990). "Higher Education in Latin América: Issues of Efficiency and Equity. World Bank Discussion Papers 77. World Bank. Washington D.C., U.S.A.

Winkler, Donald (1997). "Descentralización de la Educación: Participación en el Manejo de las Escuelas al Nivel Local". Grupo de Desarrollo Humano de la Región de América Latina y el Caribe del World Bank. Informe No.8.

Wise, A.E. y J. Leibbrand (1996). "Profession-Based Accreditation. A Foundation for High-Quality Teaching". Kappan; Vol.78; No.3; p.202.

Wolff, L., E. Schiefelbein y J. Valenzuela (1993). "Improving the Quality of Primary Education in Latin América: Towards the 21st Century". Latin América and the Caribbean Technical Department. Regional Studies Program Report No.28 del World Bank. Washington, D.C., U.S.A.

World Bank (1992). "Access, Quality and Efficiency in Caribbean Education. A Regional Study". Washington D.C., U.S.A.

World Bank (1996). "World Development Report 1996. From Plan to Market". The International Bank for Reconstruction and Development. Washington D.C., U.S.A.

Yentzen, E. (1997). "El Arte de Preguntar". Correo de la Innovación; Año.1; No.3; pp.74-75.

Ziderman, A. y D. Albrecht (1995). "Financing Universities in Developing Countries". The Standford Series on Education and Public Policy; No. 16. World Bank. Washington D.C., U.S.A.