BULLETIN

THE MAJOR PROJECT OF EDUCATION

In Latin America
and the Caribbean

40

THE MAJOR PROJECT OF EDUCATION
in Latin America and the Caribbean

Summary

BULLETIN 40

Presentation

The Ministers of Education of Latin America and the Caribbean ratified at Kingston, Jamaica, their political decision to face the challenge of implementing in their respective countries, a sound education –understood as a synthesis of knowledge, understanding, the ability to do, and the capacity to live peacefully with others– as a means to overcoming the poverty and inequity plaguing millions of children, men and women in the region.

In a transcendental recommendation –included herein– the region's highest educational authorities warned that the fulfillment of this requirement, was the only path that would lead to a true democracy, development and peace.

The encounters were the Seventh Meeting of Ministers of Education for Latin America and the Caribbean, and the Sixth Meeting of the Intergovernmental Regional Committee of the Major Project of Education in Latin America and the Caribbean.

There was general agreement among top educational authorities of Latin American and the Caribbean, in the sense that providing the type of quality education that is required, entails the confrontation of challenges that admit no delay, and the definition of new tasks for the following stage of educational development. These challenges point mostly to basic education, given its social impact, although an analysis of secondary and higher education reveals that these areas of education could greatly benefit from reforms.

In his opening speech, Federico Mayor, UNESCO's Director General, reiterated that in order to achieve optimum economic growth and a substantial reduction of poverty levels, investments must be funneled towards education, particularly basic education, adding that "current poverty levels, mass migrations, frustration, the violent behaviour of those living in sub-human conditions, constitute tremendous threats". Following a reference to the effect that throughout history, teachers and education have played an essential role in the evolution towards a republican life-style in Latin America and the Caribbean, UNESCO's Director vaticinated that permanent education for all, including professional enhancement initiatives for teachers, looms as the task of the future, provided the countries of the region are willing to offer their people access to the knowledge and wisdom necessary to infuse into the production models the longed for social equity.

The commitment made by the Ministers of Education, aims at achieving a better educational level and more relevant learning as a means of attaining the social changes demanded by workers, public servants, social leaders, academicians, parents, and society at large. This, as explicitly set forth in the Recommendation, acknowledging that if education is to fulfill this function, social development must necessarily stem from a new concept of humanitarianism that unfolds along three main axes: the universal exercise of citizens' rights, no exceptions; the total predominance of modernity codes –understood as the basic languages and skills to participate in public and productive life– and, the creation of a profound ethical and moral attitude based on self-respect and respect for others, which implies acknowledging their legitimacy.

In view of the fact that currently universal access to primary education is a near reality, and that the number of self-confessed illiterates has diminished, the meeting's working document acknowledges the difficulties behind raising the quality of the learning processes, due to the

cultural change it involves which, in turn, requires overhauling the concepts of "education and knowledge". Beyond its present meaning, the task lying ahead calls for incorporating into these concepts the ability to understand what has been learned, to develop high level intellectual skills for everyday living, and to learn to live with others, in harmony.

The large number of representatives attending this Meeting, prompted UNESCO's Assistant Director of Education to remark that "no other regional conference on education has ever before gathered so many top level representatives. This encounter will go on record as that event where the Ministers themselves took on the intellectual responsibility of the Recommendations word by word, as well as that of the projects they involved".

Along with the Recommendation, we have included the document Education for peace and development: valuing diversity and increasing individual and group learning opportunities. This work served as the basis for discussion at this encounter.

One of the demands imposed by this new stage of educational development, has to do with the need to be increasingly better informed about the educational process. This means not only counting on reliable information but also having the opportunity to experience learning which is relevant to every national reality.

Along these lines, Ubiratan D'Ambrosio's contribution to the Bulletin, presents us with reflections on performance evaluation of mathematics students, which the author propounds as valid for the school curriculum as a whole. Interestingly, student performance evaluation is conveyed as a judgment imposed by those who will later be blamed for their eventual failure, the teacher, without duly noting the fact that if students are victims to the inefficiency of the system, teachers are also casualties.

In turn, Marilyn Atherley describes the obstacles confronted within the educational process, in light of the fact that teacher training programmes do not include the kind of information that will allow them to gain insight into the way students think, feel and respond to the demands placed on them by the educational system.

Lastly, we have included a summary of the five year review of the programme Education for All in Latin America. The work is the result of the analysis of national reports submitted by Chile, Colombia, Costa Rica, Guatemala, Honduras, Mexico, Nicaragua and Panama, and the discussions held at the Regional Seminar Educational Policy sponsored by UNESCO and UNFPA, in January 1996.

As is customary, the most recent Regional Office of Education publications, are included in the present issue.

EDUCATION, DEMOCRACY, PEACE AND DEVELOPMENT
MINEDLAC VII Recommendation*

We, Ministers of Education of Latin America and the Caribbean, meeting in the city of Kingston in Jamaica, with the intention of fostering mutual knowledge among our peoples through education and progressing towards fuller integration in the cultural sphere,

1. Reaffirm the pledges made by the governments of the region when they launched the Major Project in the Field of Education for Latin America and the Caribbean in 1979. Those pledges have made possible some progress towards overcoming illiteracy, providing universal access to basic education and improving the quality of education. We also acknowledge the contributions of the sessions of the Intergovernmental Committee, and in particular the one held in Guatemala City (1989), where it was urged that education once again adopt a suitably long-term approach through broad social pacts and the development of State policies; the Quito session (1991), where the need was established to change the organization of education systems through new styles of management; and the Santiago session (1993), which stressed the need to strengthen the role of the school and to make changes to the methods of teaching and management used in schools.

2. We note the major advances resulting from educational reform, the impetus that has been given to these processes in the countries of the region and the renewed support of international and horizontal co-operation in these processes. Nevertheless, we stress the need to maintain as priorities the promotion of literacy, which today is needed more than ever for practical purposes, higher retention rates in basic education for the population as a whole, and the achievement of greater equity in access to quality education.

3. We recognize that democracy, peace and development have become crucial factors in the evolving pattern of societies. There can be no sustainable development without peace, no peace without development, and neither peace nor development without democracy. Indeed, none of this can be fully achieved unless we can guarantee the right of all children to quality education. The dynamic interaction of these three factors provides the context in which citizens' lives unfold. Education systems must be flexible in order to respond to these new conditions in such a way as to ensure that democracy, peace and development

---

* Recommendation of the Seventh meeting of Ministers of Education of Latin America and the Caribbean (MINEDLAC VII), Kingston, Jamaica, 13-17 May 1996.

are the foundation of the new educational methods. Those methods are based on the assumption that individuals, acting democratically, must participate and be actors in their own development; acknowledge the identity and the rights of others and show solidarity with them in their conduct; make use of the skills acquired in the education system and take part in a voluntary and responsible manner in the transformation of patterns of production and social structures that leads to development.

4. We are convinced that peace is not merely the absence of war. Peace is the consequence of justice and is the result of the active participation of all citizens in the fruits of economic growth and in policy decisions. We recognize that the school is an ideal place in which to give boys, girls and young people a grounding in the exercise their rights and duties through the kind of interactions and practices that will contribute to democracy, peace and development, on the basis of which individuals can play an active part in society. Hence the importance of sustained action by the governments of the region, with the co-operation of international organizations, in order to ensure that education is a means of fostering a culture conducive to democracy and peace.

5. We recognize that in order for the school to fulfil that role it must first be agreed that the process of social development should be founded on ethical principles and on an approach imbued with a new form of humanism obeying three rules : (i) the exercise of citizenship by all inhabitants, without exception; (ii) full mastery of the codes of modernity, by which we mean the basic linguistic abilities and skills needed to take part in public life and in production; and (iii) the development of an ethical and moral attitude of respect for oneself and for others, entailing acceptance of others as individuals with rights of their own.

We undertake to observe the following guidelines in drawing up and implementing our national education policies.

I. Education as State policy

6. In order to guarantee continuity in national policies, it is necessary to establish consensus mechanisms designed to guarantee more effective participation by civil society, including groups such as politicians, entrepreneurs, trade unions, family organizations and other established social actors in the formulation of medium and long-term national education strategies.

7. Meanwhile, the needs for educational development which have not yet been satisfied call for urgent measures which should be harmonized with the medium and long-term action.

8. Besides setting up consensus-building mechanisms which guarantee the participation of organized social actors, it is important and urgent to sensitize and mobilize public opinion with a view to giving greater political priority to educational changes.

II. Improvement of management capabilities: greater leadership within the local educational community and a more strategic role for central government

9. Within the new context of decentralized education systems, the objectives of quality and impartiality will require the State to strengthen its own role, thereby taking responsibility for ensuring that the basic needs of everyone are met, that equal opportunities exist for enrolling and remaining in the education system and that it has the ability to propose and manage these changes.

10. Creating conditions for achieving an appropriate degree of autonomy in educational institutions. One of the important factors in achieving quality education is that schools must be better equipped professionally so that they can gradually take charge of their own management. That autonomy must be accompanied by increased professionalism, mechanisms for accountability and the gradual attainment of financial independence in order to preserve the idea of a system, to achieve impartiality and to avert the danger of anomie and general fragmentation.

11. Making provision for the training and continuous upgrading of heads of educational institutions and for defining and acknowledging their responsibilities as leaders.

12. Developing measures which favour the participation of families in management and the strengthening of schools. Procedures which allow the community to participate in the management, planning and implementation of institutional school projects and school programmes must be developed or strengthened. Other educational strategies, such as non-formal and continuing education, which are part of an innovative trend and which may facilitate the current processes of change in education, could also be considered.

13. Creating structural conditions for the development of educational projects for schools. Within the framework of curriculum reform aimed at achieving decentralization and flexibility, the educational community must be empowered to participate in developing a range of educational projects based on the needs of each institution.

14. Optimizing and wherever possible increasing the duration of the school timetable to improve learning opportunities. To improve educational standards, the school term as well as the school day must be extended, the administrative activities of teachers must be streamlined, and teaching-learning activities must be better organized to meet the various

needs of pupils and exclude activities that are irrelevant to the achievement of in-school or out-of-school objectives.

III. Priority to all-round learning and training

15. Learning to develop skills with a strong ethical component in a world of expanding information, change and fluidity, has become a condition of survival and of personal and social development. This presupposes : effective skills in accessing, organizing, producing, interpreting and analyzing information: oral and written proficiency in the mother tongue, the majority national language of communication, and other conventional forms of representation; access to and mastery of information technologies; proficiency in basic science and mathematics; and skills connected with social interaction and integration and emotional balance.

16. Supplementing earlier learning by developing a fundamental scientific and technological culture from the basic education stage onwards, and by establishing as transverse objectives in education, development of the capacity to know oneself, to establish relations and interactions with others based on solidarity, while at the same time showing respect for the natural and cultural environment.

IV. Democratization and the culture of peace in education: putting fundamental human values on the agenda of educational transformation

17. To democratize education is to guarantee both its quality and effective access to it. For this purpose, it is necessary to define compulsory and free education as a pledge between the state and society to ensure that all people attain the necessary level of skills and acquire an acceptable degree of autonomy in learning.

18. Developing a strategy conducive to a culture of peace by encouraging exemplary teaching methods and patterns of interpersonal relations in school. Directing the selection and processing of educational content towards peace in its practical implications, emphasizing, inter alia, the values of tolerance, understanding and acceptance of differences, co-operation, self-respect and respect for others, and the peaceful and political settlement of conflicts.

19. Enhancing conditions and strategies that foster the development of schools capable of catering to children with special needs or learning difficulties due to a variety of causes, such as physical disability, inadequate teaching or schooling, and social exclusions. Schools that operate on the principle of integration make for equality of opportunity, provide a more personal education, encourage solidarity and co-operation among pupils, improve the quality of teaching and render the entire education system more effective.

20. Adequate educational provision for indigenous populations should ensure that there is equity, democracy and the shaping of national identities with a firmly multi-ethnic and multicultural outlook. Governments must face up to the twofold challenge of expanding educational services efficiently, while adapting their organization to the distinctive ways of life and work of indigenous populations, and at the same time creating flexibility in the curriculum so that it includes the mother tongue and educational content that is relevant to the cultures, needs and aspirations of the indigenous peoples. Simultaneously, it will be necessary to broaden opportunities for learning the official language as a second language facilitating access to a modern science-and-technology-based culture. The national curriculum must promote the development of values which are non-discriminatory and anti-racist, and attitudes and appreciation for the past and present contributions made by ethnic and cultural diversity to national identity.

V. Education closer to society: links with the media, the world of work and the family

21. Interacting with the media. For the immediate future, use of the media in education will have to go beyond their limited status as channels of information. They must become true links between institutions and persons that will enable knowledge to be built up through exchange, dialogue and discussion. Recognizing that media such as commercial television, the press, radio and cinema are cultural products of which critical use may be made in the classroom to bring in structured elements of outside reality as the possible basis for a new form of curriculum management.

22. Bringing education more fully into contact with the world of work and production. It is desirable: (i) to emphasize the role of general education as a prerequisite for vocational qualification; (ii) to bring bodies concerned with work into association with vocational training and qualification systems and with non-formal education; (iii) to view work not as a succession of tasks but as an act of broad participation in economic and social life based on a higher standard of education and vocational training for the unemployed and under-employed; (iv) to maintain the ethical dimension of work in school, out-of-school and non-formal syllabuses and curricula; (v) to accept suitable professionals in a variety of specialist fields as teachers; (vi) to recognize the role of education in the development of entrepreneurial capacity. This can be achieved through appropriate curricula and teacher-training programmes that emphasize participatory and activity-based approaches.

23. Improving the partnership between education and the family. It is particularly important to establish a closer partnership between families and educational institutions, beginning with the expansion of quality early childhood education programmes. Educational institutions and systems need to be sensitive to, and make effective use of, the cultural environ-

ment provided by the family, so as to give children and young people a proper grounding in their basic skills. For this purpose, it is also desirable to step up the renewal of education policies, with investment in continuing training and education for parents, particularly mothers, as a determining factor in the education of their children.

24. Ensuring equality of educational opportunities for men, women, boys and girls. It is important that educational planning, programming and delivery procedures be gender sensitive, allowing for equity in access and achievement. In this context, teachers should understand their role in creating a learning atmosphere which allows for positive self-identification and good relationships between the genders.

VI. Evaluation and measurement of the quality of education: taking responsibility for educational results

25. Using appropriate criteria and procedures so that an evaluation can be made not only of the results but also of the processes undergone by students while in developing the various types of skills. Now that in many countries education systems are in a process of transition from quantitative to qualitative expansion, it is necessary to develop both qualitative and quantitative, evaluation indicators.

26. Carrying out national assessments to determine the level of skills attained, establishing assessment systems and improving the methods and instruments used.

27. Developing comparative assessments at different levels. Establishing machinery for regional analysis of school results in order to carry out studies of attainments and performance factors at various stages in the educational processes, in different types of schools and in a range of contexts.

28. Developing systems of indicators for the performance evaluation of schools that include not only factors such as the attainments of pupils but also others that have to do with the performance of the institution.

29. Devising ways of making better use of information. Adopting methods of communicating the results of assessments of educational quality that will enable ministries, schools, parents and educational communities to adopt and implement measures to improve results, together with better arrangements whereby society can monitor the performance of schools.

VII. Performance-linked professional upgrading of teachers

30. Professionalizing and broadening the outlook of educators. The professionalization of teachers involves the ability to address the specific learning needs of each pupil and assume responsibility for the results. This is a challenge that has to be faced in the difficult conditions under which most teachers in the region live and work. It consequently calls for action on the standard-setting, technical, financial and administrative fronts. It also has social and cultural implications and requires public policies, the participation of the actors of civil society and a leading role for educators themselves. Enhancing the status of teachers will be achieved by strengthening their professional body of knowledge so that their authority is based on their ability to solve the educational problems of the population.

31. Encouraging the development of a positive social image of the teaching career. This means that efforts of organization and social communication must be backed by consistent measures to improve teachers' work situation. Bids to increase their remuneration must be directly linked to their in-service training and fundamentally related to their performance. Appropriate arrangements will be encouraged to permit relations between governments, administrators and the teachers themselves and their representative organizations, so that all parties are given a voice and a two-way communication is set up between the teacher and society.

32. Designing long-term training plans for in-service teachers. The training of individual teachers does not produce significant and sustained changes and innovations in the educational programme that schools offer. To achieve that, the training procedure intended for the school as a whole must be upgraded in the light of the needs that arise as it implements its educational project.

33. Developing better systems for the recruitment of teachers and comprehensive certification criteria which take account of the professional standards and the personal qualities that every good teacher must possess in order to meet the challenges of educational transformation.

VIII. Lifelong education to promote continuous learning

34. In order to contribute to democratization, arrangements must be made to incorporate adult and continuing education in the total education system in order to enable young people and adults to cope successfully with the demands of a society in constant flux and to lead a full and healthy life.

35. Determining overall national literacy strategies to break the vicious cycle of poverty. Overcoming absolute and functional illiteracy through improved learning of reading, writing

and basic arithmetic by all pupils, giving priority to the most underprivileged groups, and developing specific strategies for indigenous populations and for women in particular, including innovative programmes for teaching the official language and the mother tongue.

36. Designing specific strategies to improve educational supply for young people needing formal and continuing education. In particular, improving the present supply of evening classes and night schools, incorporating distance and part-time attendance options, self-instructional material and activities of non-formal continuing education and acquisition of skills; expanding the present availability of secondary education for these young people and fostering greater citizen participation and better job opportunities. Renewing agreements between State entities and organizations of civil society concerned with formal and non-formal education programmes, thereby creating closer partnerships between them.

37. Acknowledging the difficulties faced by those young people who are excluded and deprived of the opportunities available to those who have been able to complete their educational career. The signatories to this recommendation undertake to spearhead activities that will guarantee their economic, social and cultural reintegration under the best possible conditions, thereby ensuring their participation in the construction of a future of peace and tolerance in our region.

38. Improving and strengthening teacher-training strategies for the education of young people and adults. Co-ordinating with training institutions for the incorporation of methods and content in popular and community education experiments and innovations.

39. Recognizing that migration from one country to another, whether for a predetermined or an indefinite period of time, gives rise to challenges and difficulties for the education of children and young people from migrating families. We reiterate our conviction that the rights of those children and young people to basic education must be fulfilled irrespective of the conditions under which their family migrated. The education of migrant children will be promoted through bilateral agreements conferring recognition on studies already completed or through support services organized by the home country.

IX. Higher education: a crucial factor in the development of the region

40. Prominent among the problems currently faced by higher education are the poor quality of many syllabuses and the inappropriate response of the various institutions to the demands of economic development and the labour market and the requirements of scientific and technological development.

41. Promoting policies which strengthen the capacity of higher education institutions to fulfil, to the highest standards of excellence, their mission as shapers of human resources,

and to become focal points of scientific and technological research in close co-operation with the productive sectors.

42. Stepping up, in conjunction with other social actors, efforts to achieve an authentic reform of higher education, by exploring new forms of management and funding, with greater efficiency and equity.

43. Expedite changes instrumental in converting the universities and other higher education institutions into catalysts of improvement in the quality of the lower educational levels, with special emphasis on curricula and the initial training of teachers.

X.   Funding and allocation of resources

44. Despite the fact that governments have, by and large, increased their education budgets, these remain inadequate when measured against the place education must occupy in national development. Financial resources must therefore continue to be increased to cope with changes in education, while being used more efficiently both at the school level and throughout the system.

45. It is also necessary to reiterate the commitment that places top priority on guaranteeing basic education for all, with educational subsidies being channelled to the poorest sectors.

We recommend that regional and international bodies take account of the foregoing ten sections, and we request them to:

(i)   Promote and facilitate international co-operation in the field of education, so as to ensure that the external funding processes which have been designed to improve it are effective.

(ii)   Continue to work with the international co-operation agencies in order to promote the pooling of information and successful experiences.

(iii) Involve the networks of the Major Project and other networks that are active in the field of education in a set of co-operative activities aimed at improving education.

(iv)   Provide the countries of the region with the technical assistance required for drafting the background documents they will need in order to attract external funding.

(v)   Support ministries of education to provide updated national information that can assist them in the performance of their functions, and give more and better information to countries on their role in formulating programmes and projects for the improvement of education.

(vi)   Create a system for the exchange of information among international organizations, the countries of the region and their education sectors by utilising the new communication media now available, with a view to achieving more transparent and effective co-operation. Choose priorities among the various subjects of information exchange: (a) strategic experiments at national level for the improvement of educational quality and equity; (b) appropriate programmes for the training of teachers and headteachers; (c) improvement of educational statistics; (d) pooling of information on the assessment of educational quality.

(vii)   Prepare a report at the next meeting of the Intergovernmental Committee for the Major Project on the results of the drive to improve international co-operation.

(viii) Prepare another report on the State of Education in Latin America and the Caribbean 1980-1997 to facilitate an overall assessment of the results of the Major Project in the Field of Education until its completion in the year 2000.

46.   Subregional agreements expressing regional integration, constitute valuable opportunities for incorporating those elements of culture and education whose common roots and diverse experiences are the guarantee better understanding and solidarity for among our peoples. We shall thus be able to reinforce the move towards integration at the economic and commercial levels and to meet the challenges of the future. "We therefore support the initiative of the Latin American Parliament and of UNESCO to carry forward and to co-ordinate a Plan of Action for the development and integration of Latin America and the Caribbean".

47. We propose that UNESCO and the countries of the region distribute this Recommendation widely in the region by means of publications, technical meetings and other events; we also urge the Chairperson of the Intergovernmental Committee to present this Recommendation in his report to the General Conference of UNESCO at its twenty-ninth session; we consider this Recommendation to be the contribution of Latin America and the Caribbean region to the preparations for the forty-fifth session of the International Conference on Education, to be held in Geneva in October this year, whose main theme will be strengthening of the role of teachers in a changing world.

48. The Conference requests the Chairperson of the Intergovernmental Committee to make representations to Heads of State and Government and requests the latter to con-

tinue to give support and the necessary priority to education and to renew their pledge to maintain continuity in national education policies. The Conference expresses the wish that, at future meetings, Heads of State and Government may review the progress of these regional undertakings and assess their achievements at every stage.

The Conference invites the Director-General of UNESCO to establish, in consultation with the Committee, a group of experts to evaluate the Major Project in the Field of Education. The Committee would submit its findings and recommendations to the Director-General for inclusion in the agenda of PROMEDLAC VII.

The Conference further invites the Governments of Latin America and the Caribbean, countries of other regions, UN agencies, intergovernmental and non-governmental special-ized organizations, international and regional banks and other funding agencies to co-operate in activities relating to the Major Project in the Field of Education in Latin America and the Caribbean, and calls upon the political will of the national authorities to implement this Recommendation.

WWW AND NEW ADDRESSES OF ELECTRONIC MAIL

1. It is available our service WWW (World Wide Web) for access to information distributed by UNESCO through the address.

    http://www.unesco.org/

    which is possible to access by software Netscape, MOSAIC or other similar

2. UNESCO/SANTIAGO. Regional Office of Education in Latin America and the Caribbean and its Networks (REPLAD, REDALF, PICPEMCE, SIRI), may be acceded through the electronic mail by means of two INTERNET electronic mail boxes. The first is connected with the headquarters in UNESCO/Paris. Its address is:

    uhstg@unesco.org

    The second electronic mail box is through Universidad Católica de Chile. Its address is

    unesco@lascar.puc.el

    Through these mail boxes communications as well as documents may be forwarded.

EDUCATION FOR DEVELOPMENT AND PEACE: VALUING DIVERSITY AND INCREASING OPPORTUNITIES FOR PERSONALIZED AND GROUP LEARNING

UNESCO-SANTIAGO*

The Ministers of Education who invited UNESCO to create the Major Project in the Field of Education in Latin America and the Caribbean (PROMEDLAC) in 1979 anticipated the present social consensus on improving education substantially for building development and peace. It has been instrumental in meeting two of the three major goals set at that time –universal access to primary education and self-reported literacy– but important changes and events have happened in Latin America and the Caribbean (LAC). The world of 1996 is very different from that imagined seventeen years ago by the authors of this visionary project. The time has come to adjust PROMEDLAC objectives and implementation to the challenges facing us in the immediate future. Making goals more relevant will help to overcome internal barriers and obtain support from all parties concerned for universal access to basic education, functional literacy, lifelong learning, and effective and relevant learning to know, to be, to do and to get along with others as recommended by the International Commission on Education for the Twenty-first Century, chaired by Jacques Delors.

The political will expressed in PROMEDLAC is linked both to progress in meeting the basic learning needs of all and to the design of relevant approaches to improve quality. This political will supported actions towards universalization of primary education during the first decade of PROMEDLAC's implementation, thus reducing the number of self-reported illiterates. There was also support for focused efforts on problem identification, exchange of experience, analysis of available information in the field of education, and innovations affecting classroom processes and key aspects of the education system. This accumulated knowledge contributed to reaching consensus on effective policies for improving the quality and equity of education; it also gives rise to new educational problems and leads to redefining old ones. Now is the time to move from transmission to construction of knowledge, from teacher-centred to pupil-centred processes, from teaching to learning, from passive to active pupils, and from listening to exploring well-designed learning experiences.

Complex issues are linked to the next step towards an education which will support development and peace through the formation of a modern type of citizenship based upon democracy, equity and respect for cultural diversity. Such education will be able to promote the international competitiveness of the country, and incorporate and expand technical

---

progress. The main issues involved here are presented later in this document. PROMED-LAC's working programme will be the result of revised strategies reflecting the progress achieved in each of the original goals and the new challenges generated by agreements in a number of high level meetings: the last five regional Presidential Summits and the seven world conferences: the World Conference on Education for All: Meeting Basic Learning Needs (Jomtien, Thailand, 1990); the United Nations Conference on Environment and Development (UNCED) (Rio de Janeiro, Brazil, 1992); the World Conference on Human Rights (Vienna, Austria, 1993); the World Conference on Special Needs Education: Access and Quality (Salamanca, Spain, 1994); the International Conference on Population and Development (Cairo, Egypt, 1994); the World Summit for Social Development (Copenhagen, Denmark, 1995); and the Fourth World Conference on Women (Beijing, China, 1995).

UNESCO's role, as in the past, will be to help implementing the decisions adopted in this meeting, working in close co-operation with the respective national commissions, the United Nations Children's Fund (UNICEF), the World Bank, the United Nations Development Programme (UNDP), the Inter-American Development Bank (IDB), the Organization of American States (OAS), the Organization of Ibero-American States for Education, Science and Culture (OIE), and subregional and bilateral agencies. Concretely, UNESCO will contribute by creating a favourable environment and encouraging support for MINEDLAC's recommendations and by mobilizing support from the international community.

I. THE REGIONAL CONSENSUS ON THE NEED TO IMPROVE EDUCATION FOR MEETING SOCIAL DEVELOPMENT CHALLENGES

In 1979, the Ministers of Education alerted the region to the need to improve education at all levels, especially that delivered to deprived groups in the region. Their foresight made it possible to carry out the studies and experiments that have paved the way for timely and relevant responses to the educational demand produced by political, economic, social, technological, and cultural changes in the 1980s, currently considered as a take-off period. The education systems are therefore now ready to move towards delivering the type of education that leaders throughout the region recognize as having highest priority. However, in several countries authorities and the public must be better informed in order to improve education.

There is a growing social consensus on the need for good education –seen as a synthesis of knowledge, understanding, know-how and the ability to live together– as a necessary condition for the region to benefit from the opportunities of the next millennium. This consensus is being reached now that the region has decided, with some few exceptions, to move forward on the long road to democracy, development, equity and peace. Argentina, Brazil, Chile, Colombia, Ecuador, Jamaica, Mexico, Panama, Dominican Republic, and Trinidad and Tobago are examples of countries in which consensus processes have set long-term policies.

When launching PROMEDLAC in 1979, the LAC Ministers stated that education meant not simply the number of grades completed or years spent at school, but the development of all creative human potential. Such education will enable the region to change its production patterns in a context of increasing social equity. Efforts have therefore focused on attaining education for all, aimed at: (i) intellectual autonomy and personal freedom; (ii) capacity to dissent and argue without using force and (iii) understanding of oneself and of one's fellows. On the other hand, Member States did not want an education model that would produce submissiveness or blind obedience. This vision of education represented a huge challenge in a region where instruction has

been based on frontal teaching –called "banking education" by Paulo Freire because it "transmits knowledge" by teaching the whole class, with poorly prepared lectures, following the curriculum rather than adapting to basic pupils' needs, centred on instruction of the "average" student in spite of high heterogeneity of pupils, evaluating mainly the ability to recall facts and concepts, with a long tradition of cheating in tests, demanding silence to allow the teacher's voice to reach all pupils, and punishing any questioning of a teacher's statements or alternative divergent answers to their one-right-answer questions. This kind of education is also called teacher-centred education.

The vision of education eventually involved in the early 1990s to enhance citizenship and competitiveness through: (i) providing access to the codes of modernity, i.e. the set of knowledge and skills needed to participate and perform effectively in public life; (ii) persevering in the right to question unsupported statements; (iii) increasing capacity to listen, together with articulating one's own arguments without violence or use of force; and (iv) continuing search for consensus. This type of education implies increased capacity to communicate efficiently through the main languages used in society in each country.

The consensus achieved on the type of education needed arises from: (i) the changes that have taken place in the region and in the world as a whole which put knowledge and information in the centre of social processes, thus requiring "higher order thinking skills" for most people, rather than for a small elite; and (ii) the surge of new problems (or the re-definition of existing ones) corresponding to this new stage of educational development. Ability to adapt to changes and to cope with problems usually depends upon knowledge, skills and values generated in learning processes based on development of the human being as a whole, in accordance with his/her specific needs. There is a need therefore to take into account what is really happening in the school and at the classroom levels, mainly in regard to the learning

and teaching processes, particularly in urban-marginal and rural schools.

Looking back, PROMEDLAC's creation and implementation has been a visionary enterprise that anticipated a crucial social reality: that peace and development are closely linked, and that both are based in the quality of education and the equity in its distribution. UNESCO's enthusiastic support derives from the fact PROMEDLAC's objectives are in agreement with the Organization's ethical, political and practical role: "since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed".

II. THE POLITICAL, ECONOMIC, SOCIAL AND CULTURAL PATTERNS DEMANDING EDUCATION QUALITY

In the seventeen years since PROMEDLAC was created, the world as a whole and LAC in particular have changed radically, and many of the new trends call for better education. Observable patterns overlap remarkably in closely related areas such as: (i) the locus of power; (ii) the economic use of resources; (iii) the rapid development of technology; (iv) the role of the state; (v) the building up of a committed society; (vi) the organization and role of family; (vii) the moral capacity to ensure justice; and (viii) the expression of the cultural identity of minority populations.

These patterns lead to expectations of better living conditions, but at the same time they may affect peace, through contradictions, misunderstandings and challenges that cause doubt, confusion, and social conflict. The potential conflicts, built into the present patterns of the social behaviour, call for a new style of education that can prepare people to build development and peace. Society demands educated people, able to make rational decisions, to participate actively and perform effectively in solving social problems. This demand implies critical assessment of everyday events; knowledge and intellectual ability to define options;

moral values to select relevant criteria for decisions; skills to gather and process reliable information; know-how to choose and implement alternatives; ability to work in groups; and willingness to evaluate and monitor the decisions adopted.

The locus of power is under close examination. LAC countries removed de facto governments during the 1980s and today representative democracy has gained a solid foothold in most countries. Nonetheless, the role of the ruling groups is frequently questioned, particularly the role of the political parties, and in several countries political leaders are defending themselves from corruption charges (showing also a new ability of the society to detect and prosecute corruption). The end of the ideological East/West confrontation –the Berlin Wall's fall being its most representative sign– has facilitated the peace processes. Countries now look for social equity, agree to respect social diversity and seek consensus rather than exacerbating unnecessary conflicts. Now it is possible to make an optimistic forecast of political development in LAC given the initiatives for national reconciliation found in Central America, Argentina, Haiti, Chile, Colombia, Mexico, Paraguay, Peru and Uruguay. These multiple efforts aim to consolidate real democracy, defend and respect human rights, and to build a durable peace and increased equity. This forecast again emphasizes the need for a more educated and active people, ready to participate in the democratic practice, with better access to information, critical and analytical abilities, and a positive behaviour with respect to the differences between people.

The economic use of resources triggered by a new model of economic development has helped several LAC countries to achieve a rapid economic growth, but this also requires a better educated labour force as discussed in a joint ECLAC-UNESCO report. This new model is based on: (i) opening up national economies to international competition, (ii) financing national investments on the basis of international resources, (iii) maintenance of macro-economic equilibrium, (iv) liberalization of the economy and the labour force, (v) transfer of technologies (including innovations), and at the same time (vi) operation of democratic governments, vii) reduction of social inequities and extreme poverty and (viii) building up the endogenous capacities necessary to maintain national competitiveness.

Achieving higher levels of development by implementing such economic models depends ultimately on more efficient production units with decision-making power at every point of the organization, thus demanding a better educated work force, which in turn requires increased access to quality education. Perverse external disturbances such as unexpected monetary devaluations in large countries may create uncertainty and disequilibria with high social costs. Private-sector managers need an internationally competitive labour force able to: (i) adapt to continuous technological change rather than to master specific skills; (ii) absorb new information, methods and ideas throughout their working lives; (iii) perform effectively in a context of growing autonomy; and (iv) work in groups to analyse and agree upon new ways to organize functions and tasks. These linkages between education and "productive transformation with equity" are carefully analysed in the ECLAC/UNESCO report. Countries are aware of these demands and have requested UNESCO to increase efforts to generate a more relevant education.

The rapid development of technology also demands a lifelong ability to learn. The technological and scientific revolution stems from the dissemination of micro-electronics technologies, especially those related to information processing and transmission. The uniqueness of this revolution, compared to those of the past, lies in the increasing convergence of scientific development and technological advances, and their application to the production, distribution and consumption of goods and services. This convergence implies the existence of "technological systems", which are the foundation for increased productivity. The

systemic nature of innovation is illustrated by the alliances set up among enterprises and between them and public institutions, non-governmental organizations and other economic agents.

The role of the state is quickly changing in the region; the state is reducing its executive or productive capacity, while the economic model generates pressures for the state to increase its capacity to guarantee conditions of real equity. In spite of the increase in average income per capita, the new economic model has not been able to overcome certain social disequilibria: increasing poverty, growing drug traffic and abuse, violence, organized crime, and environmental depredation and high pollution levels. Growing awareness of these problems calls for the state to defend non-organized social groups and to articulate their needs and opinions. This new role the state is called upon to play has created tension between governments and voters, and has made evident the need for stronger participation mechanisms that may guarantee governable countries.

Building up a solidary society requires positive discrimination and attention to values education. However, the region suffers from unequal income distribution and an alarming level of poverty, in spite of a drastic reduction of rates of population growth. Some 200 million, mostly children and young people, live in slums and below the poverty line. The number of street children who dropped out of school or need special attention is enormous. There is a striking contrast between the top stratum of the population which enjoys the benefits of modernization and the majority faced with inequity. Despite the fact that in recent censuses most of the population reported that they can read and write (less than 10 per cent declared themselves to be illiterate and these are mainly members of minority ethnic groups and women), only half the region's population is really able to communicate in writing at the level required in contemporary society; the other half is functionally illiterate. The functional illiteracy of such a large percentage of

population indicates that education systems are not contributing towards the more equal society required for further economic development and participatory democracy. There is an urgent challenge to advance towads equity in education.

Present demographic patterns facilitate positive discrimination. Universal access to primary education is linked to demographic transition and the slower rate of population growth has generated a virtuous circle: increased space and materials have facilitated school attendance and slowed down urbanization. However, further lifelong training is needed to help the large number of functionally illiterate adults in their self-development.

Governments are looking for solutions to the challenges posed by new societal problems in formal and non-formal education. While education has had an impact in health programmes in most countries, it has not been able to prevent pandemic diseases or unwanted adolescent pregnancies in the region. AIDS, cholera and tuberculosis have recorded impressive growth in different social strata and education levels. Education has also had some success in providing learning and training opportunities for youth. Massive programmes including formal education, retraining-refresher courses and wide mass media campaigns are needed urgently to secure good health and training for all.

The organization and role of family have also drastically changed. Families have become smaller and the number of one-parent homes (many headed by females) have increased significantly. The number of adults in a household who can take care of children is diminishing and time devoted to transportation is increasing. The traditional male/female role in income generating and domestic tasks has also changed. With the opening up of new channels of communications, less time is devoted to personal interactions. As a result, there is less control over children and they now have more free time to spend in the streets. These changes place new demands on education: in-

creasing the length of the school each day, more school personnel to supervise children's homework, and coherence between school regulations and home norms.

The moral capacity to do justice demands education for peace, tolerance, co-operative work and understanding of multicultural settings. While there are many examples of efforts undertaken to ensure justice for refugees, deprived groups, minorities, children suffering from abuse and women in Latin America, and boys and young men in the Caribbean, there are also signs of increasing intolerance, violence (domestic and social) and xenophobia. These problems create an urgent need for new modalities of co-operation in the fields of education and culture, sharing ideas and encouraging efforts to reinforce mutuel understanding and respect for individual, social and cultural differences. More gender-sensitive curricula at all levels of education are also required.

Mass media have a crucial role in bringing issues of intolerance and inequity into the public eye. However, education must provide students with the ability to evaluate media message contents critically and thus avoid artificial conflict manipulation that may eventually hamper the search for suitable solutions.

The characteristics making up the cultural identity of each country should include respect for cultural diversity. UNESCO's efforts to promote an inter-cultural dialogue have over time created deeper respect for and understanding of cultural diversity. Recently, specific cultural identities have been awakened by the globalization of high speed communications, the internationalization of exchanges, the standardization of norms and rapid urbanization. In some cases ethnic communities, religious associations or linguistic groups fight at any price, sometimes with terrible consequences, to preserve their identity. This suggests that schools do not provide adequate education concerning the positive contribution of diversity in order to increase students' tolerance and respect for different views. Countries are aware that edu-

cation is not responding to the diversity patterns and relevant strategies being tested are discussed below.

Each of the eight social patterns discussed in this section are closely related, even though each of them call for radical (but consistent) changes in quality and equity of education. Among these changes a crucial one involves shifting from emphasizing the transmission of contents to constructive and group learning. This change in turn implies an important change in the role of teachers as they move from applying teacher-centred methods to student-centred methods. Obviously, institutional and financial adjustments are also required.

It is, therefore, necessary to examine the educational progress and achievements that took place in the region in order to select the most promising approaches and to extend them throughout the countries, thereby enabling education to respond to the demands generated by the rapid changes of the society. As a result of the examination of the education systems, six challenges are discussed in the final section of this document.

III. BASIC EDUCATION: GOALS, STRATEGIES AND ISSUES

Even though PROMEDLAC encouraged the universalization of primary education, successful innovations and the use of research findings to increase quality because few changes have reached the classroom, a certain pessimism about education persists. Once near-universal primary education had been attained and illiteracy controlled by late 1980s, the problem was no longer to speed up on-going activities, but rather to innovate. Better and more of the same activities was not enough; learning should be improved by increasing opportunities for meeting basic learning needs through personalized and group processes.

PROMEDLAC made efforts to define in a very precise way the educational learning problems and then to identify the most relevant experiences to attack those problems. Testing

of achievement levels carried out as part of those efforts has shown that many pupils are not able to understand what they read even if they are in the final grades of basic education. The fact that these findings are obtained in countries that have carried out many activities to improve education may explain the pessimism of certain educators, but now is the time to transform the classroom processes. Collecting information along with in-depth analysis and evaluation facilitated a progressive advance from consciousness-raising to problem-definition and then to agenda-setting in the last three meetings of PROMEDLAC's Intergovernmental Regional Committee.

At PROMEDLAC III (Guatemala City, 26-30 June 1989), the Ministers of Education discussed the UNESCO report on the severe learning problems affecting the education systems in most LAC countries, as reflected by high rates of repetition, particularly in early grades of urban-marginal and rural basic education. In fact, the rates of repetition estimated by UNESCO were much higher than those reported by principals, because most of the pupils they reported as drop-outs eventually enrolled as repeaters the following year. Such poor outputs led to careful attention on what was happening at the classroom level, without ignoring external factors (for example nutrition, health, or parents' education) influencing the learning process among young people.

Even though the Ministers noted that the impressive advances towards universalizing access to primary education also meant that most youngsters attained literacy (according to self-reporting literacy levels in the population aged 15 and above), they also reviewed data showing that 50 per cent of adults (mainly those in the lower half of the socio-economic distribution) could not understand what they read, or communicate simple messages in writing, or make use in their day-to-day life of what they had learnt to repeat by heart. These problems led to a redrafting of educational policies for adults and youngsters, and to further research into the causes of this functional illiteracy.

At PROMEDLAC IV (Quito, 22-25 April 1991), the participants knew more about the main causes of poor quality education and discussed a preliminary ECLAC-UNESCO report on the importance of quality education for economic and social development. Evidence from research and national reports suggested that low quality education, expressed by high repetition rates, corresponds to a great extent to difficulties encountered by children in learning to read with understanding. The Ministers concluded that improving the quality of education implied a deep transformation of pedagogical practice and consequently agreed on the "need for a new style of educational development". This decision was reinforced by the discussions and recommendations of the World Conference on Education for All (Jomtien, Thailand, 1990).

Participants insisted that solutions should be based on: (i) setting up long-term strategies based on national consensus; (ii) concerted efforts from all sectors of activity (because education affects –and depends on– all sectors of a society); (iii) participation of an increased number of social actors from outside formal education; and (iv) well-developed educational information systems for designing and monitoring educational development.

The emphasis at PROMEDLAC V (Santiago, 8-11 June, 1993) was on the analysis of a new style of educational development based on: (i) targeting the activities carried out by the Ministries of Education and (ii) professionalizing the school teachers and school principals for raising quality of education. The activities of the Ministries of Education would be targeted to: introducing positive discrimination benefiting the most economically, socially and culturally deprived groups; encouraging innovation in education; providing incentives for active participation of parties concerned; and measuring learning achievements, and setting up learning standards and a reliable information system on shortcomings and causes.

In order to professionalize pedagogical processes, PROMEDLAC V recommended four changes at the classroom level: (i) encourage

personalized and group learning processes, particularly for the most heterogeneous population segments mainly living below the median income level, (ii) give high priority to modern reading-writing learning methods, (iii) use carefully designed and well-evaluated self-learning materials that guarantee the active involvement of all pupils in relevant learning experiences that include group work, and (iv) define long-term policies on pre-service training and periodic in-service upgrading of teachers in line with the most promising strategies for an effective educational development.

UNESCO and several international institutions shared efforts for implementing these recommendations at the school level. The starting point was a careful identification and selection of successful experiences carried out in the region. Among the successful innovations that show the increasing interest in improving quality and equity in education, UNESCO and UNICEF have identified the following: self-learning materials (study outlines), pre-primary education, bilingual education, classroom libraries, "learn-your-letters" classrooms, critical approach to mass media, mainstreaming children with special needs, increasing time available for learning, interactive computer programs linking schools in networks, testing learning achievements, decentralization and new organization approaches (including core curriculum that can be implemented at the local level), regional exchange of research findings and information, increased participation of parents and civil society in school management (including management of public funds for paying teachers' salaries in rural schools), and mechanisms for reaching consensus on strategies for improving education.

The best learning materials used in those successful experiences were upgraded and tested in several countries (Colombia, Costa Rica, Chile, Ecuador, Guatemala, Honduras, Peru and Dominican Republic), and the results were discussed in periodic seminars and during the annual regional training courses in educational management organized by UNESCO in co-op-

eration with the Government of Spain. The materials have also been analysed in the joint UNESCO-Asociación de Televisión Educativa Iberoamericana (ATEI) Tele-Seminars addressed to LAC university professors through the Spanish HISPASAT satellite. Further comparative experiences in half a dozen countries will be carried out with support from IDB.

Future policies should encourage efforts that have attained the desired results and those deserving higher priority in line with the level of education attained by the countries and the impact on cost. Evaluation of results, costs and feasibility should be as precise as possible. For example, more evidence is needed on the results of many attempts to extend time available for learning. It would be useful to evaluate experiments undertaken in the 1990s by Argentina, Chile, Cuba, Costa Rica, Mexico and Venezuela in extending the number of class hours per year (in LAC, the average in urban areas is near 800 hour per year, 5 hours daily for 160 days; it is much shorter in rural areas) and to estimate the negative effect of fewer hours through comparisons with developed countries (where the school year exceeds 1.200 hours per year). Evaluation of experiments with the use of computers (especially the use of interactive systems as in regional or national networks) carried out in Argentina, Brazil, Costa Rica, Chile, Mexico, Uruguay and Venezuela is also a priority.

Many other changes have been also carried out even though the final impact has not been identified or evaluated. These changes include curriculum reforms (that many teachers, mainly those working in urban-marginal and rural areas, are unable to implement); constitutional amendments granting base budgets or free education; educational radio and television programmes for literacy adult campaigns; the school "nuclearization" strategy; financing or subsidizing projects designed by the teaching staff of each school; and courses for in-service teachers' training. Several LAC countries have decentralized decision-making, drastically reduced the curriculum to a minimum, changed

the administrative structure or encouraged parents' decisions by widely diffusing information on scores from testing learning achievements. All efforts undertaken reflect the interest countries have in improving education. The main question remains as the key sequences of relevant and cost-effective innovations that can improve education.

Some common characteristics of innovation processes can be emphasized: (i) on-going activities have been generated within a democratic context, (ii) a firm decision to raise the quality of education, to assess the results and to establish accountability, (iii) growing use of informatics in educational practices and methods, (iv) decision-making power transferred to the local and school level (for example control of effective class time innovations in the "EDUCO project" in El Salvador, "Instructores Comunitarios" in Mexico, "Plan Social Educativo" in Argentina, "Escolas Padroes" in Brazil, PRYCREA in Cuba, the "P-900", in Chile and the "Proyecto Educativo Institucional", PEI, in Colombia), (v) the key role of external financing in both design and stable implementation, (vi) decisions made in spite of a context of social turmoil, including teachers' unions and state confrontations, (vii) and changing the centralized role of the Ministries of Education by reinforcing its ability for analysis; forecasting and solving problems; assessing valuable national and foreign experience; defining and implementing fundamental regulations; and creating suitable incentives.

The strategy for changing classroom practices (targeted as the core of the problem) that emerged from the successful innovation experiences implied: (i) changing the teacher's role by reducing by 50 per cent the time devoted to straight lecturing, (ii) providing self-learning guides to pupils (texts, modules or outlines) for relevant learning experiences that replace the obsolete curriculum, (iii) ensuring classroom libraries that pupils can freely use, (iv) organizing co-operative learning work in small groups, (v) lengthening the school year, (vi) using a critical analysis of mass media infor-

mation, (vii) guaranteeing bilingual inter-cultural education for those children whose mother tongue is not the official national language, (viii) enhancing early childhood education (including pre-school and early stimulation possibilities), (ix) organizing in-service workshops to upgrade teachers, especially in reading learning methods, (x) involving the family in the learning process; (xi) introducing computers and networks, and (xii) financing higher teachers' salaries for more working hours. A brief analysis of the present situation is presented below for assessing the problems of implementing the strategy just outlined and defining the specific challenges. Further details are available in *The state of education in Latin America and the Caribbean, 1980-1994* (UNESCO-Santiago, 1996).

Since the 1980s significant progress on expanding school access and increasing the real length of the school year have been achieved in LAC. However, only purely didactic methods (see para. 7) are used in most LAC classrooms and over half of public schools do not provide adequate education in keeping with the new demands generated by development processes or cultural and social changes (in fact, many students never learn to understand what they read).

Children from practically all culturally deprived homes are attending school now that the region is close to achieving universal primary education. Furthermore, almost all Caribbean children and one out of three Latin American children are enrolled in pre-primary schools; however, few children from rural areas benefit from pre-primary education. There has been a dramatic increase in access to primary school, from 60 per cent in 1960 to near 95 per cent in the mid-l990s. In 1992, school enrolment for 6-to-11-year-olds was 87.3 per cent while for those aged 9 it exceeded 95 per cent.

There is a gap between years enrolled at school and grades passed that is linked with the quality of education. Dropping out has been put off until age 14 in most countries, but still

many teenagers have completed few grades due to high repetition rates. School attendance has an average of six years but on average children are promoted only four grades. The two-year gap is a relevant indicator of poor teaching practices (due to lack of relevant materials) and inequity in the distribution of resources.

Even though disparities in family incomes are not an obstacle to enrolling in primary schools, a relatively low income level is in fact a serious constraint as regards reaching suitable learning achievement levels (given that schools in urban-marginal and rural areas have pupils who differ substantially in age, ability and time to study, but cannot receive individualized attention because the teacher dictates to the whole class at once. Socio-economic background will continue to be an important factor determining graduation from primary education and the attainment of the knowledge levels required for admission to secondary education, unless effective innovations are implemented. Schools are facing a more diverse population, with whom traditional didactic methods have failed.

Implementing innovations requires additional resources (or more effective use of existing resources). All the innovations have also taken advantage of new patterns of international co-operation that are emerging as we enter the twenty-first century. The total amount of aid to education projects financed by external assistance agencies in the region has averaged over US$1.1 billion per year during the period 1990-94. While this is not large in comparison with total education budgets, it amounts to more than half the new investment in improving education in the region, and a very large portion of the funding available for innovations and reforms aimed at improving the quality and equity of education.

In addition, lateral co-operation between developing countries (LCDC) has played an increasing role, and new mechanisms for exchange of information and analysis of data have extended the impact of innovative projects far beyond their original scope. For example, the Escuela Nueva in Colombia took six years to achieve national success, but replications are being carried out in only one or two years in other countries that have adapted the Escuela Nueva model to their own context (and have benefited from additional improvements of the model). Disseminating the results of successful experiences reduces the risk associated with innovations and helps avoid mistakes during implementation. LCDC has increased the timely exchange of information between countries and made it possible for national officials to visit other countries and familiarize themselves with successful on-going experiments (trans-regional, regional and sub-regional). An important issue relating to external aid to education is the degree of co-operation and coordination –between assistance agencies and between countries themselves– and how coordinated activities can improve the effectiveness of programmes that seek to improve education in the region.

Regardless of the impressive efforts deployed and the educational achievements, the availability of effective feasible strategies and the increasing financial co-operation, there is a certain pessimism concerning what should be done in the field of education, and especially public education. Test scores on learning achievement show that pupils barely learn 50 per cent of the official curriculum (pupils enrolled in private schools easily learn near 100 per cent) and only half the fourth grade pupils taking the test are able to understand what they read. In fact, even the average score of pupils enrolled in elite private schools is only close to the national average score in developed countries.

Cross-country comparisons made by the International Association for the Evaluation of Educational Achievement (IEA) show that (i) the achievement scores attained in Trinidad and Tobago, and in Venezuela –which in fact are representative among the education systems in LAC– are rather closer to African averages than to those of East Asia, and (ii) there are

serious educational equity problems in the region. Even in the case of Chile with its decentralized decision-making, deregulated schools, trained teachers, textbooks, achievement measuring and disclosed scores, reduced class size and flexible curriculum, no substantial changes were observed in achievement scores in the 1982-90 period, even when comparisons are made among groups that are homogeneous in terms of socio-economic levels, geographic location, and type of school.

In short, efforts carried out in the 1990s have generated an institutional change and the time is ripe for a pedagogical renewal (methods, contents and teacher-training). Available comparative data –cross-country and over a long period of time– suggest the need to review the main present challenges that still prevail in the region in spite of PROMEDLAC's efforts to solve them. Such a review will be presented in Chapter VI after discussing goals, strategies, issues and problems in secondary and higher education.

IV. SECONDARY EDUCATION: MASSIVE EXPANSION AND CRUCIAL ISSUES

Growing dissatisfaction with secondary education must be looked at in the context of the education system as a whole and society in general, in part at least because countries are demanding learning and training opportunities for marginalized urban and rural youth. Secondary education can no longer be considered an end in itself because students should continue learning, either in post-secondary education or in a work and lifelong education context. In many countries, there is a growing demand for secondary school graduates and there is a growing queue of primary school leavers waiting to go on to school. One youngster in three goes on to some form of higher education; by 2010 half the region's youth will probably have access to higher education, and more and better secondary school graduates will be required. Improvement in the quality of primary education will reduce repetition and –given that dropping out is mainly related to age– increase the graduation rate from primary school, thereby adding pressure to expanding secondary education. The expansion process in a context of fierce competition for limited public resources for education does affect achievement levels. It is possible to find illiterate children in secondary education, but they in fact represent a failure of primary education rather than a side-effect of the massive expansion of secondary school places.

Secondary-school education is also affected by social patterns, especially technological change. Youngsters now entering secondary school think they know everything: urbanization, city living with its shows, its television and its entertainment give them the impression that they are knowledgeable, that they are grown-up. They are used to the speed of television and video games, and they get bored at school learning things they believe they already know and cannot imagine what use they will be to them later on. It is indeed the task of secondary education to help youngsters to be able to use their knowledge, to critically assess (and challenge) the messages received from mass media and to discuss in small groups their fears and doubts, thereby avoiding the charge that these fears can eventually lead to violence. Students also must have access to quality and up-to-date content.

The end result of all these related factors has been a massive expansion of urban secondary schools in terms of numbers of students and the size of the payroll in many countries. Ten Caribbean countries have universal secondary education and several Latin American countries have secondary gross enrolment rates exceeding 70 per cent. Still, countries need to define a clear expansion policy. Such a policy should take into account the probable rising graduation rate from primary education as well as sources of financing.

An intriguing question arises from rising demand and the remarkable increase in enrolment, investments and current expenditures:

why is there so little celebration and so much dissatisfaction with the state of secondary education? While the question certainly can be answered in terms of low achievement levels, especially in public high and technical school *(liceos),* a number of factors appear to offer at least a partial explanation. Secondary education is affected by outdated technology and textbooks, and traditional didactic methods (as is the case of primary education) but it also has additional problems as regards quality, selection, streaming and articulation with the world of work, foreign language learning, investments, financing, teacher pre-service training and, in several countries, the need to expand coverage. These factors lead to a mismatch between what the high schools deliver and social demands. Fortunately experiments with new technologies are now being implemented in several countries.

The qualiy of secondary education is questioned both by first year university professors who claim that most secondary school graduates are not able to communicate in writing, and by employers of graduates from technical vocational schools. Testing according to expected curriculum standards only show near 50 per cent achievement levels. The question of whether the standard curriculum can be covered within a standardized instructional framework of five or six years is not relevant, because it usually can be achieved in good private schools. However, students are intelligent in different ways, but teaching is delivered for the so-called average student. This wide variation in ability, aptitude and achievement is in sharp contrast to the standardized curriculum structure of secondary education (presented in boring textbooks to be learnt by rote) and strict lecture. The question becomes: How can these two realities be accommodated? How can relevant and interesting learning experiences be presented to students? How can personalized and groups learning processes be delivered? However quality is defined, critical issues centre around its measurement, certification and meaning. What are reasonable standards of input, context, process or outcome in a mass system of education, given all the factors operative in such system? How can knowledge and skills acquired through self-learning or work be certified?

Pedagogy in secondary schools is generally perceived to be outdated in its capacity to address contemporary ethical and behavioral issues, and obsolete as regards technology employed in instruction. Technology in the secondary classroom appears outmoded compared to many homes, most offices and modern entertainment, and out of step with the learning styles of teenagers comfortable with the information revolution and excursions into cyberspace. Even though very fine teaching is done via straight lecture, most secondary teachers use it as the only teaching method, neglecting learners' needs and distorting key educational objectives. For example, some 80 per cent of Chilean secondary-school teachers dictate their lessons to students.

Teaching methods have pervasive effects on the ability to use knowledge, on creativity, on values and on attitudes. Current trends of only lecturing to the whole class imply: (i) accepting an authoritarian academic structure; (ii) focusing on the transmission of information; (iii) asking the students to "learn by heart"; (iv) insisting that there is only one correct answer to a question or a problem, thereby eliminating any chance to discuss alternatives; (v) closing down all peer group discussion; (vi) limiting opportunities to learn about how to reach social consensus in a forever-changing world; and (vii) bypassing opportunities for using the local context in interesting learning experiences. Thus, many attempts to address the issue of values and attitudes of youths –teaching about what is right– has taken place in the context in which the rights of youth to access to meaningful learning opportunities are being flagrantly disregarded. Students are being exhorted to behave correctly, respect particular conventions and treasure particular outlooks while at the same time the gates to the most sought-after areas of secondary educa-

tion are closed to them, joblessness is their future prospect and the streets their main centre of social intercourse. In summary, they are being asked to espouse a value system from which they are excluded in classroom life.

Teacher training must be improved since quality education relies on teacher excellence. A balance between subject matter and pedagogical training is needed in the curriculum of teacher-training institutions and a hands-on approach must be developed (teachers must learn to design self-learning materials in each subject). Solutions should take into account the huge gap between youngsters' expectations and the present opportunities (learning experiences) offered by secondary education. It is now so difficult for a teacher (without well-prepared and tested material) to present a really interesting learning experience for youngsters exposed to large amounts of information. The design of such learning experiences should be the task of highly qualified teams that can share their prototypes with classroom teachers. Those designs should use mass media rather than compete with them. Argentina has decided not to admit students to the first year teacher-training institutions in 1996; this academic year will be devoted exclusively to upgrading the training of the staff and to improving pre-service training.

Selectivity is clearly observed in secondary education. Despite the expansion in access, poor children of Black, East Indian and Amerindian origins from rural areas, outer islands and depressed urban communities still have considerable difficulties gaining access to and maintaining themselves in the secondary education system that offers the best prospects for upward social mobility. It is precisely in this group that gender inequalities still prevail in the region (young males being discriminated against in the Caribbean and females in Latin America). The promises of equity and equality have not materialized for most of the people who constitute these segments of the population, and who have become disappointed by and distrustful of such claims.

Countries must strike a balance between education (seen as child development leading to the ability to create in co-operation with others a desirable social milieu for living) and training (seen as the acquisition of useful and practical abilities and skills). In secondary education the balance is more difficult to reach, because contents (and some skills) must be thought out differently, depending on whether it is seen as the culmination of primary education (half of the LAC countries have over eight years of compulsory education) or as preparation for a diversified higher education. Accepting that the goal of keeping all children in school until age 17 or 18 years is both desirable and feasible, the problematic becomes the working definition of secondary education employed for policy purposes, and the public's understanding and acceptance of that definition. Countries must define when and which type of technical education should be supplied (how to combine the advantages of general education with training provided by institutions such as SENAI in Brazil or SENA in Colombia) and the flexibility of transfer between general and vocational streams.

Many countries try to cope with these alternative demands by offering a wide variety of types of secondary schools predicated on a combination of criteria based on ability and anticipated target occupations with or without further study. The usual divide is between general and technical/vocational education. At the same time many countries have, in recent years, expanded technical/vocational education and training for school leavers, related to the economic sectors in which they are likely to find jobs or self-employment. This form of education responds to demands of industrial society to lengthen the training period in order to obtain skilled labour and technicians capable of reading plans, making calculations and operating complex machines. It must be remembered that there is a large range of types of vocational education, from, for example, pre-engineering training to training plumbing assistants.

Even though research suggests that second-

ary vocational education is not always cost-effective –students continue on to university rather than entering the workforce directly– there are pressures for expanding it: because half of the secondary-school graduates or drop-outs join the workforce. A large empirical literature has developed over the last twenty-five years arguing strongly against vocational schooling on cost-benefit grounds, even though cost effectiveness may differ significantly from country to country, as a function of unemployment levels and rate of growth of economic activities. On the other hand, vocational secondary education has at least two benefits that may have been overlooked: firstly, it has contributed to maintaining the work ethic of the youth, as the programmes centre around work-like activities; and, secondly, there is some evidence that this type of education is relevant to activities taking place in the informal sector. In fat, there is an increasing demand from the world of work for students who have a higher level of general education, are trainable, and have wholesome attitudes and habits; but also there is a demand from parents with low education who hope their children will get a job after completing some vocational training. UNESCO is strengthening the UNEVOC project, with support from Germany and other Member States, to better understand problems for improving vocational education and to respond to the demands from economic activity.

Most governments have identified foreign languages and science as critical to economic development, but options as to which languages are studied should be available in secondary education. The globalization of markets, and the need to conduct business across language and cultural divides, to understand instructions or software, and the importance of tourism have been the principal stimuli here. However, more attention to options and suitable technology –for example, language labs or total immersion for short periods of time– is needed for a realistic approach to effective foreign language learning.

In spite of huge investments in science labs and libraries financed by international banks or bilateral sources in the 1970s and 1980s, secondary education did not improve; however, investments in computers and interactive software could be cost-effective if young assistants are available or teachers are given enough time to adapt. Strong moves are afoot in almost all countries to modernize secondary education through the use of information technology. These policies and programmes relate to both administration and instruction. Management information systems in Ministries of Education, with links to schools, is part of the planned future of most countries. So too is the use of computer technology in classroom instruction creating linkages between schools locally through networks and with schools across the world through the Internet. Parents, communities, the private sector and schools have joined with governments to achieve these goals.

Unit costs in secondary education are rising and better quality will eventually require further co-operation from parents. There are pressures to restructure the financing of education to increase cost effectiveness and include cost recovery, cost sharing and special taxes to meet educational expenditure, but equity must be a key criterion. Countries must carefully review their policies on subsidized provision of textbooks, payment of examination fees and other school-related expenses. If schools are to charge fees, poor students should not be denied education, that is, government should subsidize their fees. Interestingly, in countries in which student fees have been introduced, the policy statements have included the proposition that no student should be denied secondary education because of inability to pay fees.

Secondary education for adults and young drop-outs is a growth area in the region and positive discrimination should help to reduce present intra-country learning gaps. The major consumers are those who have had access to regular secondary education but who dropped out or who finished but did not achieve to the requirements of employment or further educa-

tion or even to their own satisfaction. The provision of formal secondary education to those who missed out while they were of school-age is an important element of any overall human-resource lifelong development policy. The main providers are secondary schools, in urban centres, offering evening programmes on a self-financing basis; non-governmental organizations are also involved. Such arrangements tend to exaggerate the differences in educational opportunities between urban and rural areas in that adults residing in rural areas must go to urban centres to continue their education. However, face-to-face instruction through full-time or part-time programmes is only one modality of education. Alternative modes of instruction (for example, distance education) will be needed. Costs analysis of *telesecundaria* in Mexico seem to indicate that it provides quality education similar to that of the regular secondary schools, and is a cost-effective means of reaching relatively isolated regions of the country. Similar analysis should be carried out for alternative programmes operating in Costa Rica (Information Kiosk), Argentina (TELAR) and Chile (Enlaces). Evaluation of achievement levels in each type should be made public to help customers to make the right decisions.

There is a growing interest in the region to systematically improve secondary education by testing out and evaluating promising approaches –especially in technical/vocational secondary education– in order to respond to the diversity of cultures and of labour-market demands. Several draft resolutions presented in the last General Conference of UNESCO related to secondary and vocational education, and to youth problems. This interest suggests that there may be advantages to extending PROMEDLAC activities up to Grade 12.

V. HIGHER EDUCATION AND RESEARCH: INCREASING THE SCIENTIFIC AND TECHNOLOGICAL POTENTIAL

Training elites is a crucial aspect of educa-

tional policies, but it is no longer by definition attributed to higher education or to universities. Massive expansion in higher education enrolment in the last two decades coupled with reduced public spending triggered a growing variety of higher education institutions and generated wide differences in the quality of their graduates. There are some 8 million university students to 1 million faculty, but in spite of their rapid growth, universities are no longer the only institutions carrying out research.

Following this massive expansion, the goals of the concerned parties are no longer homogeneous, the system has become bureaucratic, and pressure from teachers and students unions must be taken into account. The rapid increase in enrolment has posed insurmountable financial problems, resulting in a sharp decline in average quality. The performance of higher education has also been affected by the decline in average academic standards of secondary-school graduates, which in turn resulted from the rapid growth of enrolment with the increased access for students from traditionally less privileged populations. At the same time, standards are difficult to maintain in the face of dwindling resources per student.

Higher education problems can be illustrated by the poor quality of the faculty staff and unequal distribution of benefits. Less than 20 per cent of university faculty members have doctoral training, and half –including a large share of full-time faculty– have another job. In addition, the distribution of higher education across socio-economic levels remains unequal; the reduction in public resources per student has not improved the unfair distribution. The wealthiest quintile of the population receives nearly half the public subsidies to higher education, while the poorest quintile receives just 5 per cent.

The massive enrolment increase has forced governments to control the product (rather than the traditional control of process) and triggered the creation of a variety of higher education institutions. Careful regular monitoring of a few elite institutions has been replaced by at-

tention to the quality of graduates and the development of voluntary accreditation systems. At the same time, the growing social demand for higher education and changing labour market needs have encouraged the development of non-university institutions, while financial constraints have encouraged the expansion of private institutions. Two-year technical centres and four-year professional institutes are now operating in several countries, some offering completely new courses. These new institutions have introduced flexibility in higher education training policies but have not affected research, mainly carried out in a few state universities. The wide range in terms of quality and uncertainty concerning the reaction of prospective employers to the new qualifications offered make it difficult for high school graduates to take the right decision concerning future studies.

There is also a variety of private institutions, ranging from profit-making to non-profit-making *communitarian* organizations. In countries where private universities must be non-profit-making, lavish salaries to the owner(s) and relatives can bend the rules. Private institutions are also using low-cost teaching strategies, including the employment of full-time staff from state universities. Although private institutions have been a counter-balance to the highly politicized state universities, they are not attempting to replace them. The public should be better informed and more relevant information should be made available to help students and their parents in selecting an institution of higher education and a career.

As is the case for primary and secondary education, innovative experiences should be evaluated and the best examples widely diffused. The utilization of new technologies to facilitate regional and international co-operation should be carefully evaluated. Under the UNITWIN programme, the Regional Centre for Higher Education in Latin America and the Caribbean (CRESALC) helped to launch the Proyecto IESAD-Innovación de la educación superior a distancia para América Latina

y el Caribe including a network of institutions in Venezuela, Brazil, Colombia, Costa Rica, Cuba, Ecuador and Mexico. The University of West Indies uses teleconferencing to reach participants in all the Caribbean. The Universidad de Brasilia has a UNESCO chair in Distance Education that carries out innovatory work with thirty universities.

All in all, there is a lack of high quality training capable of producing for elites. Those who work on a national or regional scale need outstanding and sophisticated training to be able to assume their vocational responsibilities; they must be capable of assuming their responsibilities as citizens of the world and of their country. All levels of higher education, including top specialist training, must include the humanities in the broadest sense of the term, teaching people to understand themselves and others, and to understand the world.

Research in each country is concentrated in a few, mainly state, universities; there is also an increasing number of public and private research institutes and enterprises. These few universities play a major research role in most countries, but their research is constrained by faculty members without doctoral training and scarce incentives, especially financial, for conducting research. Training young researchers depends on fellowships, because it is difficult for them to plan a long-term career that will provide a reasonable income and standard of living in view of the cost of becoming a researcher. Partnerships between doctoral programmes, research projects and fellowships for doctoral studies are minimal, even though RELAB and on a lesser scale UNITWIN networks, UNAMAZ and the Association of Montevideo are providing successful examples; several LAC Universities are linked to networks in other regions.

Latin America and the Caribbean remains extremely weak as regards producing and using knowledge. The percentage of GDP allocated to research and development is only one-fifth of the proportion allocated by member countries of the Organisation for Economic Co-

operation and Development (OECD) and barely one-third of the newly industrializing economies of East Africa. Externally-reviewed research project funding is increasing and recently some countries started to reimburse university overhead costs and to gradually increase funding levels.

In brief, higher education needs to improve quality through increased relevance, which means better co-ordination with the world of work, a clearer input into the development of the whole education system, and a contribution to sustainable development and to better understanding among nations and peoples. In a world in which conflicts are numerous, universities should renew their efforts to better define contents, methods and pedagogical materials in international education. They will be more efficient if they are able to educate citizens capable of understanding major world problems and of applying a democratic approach, respecting human rights. The networks being developed by UNESCO in such fields as sustainable development and human rights shows the potential of international co-operation in these areas.

VI. SOLVING CHALLENGES AND DEFINING NEW TASKS

The social changes discussed above demand better levels of education and more relevant learning for the public at large –the labour force (learning to learn and to innovate), civil servants, social leaders, scholars and parents. Available evidence suggests that in spite of the increase in enrolment and the reform efforts carried out to date, the required quality and equity of education are far from being achieved in most countries, particularly in case of pupils living in urban-marginal and rural areas. This is a constraint on development in the region (according to the findings of research into the East Asian miracle) and reduces government credibility despite progress toward other PROMEDLAC goals.

Delivering education of the quality demanded

by society requires solving two major tasks: firstly, revising the concept of education, changing the role of pupils and teachers, and secondly, optimizing the use of funds provided by internal sources and by international agencies. These tasks also have priority for meeting the remaining main objective of PROMEDLAC. They involve facing six challenges for improving the quality of education as well as defining new tasks to be undertaken by the education sector. Meeting these challenges is the next step in educational development. The challenges are mainly focused on basic education, given the social priority accorded to that level, but analysis of secondary and higher education shows that related improvements are also required in those levels.

An effective answer to social demands for an improved learning process is difficult to implement because it calls for a change in the concepts of "education" and "knowledge". Education includes the ability to understand what has been learnt, developing intellectual skills of a higher order, using these skills, knowledge or information in day-to-day life, and the ability to live together with other people. Democracy calls for effective and critical participation and the ability to work together. The trade and production sectors need workers with increased ability and skills, and relevant knowledge rather than specific trivia. Parents want their children be able to "make" and not only to "know" or to "remember". Finally, there is a growing interest for children to behave according a socially well-accepted set of values.

Meeting all these different requirements at the same time is difficult because, up to now, education has concentrated on the transmission of "knowledge", that is to say on mastering the most recent data rather than developing the ability to do and to make creative use of such knowledge, both of which are essential for social development and international competitiveness. Fortunately, demands from outside are now pressing education for intelligent people with basic values, able to evaluate

critically and to define problems, look for information and define relevant options. These demands are shared by educators, social leaders, employers and parents.

Social change demands extending schooling well beyond the six years of primary education. Recent research into the causes of the economic success in the East Asian "miracle" countries suggest that ten to twelve years of good quality schooling is important. Studies carried out by ECLAC also report that ten years of good quality schooling are necessary in order to overcome poverty.

Fortunately, reaching that level of compulsory schooling is not a problem for many countries in the region. If the quality of education at basic level increases and most pupils learn more than the minimum required to be promoted in each grade (irrespective of their socio-economic status or the school in which they are enrolled). In that case, better quality basic education will make it possible for most of the 12-to14-year-old pupils now enrolled in Grades 1 through 6 (because they had a late entrance or multiple repetitions) to be promoted on time, to graduate from primary education and, eventually, to continue far beyond in secondary education.

At the same time, new demands have been created by past educational progress. For example, now that illiteracy (defined as those declaring themselves illiterate to the population census) has declined and only 10 per cent of those aged 15 and above report themselves to be illiterate, a slightly different goal must be defined. Most of the self-reported illiterates live in rural and indigenous areas, are aged 40 and above and have access to alternatives for learning to read. However, UNESCO research carried out in seven countries found many functional illiterates, people unable to communicate efficiently in writing or to benefit from the new technologies at their disposal (for example, the use of a public telephone) because they are unable to understand written instructions. Several countries have requested UNESCO to target this group –including

young adults and out-of-school youth– as a priority.

To cope with the pending challenges and the new goals to be defined, it is necessary to identify the causes of problems. For example, reducing functional illiteracy is a new specific task that involves providing good quality universal basic education and new lifelong education options for young and adults. In general, the best solution for any educational problem consists in eliminating the source of the problem rather than attacking the eventual effects. This requires careful analysis of problems and their causes.

Learning about the causes of problems will allow identification of criteria for optimizing educational investments (given that financing from international agencies is available). If resources from multilateral banks are well utilized (through careful appraisal of benefits and costs), a positive change in quality and equity of education will take place. The UNESCO-sponsored "LAC Lab for education assessment" will help in providing objective evaluation of promising experiments and will effectively contribute, therefore, to improving educational quality.

In summary, improving education requires better educated staff, careful testing and evaluation; at the same time, innovations must be introduced without relying either on additional voluntary time spent by teachers or on recruitment of better-trained replacements. These are tough conditions, but have been fulfilled in some successful projects. All successful innovations have involved some degree of consensus generated by in-depth and wide-scale consultation within the societies, including individuals and groups related to economic activities in Ministries and statutory bodies within the public sector, large and small enterprises within the private sector, associations representing these enterprises and comprising those representing small businesses, manufacturers, commerce, tourism and hospitality industry, commodity groups and financial services; and professional organizations representing various

professions including law, medicine, engineering, journalism, accounting and others. They also included individuals and groups representing civil society consisting of various religious bodies, service clubs, citizens associations, political parties including the opposition and governing parties, trade unions, and non-governmental organizations engaged in social, economic and philanthropic ventures. Also included in the consultations were school-related individuals and groups (principals and teachers at all levels), teachers'associations and unions, parents' organizations and parent/teachers' associations, students and student associations, and boards of governors where these existed. Finally, the consultations included the political directorate both those in government and opposition. The six challenges presented below require adaptation to the specific characteristics of the country concerned through these consultation processes.

Challenge 1: Creating public support for personalized and group learning in order to overcome the key causes of low quality education

Generating good quality learning requires a national consensus for laying down a long-term relevant educational policy. This is difficult to achieve because it involves destroying myths and implementing strategies quite different from those accepted by the general public. However, consensus can be achieved if based on solid research findings and reliable information. Although little is known about how to carry out effective education innovations, research has identified the most important factors linked to low quality education and inequity.

Research findings indicate that certain internal factors can be modified to increase learning at the classroom level (some of which differ from conventional wisdom) while factors external to the education sector also affect learning but cannot be modified through education policies: poverty, malnutrition (includ-

ing iron deficiency), affective (personal or family) problems, low parents' education and lack of family support for homework. Research suggests, therefore, that it is feasible to increase the quality of education by using relevant educational strategies (including positive discrimination) to change those modifiable internal factors effectively.

The review of research findings on the "necessary" and "sufficient" conditions for an effective learning process might help to show up the misconception of conventional wisdom or traditional beliefs about quality of education. One "necessary" condition for learning consists of the provision of basic inputs such as principal's time to lead the school, teachers' time spent in the instruction process, suitable teachers'salaries, school maintenance, basic services, textbooks, chalk, paper or pencils. But access to basic inputs is not enough. On the other hand, lack of basic inputs will certainly constrain the design and implementation of a good learning process. For example, little learning would be achieved in a school with multigrade classes without enough self-learning guides enabling pupils of each grade to be involved in a personalized and group learning process while the teacher is helping pupils of another grade. In short, inputs are a necessary, but not a sufficient condition for learning.

It is also possible to consider as inputs the school feeding and health programmes for pupils whose families live below the poverty levels. These programmes are not discussed here, because they should be analysed within the framework of national health strategies. However, the existence of such programmes would not guarantee a classroom learning process of the expected quality. Key elements for effective learning (that differ from the quantitative inputs of para. 89) include: the specific activities and leadership carried out by the principal, activities carried out by teachers in the classroom; time available for pupils to learn (including relevant homework and its evaluation); and design of learning materials.

Good quality learning requires students to

spend "time on relevant tasks" now missing in most LAC classrooms. Good learning is achieved when pupils: (i) become involved in an exciting learning experience; (ii) interact and discuss in group the proposed learning task; (iii) have enough available time for learning the proposed task; (iv) get involved in a learning task linked to their context or expectancies; (v) receive formative evaluation to overcome problems faced while working on the learning task; and (vi) are aware that they are learning relevant knowledge together with their teachers. In fact, when the students are learning by themselves (alone or in groups), following suggestions for a carefully designed learning experience, the teacher has time to help effectively by expressing affection and interest, extremely valuable given that many learning problems have emotional roots.

Few of these relevant tasks happen in the region's schools. Classroom processes mainly involve passive listening and rote learning with little relevance to the life of the pupils and seldom evaluated in a formative way. In addition the initial grades in primary education seldom integrate play, physical and artistic activities into the teaching and learning processes. There are also few opportunities for the personalized attention of basic needs that should characterize most pre-school and basic education practices.

All the necessary learning activities are simple, but require well-trained and committed teachers and principals or good learning designs to be implemented by less well-trained teachers and principals (who can improve their training in the process). The reason for 35 per cent of first grade pupils repeating lies in inadequate teaching techniques, particularly regarding reading and writing. Poor first grade teaching is clearly evident when pre-schoolers leave their "learn-your-letters" rooms with their meaningful written messages –including pupil's names and the names of objects seen or used by pupils– posted on the walls, rooms where they actively learn, alone or in groups, and move into the first grade of primary school

where they must sit in silent rows passively receiving the lecture of their teacher. Unfortunately, most teachers received their own training through this method and provide one-way instruction, transmitting information (hastily organized from a notebook) to an "average pupil" (while in fact the class is a highly heterogeneous group) to be learnt by heart and repeated later at examination time. Teacher training is a complex problem that challenges all countries (see Challenges 4 and 5).

The lecture model does not work when it is used by untrained teachers to an heterogeneous group of pupils such as primary and secondary students of deprived urban-marginal or rural areas. It is less harmful when used in private schools or universities. It cannot achieve positive results when large age differences prevail, when there is a large gap in abilities, when family support is very different or if some pupils speak a mother tongue different than the official language of instructions. On the other hand, it results in good achievement levels with students of the same age, with a common cultural background and solid family support, and who are members of an educated family group; in this case, obviously, lectures must be delivered by excellent teachers, able to motivate students to use previously-acquired and reason on their own and ask stimulating questions. It should be noted that the average results of students in private schools are poor when compared to those in developed countries. Despite this, individual students from good private schools moving to developed countries have no problem in adapting. This method also works in massive systems when students are relatively homogeneous in age and cultural background, as is the case of some East Asian or Central European countries.

Strategies to improve the quality of education should initially be focused on pupils from urban-marginal and rural areas, where owing to the heterogeneous nature of classes, the risk of failure is higher. In fact, traditional didactic methods punish all those students less able than the "average student" who is the ideal target

of teacher performance; they are by definition doomed to grade repetition. These methods have proved especially punitive in case of first grade pupils (even for those coming from pre-primary education who are familiar with a socialization process) when permission to move or speak is never granted and they must therefore remain quietly seated in their place in the classroom rows. On the other hand, an excellent teacher can always find suitable strategies. In Japan good lecturing prevails, but the brightest children are taught to help their slower-learning comrades and smooth out interpersonal relations.

In summary, the public should be informed of poor quality levels and their main causes as well as the conditions (including the teaching style and the role of primary and secondary teachers) affecting quality of education. Research findings and suitable information should help in reaching a national consensus on required improvements for raising the quality of education to expected levels. This calls on the public to support changing from straight transmission of information to constructive learning experiences by adding other teaching models (to the prevailing didactic methods so deeply rooted in school tradition and practice, by improving pre-service training and by learning plans that can be implemented by less well-trained teachers.

Challenge 2: Advancing towards equity in education for development and peace

Knowledge is distributed unevenly throughout the region. However, there is today a general willingness to improve the sharing of knowledge, to respect diversity and to value tolerance in order to achieve increased social and economic development, and to reduce future social conflicts that may hamper peace. All children have access to school, but at present half –mainly those in the lower half of the socio-economic distribution– will not learn to read well enough to really understand written messages. Positive discrimination –giving more

to those deprived– is needed to reduce inequity effectively.

The quality gap between the education received by the most privileged and by the most deprived groups has blocked efforts to cope with poverty and to reduce social inequity. There are different schools for the wealthy and for the deprived, especially indigenous children and those with special needs. Differences in provision for boys and girls persists only in terms of teacher expectations at the classroom level, and there is a reverse effect in the Caribbean; however, more gender-sensitive curricula should be used at all levels of education.

Equity is now closely linked to a good quality of education (based on well-defined standards) and, at the same time, involves supporting diversity. Getting universal access to education was the first step towards equity, and now virtually all pupils remain enrolled at least six or seven years in the education system. The next step towards equity involves delivering education that guarantees a minimum accepted quality for everybody, not only for the upper 50 per cent in terms of the socio-economic and ability distributions.

Education systems should respond appropriately to social, economic, geographic, linguistic, cultural and individual differences; the present system has resulted in high levels of functional illiteracy, repetition and temporary drop out. Some form of positive discrimination is needed for the most deprived social sectors to improve educational equity.

Early childhood education should be expanded to urban-marginal and rural areas. Campaigns to help parents to provide early stimulation to their children educational television programmes and expanding pre-primary education are powerful means of compensating for shortages and handicaps, as well as to prevent future learning difficulties. However, they tend to be concentrated in the urban sector and not to reach the most deprived population groups. Expanding pre-primary education should rely on the best models among the rich

variety of community or home-based programmes.

Primary education should use teaching models that adjust to heterogeneous groups and discriminate positively in favour of children of extreme poverty and ethnic groups, making heterogeneity an asset rather than a problem. The same applies to schools that offer the initial grades only, so pupils must switch to other schools in order to complete their primary education and to pupils with irregular or temporary school attendance, those who enrol late and repeaters. In all cases appropriate self-learning materials are a required (but not sufficient) condition for success. Self-learning material can also be instrumental in providing the knowledge and skills needed to participate in public life and play a productive part in modern society.

A special effort should be made for children with special needs and for ethnic groups. Most children with special needs are now attending the formal system of education, but do not receive special attention; some 10 to 20 per cent attend segregated special schools. Only a very small percentage of children with special needs are not enrolled, mainly those living in rural areas. Mainstreaming represents access to an equal opportunity and full participation in regular and extracurricular activities. Personalized and group education is required for effective mainstreaming. Mainstreaming encourages solidarity among students and, at the same time, improves the cost/benefit ratio of the education system as a whole.

Better equity involves a willingness to help all children to learn, to concentrate on teaching substance, to progress towards open and flexible curriculum, and to improve the flexibility of the education system. These goals are consistent with the recommendation adopted by the World Conference on Special Needs Education: Access and Quality (Salamanca, Spain, 1994) that all schools must facilitate access of all children whatever be their personal, cultural or social status: disabled or gifted children; street children or those of eth-

nic, linguistic or cultural minorities; or from deprived or marginal areas. These objectives constitute a real challenge for any school system; they may be beyond the level of economic development of some LAC countries at present, but they map the future development of education systems.

Bilingual and intercultural education is not sufficiently well developed despite major efforts undertaken since the 1980s. Projects in Guatemala, Mexico, Paraguay and Peru have proven the success of such education. However, most projects were targeted to indigenous groups by linguists and anthropologists but lacked the support of educators and specialists in school textbook design.

An equitable distribution of socially significant knowledge is a basic condition to creating a culture of peace and tolerance. The school's role should be to educate in the diversity and, at the same time, to improve the quality of education. Future citizens should be educated within the framework of enrichment through diversity and integration, respect for one's fellows and valuing differences. These objectives involve the opportunity to meet and to live in harmony and solidarity with other people.

There is a regional consensus that each country should find the right balance between the community and the individual, and should ensure adequate mechanisms through which significant knowledge is produced and distributed. In 1990, the ECLAC Ministers of Finance adopted in an unanimous vote the proposal on "productive transformation with equity" and later, in December 1991, they underlined the key role of education in such transformation. Ministries and other governmental bodies as well as non-governmental organizations should undertake joint efforts to implement the educational complement of national development models. Social policies based on consensus should make it possible to shape the new role of the state in educational matters (financing inputs and monitoring the required increased quality and equity).

In summary, the equity challenge is closely linked to PROMEDLAC's objectives, mainly through improvement of the quality of education provided to the neediest pupils, positive discrimination for poor schools and emphasis in the potential of deprived groups. The equity education strategy includes early childhood education, early stimulation, personalized learning opportunities by providing materials for teachers to help children to learn far more than the minimum required standards, materials and self-learning guides for rural multigrade-class schools, and reaching the unreached such as street children and isolated population groups. To meet this challenge, a solid political backing for implementing equity strategies is needed.

Challenge 3: Educational management and decentralization

Educational management has not been able to break the vicious circles constraining effective learning processes and social consensus at the central or the school level, but decentralization patterns show openings for improvement. The implementation of successful learning models has been rather slow; teachers are still trained according the straight lecture model; and decisions are made without the systematic support of research findings, for example, resources are used to reduce class size rather than to extend the annual school hours or to raise teachers' salaries. More global appoaches, for example, relying on the educational market, have also been unable to rise pupils' achievement levels. However, several countries have been able to increase time for learning by decentralizing resources to the community level.

A well-informed public opinion, aware of educational advances and shortfalls, is crucial for building up social consensus on long-term education changes. Some well-designed strategies will contradict conventional wisdom and should be endorsed by public opinion in order to reach the national consensus for long-term implementation of those strategies. Social consensus is required on the need to change the training of future teachers according to the desired learning processes (and even to stop training while upgrading and reshaping teacher-training institutions) and for increasing the amount of public resources allocated to the education sector.

There is a deeply felt need to set up suitable methods for school management –beyond attempts to make people accountable– by supporting efforts aimed to: (i) improve the pedagogical leadership of principals, (ii) evaluate achievement reached in each type of educational context, (iii) encourage new research projects and benefit from educational research, and (iv) compare in a systematic manner the elements and rationale of the most successful experiences carried out in the region. New developments such as the public selection of principals in the state of Minas Gerais, Brazil, and the national testing and publication of average scores for schools and courses should be carefully evaluated.

The operation of education systems in a highly imperfect market have produced underinvestment in education, allocations too low for current operation and the use of obsolete technologies. It is necessary to be aware of market imperfections generated by: (i) too general labels for the alternative types of education provided, (ii) long-term lagged effects, (iii) naturel geographic monopolies generated by isolated, scarcely populated locations, (iv) availability of public resources for improving quality and equity linked to a large extent to the effect of demographic patterns upon school enrolment, (v) lack of information on the relative effects of school peer groups and parents' socio-economic level; (vi) subsidies to school supply, (vii) too many legal and bureaucratic regulations, and (viii) ability of corporative vested interests to legislate. The education market is also rooted in colonial traditions providing little or no incentives for self-realization, and in a legal structure which applies to expected rather than real behaviour.

Decentralization processes of different types have been carried out in several countries, but the final impacts have not been carefully evaluated. In Argentina and Brazil there has been decentralization to "states" and "provinces", but at the same time funds are being decentralized to the school level. In El Salvador, Nicaragua and Mexico funds for paying rural teachers have been transferred to the local civil bodies and the time available for learning has increased substantially. Educational decentralization may require improving transparency, in terms of costs to be borne by parents and communities, of the education market and major changes in the legal framework. Eventually decentralization may become in effect private education. However, applying the market model to education does not guarantee improved efficiency or effectiveness; it does normally lead to greater inequity.

Diminishing pressure for linear expansion of primary education frees resources for improving inputs, including teachers' salaries. Nonetheless, once low salaries have launched the vicious circle of negative selection for the teaching career, and once the teaching staff includes a large number of poorly trained teachers, it becomes very difficult to improve the training level of teaching staff. In fact, increments in teachers' salaries might have positive results only on long-term basis because the teachers in place will continue teaching, without any change in their training. Furthermore, research shows that no performance-based incentive system has proved effective.

Education managers are not longer fighting for more resources to expand the system, but are facing key decisions as to how to allocate resources for innovating and improving its operation. The demand for resources for a linear expansion of education have decreased (except pre-primary education which should be expanded and should offer different options for children needing special education). There is less need for quantitative expansion because most countries have lower rates of demographic growth –an important consequence of univer-sal access to primary education, particularly for girls. However, in some countries demand for secondary and higher education places has increased, and there is pressure for linear expansion in those levels. The really tough decisions deal with balancing resources among more time for learning, suitable training materials, early childhood education to help children to succeed in primary school, increased attention for children with special needs, intercultural and bilingual education, if needed, lifelong education for adults and, last but not least, suitable salaries for teachers to work a regular schedule. Fortunately, it is possible that all these inputs might be made available to schools, given that present demands for development give priority to the solution of educational problems.

The role of the Ministries of Education should adapt to changes generated by decentralization, market forces, and the need to improve equity and to increase accountability. The new role sometimes involves the creation of new public or autonomous institutions for accreditating, evaluating students, allocating competitive research grants, handling comprehensive information systems and guaranteeing a systematic exchange of research findings. A balanced distribution of functions between central, regional, and school levels should be defined. All these activities require a well-qualified staff in new areas including management, informatics, testing and research.

Some strategies will require improving the social context for effectively implementing reforms. It may be necessary to change the mechanisms and criteria for staff selection; to provide information on the impact on access to the labour force for making education more transparent; or to adjust the incentives and the legal context (for example, principals and teachers should not be responsible for lost or damaged textbooks; at present those inputs are not used in many schools due to such responsibility and remain stocked in boxes or on shelves in the principal's office).

In summary, the use of research findings for

decision-making and diffusion of relevant information to the public may contribute to better educational management. Special attention should be paid to adjusting the operation of Ministries of Education to the new context. Providing adequate information for parents and students to select among the various educational alternatives will also introduce their monitoring of quality standards of the various units composing the system. At the same time, broad national consultations on key educational reform issues may also help the design of long-term strategies. Obviously, the modernizing and decentralization strategy to be adopted will differ from one country to another.

Challenge 4: Upgrading in-service teachers towards a professional role that encourages personalized and group learning

Teachers' training is closely related to the success or failure of the education system. Unfortunately there is at present a gap between the required and the present average training levels, evidenced by the fact that half of the pupils fail first grade. However, the results of certain well-tested innovations show that teacher-training can be upgraded by implementing good learning designs. The problem is complex because any attempt to change the teachers' pre-service training implies profound changes in school management, increments in salaries and hours of work, and adjustments to the social context as a whole (as discussed in Challenge 3). However, successful experiments in several countries show that the teacher (i) can provide personalized help to pupils or monitor group projects by reducing the time spent in giving routine instructions and information (when learning guides are available with a printed version of all routine instructions and information that the teacher should explain in loud voice) and (ii) can improve professional training by sharing ideas with colleagues in periodic workshops and can be trained in the use of computers and share ideas through networks.

In one LAC country 80 per cent of secondary-school teachers dictate their lessons. What has been detected in that country is not an exception but rather the norm in the region. Unfortunately, teachers' training cannot be substantially improved using short in-service courses.

Moreover, those teachers whose first priority was not in fact the teaching career but who ended up as teachers because they could not enrol in the preferred career may transmit their frustration to their pupils. They may not care enough for the children's basic needs. They may distort important educational objectives. In fact, research shows that pupils' poor achievement levels may be traced back to low levels of teachers' professional satisfaction compounded at present by low salary levels. Teachers' attitudes generated by negative selection and low professional satisfaction cannot be easily improved through short traditional training courses.

Pupils' achievement scores and parents' preferences suggest that teachers in the public sector are less well trained that those in the private sector. Public opinion shows a preference for private education because it ensures better instruction without recurrent salary or political conflict (surveys carried out in ten LAC countries show that even officials working in the Ministries of Education send their children to fee paying private schools). Chilean parents massively moved their children to subsidized private schools when a financial subsidy equivalent to the public unit cost was granted to these schools.

When well-trained and committed teachers are lacking, the alternative is a good learning design that can be implemented by the average teacher. The best available alternative is based on self-learning material that frees teachers' time for more professional work, for example, with those pupils who have problems learning by themselves or working effectively in groups. Given that the self-learning materials (for individual or groups) will be directly used by pupils, they need to be carefully de-

signed, tested and evaluated. Ideally, an evaluation report for each guide should be available so that the teacher may know exactly what the expected results are with a variety of types of pupils (with a suitable indicator of statistical reliability), in order to select which material might be used for each specific group of pupils. Well-designed self-learning materials will allow teachers to invest a greater portion of their working time in helping their pupils to solve the specific learning problems they are facing. Experiences carried out in eight countries prove that teachers' and pupils' work is more effective when pupils are using suitable materials. In fact, after a few sessions trying out materials teachers can easily explain the advantages their use generates for them and for their students. Those materials are a permanent source for upgrading teachers' training. However, the whole experience suggests that pre-service training should also be changed (as discussed in Challenge 5).

The present gap between the required teacher-training levels and their actual training (which may also be estimated by the difference between expected and tested achievement scores) is socially expressed in terms of low salary levels (discussed in Challenge 5) that tend to generate periodic salary conflicts and strikes, reducing time for learning and further restricting salary increments. The sources of salary conflicts are compounded by too optimistic self-appraisal of professional ability. Most teachers claim they deserve salary increments because thy feel they have the required skills and abilities to teach. The poor levels of pupils' achievement challenges that claim, but there are no effective individual performance evaluation methods available to identify which teachers are or are not performing according to the standards of the teaching profession.

Salary demands (and potential conflicts) are also linked to gender and to annual timetables because over than 65 per cent of LAC teachers are women and society or labour markets usually discriminate against working women who normally are (or prefer to be) appointed

on a part-time basis. However, the expected salary all teachers want to receive is a "full-time well-trained male teacher" wage. Fortunately, both a growing consensus to reduce discrimination against women and probable reductions in the average hours of work (from today's 70.000 to 40.000 annual hours over fifteen years time) will eventually reduce these sources of salary conflicts and will allow teachers' salary levels to rise.

The potential for salary conflicts is even higher in the public sector because the best qualified teachers try to be hired in private schools where salaries normally are two to five times higher than in state schools, or try to move into non-teaching jobs.

Pressure for higher salaries in public-sector schools is expressed in teachers' demonstrations for salary improvement as well as periodic (at least once a year) strikes. Teachers' unions have solid support for these activities because teachers are a large group among national civil servants, often organized into powerful unions and federations backed by congressmen and leaders of political parties. Sometimes, teachers are prominent local civic leaders and they are in high demand in electoral periods and political campaigns.

Even though recurrent strikes have not increased teachers' salaries in the last decades, they have eroded pupils' achievements. Some teachers' unions are now becoming interested in improving the teaching and learning processes in order to increase social prestige and salaries. This change may be related to test findings showing better scores in private schools' parental preference for private schools and examples from countries such as Japan and Republic of Korea with excellent pupils' achievements and well-paid teachers.

In summary, a careful and realistic evaluation of teacher-training should help decision-makers to decide whether to rely on improving pre-service teacher-training to a level that allows them to use a variety of teaching models or to carry out a concerted effort (in which teachers have an important voice) for upgrad-

ing teachers in-service using various methods, including self-learning materials for pupils. There should be public awareness of the improvements in teacher performance (and pupil-achievement levels) in order to support a national effort to increase teachers' salaries for longer hours of work.

Challenge 5: Improving pre-service training

New strategies for admission, training and selection are being carried out by several countries trying to break the vicious circle generated by negative selection of low-achieving applicants to teaching, by teacher pre-service training based on the same traditional didactic method they should be taught to avoid and by poor selection of graduates for teaching jobs. These strategies may overcome the tough and complex social factors which have critically constrained improvement of teaching with the result that pupils' learning achievement level has not improved.

Teacher-training institutions have low requirements for admittance because there are not many candidates. A few excellent secondary-school graduates are attracted by the intrinsic value they attach to teaching, short daily schedule, long vacation periods, low requirements for admittance, no discrimination against women and job stability, but these unfortunately are the exception. Most secondary-school graduates are reluctant to apply to teacher-training institutions, given the predicted low salaries, low levels of job satisfaction, modest social prestige, poor working condition and facilities, and lack of professional satisfaction due to low level of pupils' achievements.

In spite of the low range of candidates' test scores on academic achievement, it is possible to use personal characteristics related to professional success as effective criteria to select better future teachers. Few teachers now in service decided to teach because they were drawn by vocational or personal interest: most

teachers selected the profession because they did not make it into more prestigious post-secondary careers or because they wanted to work a short schedule. This negative selection is highly damaging for the teaching career because the teaching process is a very complicated function requiring high standards of formal knowledge and skills. Research on the effect of teacher characteristics on student achievement indicates that criteria for selecting candidates for teaching should include motivation, optimism and perseverance as well as substantive knowledge, skills and related personal factors.

This problem of negative selection into the teaching profession is compounded by a pre-service training of teachers based on only one teaching model. In addition, teacher-training institutions deliver lectures on structural grammar, linguistics, developmental psychology or teaching/learning models for the future teachers to learn by rote but do not develop projects for learning together, nor do they coach future teachers on active individual and group-teaching strategies to be used in classrooms. Pre-service training needs to be drastically reshaped to move from transmission of knowledge to re-construction of knowledge.

Pre-service training of future teachers must be consistent with the educational goals and methods discussed in Challenges 1 to 4. At the end of training, teachers should (i) strongly believe that *all* pupils (boys and girls) can learn; (ii) be able to bring about pupils' personalized learning instead of "transmitting information"; (iii) be able to design learning activities that are linked with understanding and value judgements; (iv) be able to select learning experiences dealing with the foundation of each topic or subject matter; and (v) be able to ensure that the teaching process eventually generates intellectual curiosity and independent thinking because the aim of good teaching should be the eventual ability and desire of pupils to learn on their own.

At the end of their pre-service training, all new teachers should be able to effectively teach

by: (i) using well-tested and evaluated techniques (or those of their own design if students' achievement level generated by their own design is higher than the level generated with the well-proven materials and techniques); (ii) enhancing pupils' research capacities rather than demanding that they memorize and repeat *the* right answer; (iii) using elements from the context known by pupils (even when their family incomes may be lower than the national socio-economic average); (iv) inspiring and complementing pupils' learning experiences (accepting that the pupil is the learner) rather than coming between the learning process and the pupil (transmitting instead of helping to construct knowledge); and (v) designing a meaningful course of study by selecting a sequence of well-tested learning experiences rather than following a pre-defined list of curriculum contents.

Criteria for selection and salary level mechanisms are under revision in several countries. Given similar academic backgrounds, criteria on personal characteristics (motivation, optimism or perseverance) are being considered for selecting candidates. However, when no trained teachers are interested in a rather difficult job, the salary should be raised and a new search for applicants made until the higher salary can attract a trained teacher.

In summary, a major change in faculty staff training of pre-service training institutions is required as well as higher admission selection criteria, if their graduates are going to be able to perform at the levels required. One possibility would be to provide one or two years of retraining for teacher-training faculty members, including work in demonstration schools, so that they learn to appreciate and implement the new training methods required to face this challenge.

Challenge 6: Resource availability and use

Once the five key previous challenges for improving the quality of education have been defined, it is necessary to review resource availability and use. Now that the region competes on the world market, its children must have an annual amount of time for learning similar to that available for children of developed countries. They must have well-trained and well-motivated teachers and adequate inputs such as textbooks. These elements will require additional resources and their wise allocation. LAC countries are trying to make better use of resources, but increased resources are also required for: increasing time available for learning; providing universal pre-schooling; improving the quality and availability of training materials (better-designed and tested for reliable achievement of standard learning objectives); and increased salaries so that teachers will work longer hours.

Democratic societies recognize the crucial role of reliable teaching staff at all levels and the need to provide adequate social and economic rewards; unfortunately, they have no way of rewarding staff according to their relative ability levels. However, the vicious circle must be broken. Increasing teachers' salaries may help the recruitment of good candidates for teaching training and provide a selection of good potential future teachers and better teachers in-service because they work in an activity that was their chosen professional career. Some countries have increased teachers' salaries in order to have a longer working day or an extended school year to help them to better prepare their lectures, to help pupils with their homework at school, or to do remedial work with them.

The LAC governments have issued strong statements on the need to improve education and have committed themselves to implementing reforms and increasing financing for human resources training. These ideas were recently endorsed in the Ibero-American Presidents' Summit (Bariloche, Argentina, October 1995), but were also made explicit in the four previous summits and in the Miami Hemispheric Summit (October 1994).

The time has come to implement effective educational reforms and a social consensus

must be reached in each country on the amount of educational financing to be provided by public and private sectors. On the average, LAC countries allocate about 7 per cent of their GDP to education and human resources training, with about 4.5 per cent financed by public sources, but an ECLAC-UNESCO study suggests that present effort should be increased by 50 per cent in order to ensure an education system responsive to societal needs, including an average public sector contribution of 6.5 per cent of GDP. Heads of State should issue a statement at their next summit on the social effort their countries are willing to make to ensure the expected quality of education for their children.

Given that most parents these days have completed basic education and are better prepared to make responsible decisions on amounts and types of schooling, it now seems possible that parents and students should become actors in any educational decision to be taken and share a higher proportion of education costs. This also implies transferring the risks of decisions and, for example, reducing formal conditions for admission and increasing choice possibilities in the light of experience throughout the world.

Closing the quality gap involves a large increase in financial resources over a long period of time. Even though most countries of the region have overcome the most severe economic problems of the 1980s, resources are still limited and must be allocated effectively to assure their impact on the quality of education. In terms of national resources, the reduction of the quality gap means ensuring that, in addition to funds for increasing salaries, funds are available for expenditures such as teacher training, school textbooks and self-training materials, pre-school education and mass media campaigns to help parents provide early stimulation, extending the school year from 800 to 1.200 hours, improving testing and diffusion of student achievement results, and testing and evaluating new educational approaches. Social consensus is crucial to ensure long-term im-

plementation of the selected strategies even in the event of changes in government.

In view of the large resources needed, international assistance to education must play an important role. External aid to education now averages over US$ 1.1 billion per year. This is not large in comparison with the approximately US$40 billion that the region as a whole spends on education, but it represents about half the funds spent on new investment, and a very large share of the scarce flexible funds that can be used for innovations and qualitative improvement.

In summary, LAC countries will need to reach a social consensus to undertake major national efforts to increase both public and private funding of education. The average public effort should be close to 6.5 per cent of GDP. In the area of international aid, countries will have to take charge of the flow of external assistance and co-ordinate the multiple projects financed by international agencies, while the agencies themselves need to improve co-ordination, both among themselves and with the countries in order to make aid to education as efficient and effective as possible.

Education for development and peace

Lifelong education for all, including continuing professional education for teaching staff, might be the agenda for the future if LAC countries want their people to have access to knowledge and wisdom in order to change production patterns with social equity. This objective goes beyond original PROMEDLAC's goals, but responds to the importance societies accord education and the production of knowledge. PROMEDLAC has been instrumental in the design and setting in motion of a global policy in basic education, but changes in the social context require corresponding adjustments and a social consensus on priorities.

In 1979 LAC Ministers of Education analysed the state of the whole education system and targeted PROMEDLAC's objectives in basic education and literacy. The starting point

for reshaping these objectives should be a global analysis of the lifelong education system. Lifelong education and training involves alternative opportunities at various life stages and attention to specific needs. Countries are trying alternative delivery systems because of increased job changes or new types of job required by technical development, as well as longer life and work expectancies. The quickening of the regional integration process and the need for continuous technological change may raise the social priority for lifelong education.

Lifelong education is being compared with a complex transportation system, ready to deliver new passengers to the most unexpected destinations. For example, higher education –especially universities and further education institutions– are expanding their role as permanent learning centres for professional retraining and upgrading, and even there are cases of accrediting courses without formal admission requirements (but the student assumes the risk of failure). The next step in lifelong education would then consist of "learning without frontiers" by opening education to life, and reinforcing second-chance education. This is in line with UNESCO's interest in improving training and crediting individual's knowledge and skills.

Reshaping PROMEDLAC in a lifelong education perspective requires that each country simultaneously take decisions with respect to the expected activity level of the alternative education mechanisms available for learning in each life stage and the additional financial resources to be allocated to the different types of education alternatives. Technology is quickly expanding feasible alternatives.

UNESCO and other agencies have carried out a diagnostic analysis and detected nine key areas that countries can use as a checklist for priority attention in the perspective of lifelong education: secondary education with special attention to technical and vocational education; learning opportunities for at-risk youth; pre-service teacher training; pre-primary education;

special education; functional literacy; higher education and graduate research programmes; and educational research and development. Member States must decide on their relative urgency and on the need of regional co-operation.

A transdisciplinary area which should be discussed within all of these key fields is education for a culture of peace. This issue deals with how to educate for tolerance, respect for human rights, the practice of democracy and learning about the diversity and wealth of cultural identities. A contemporary view of the problems relating to these issues is offered by the Declaration and Integrated Framework of Action on Education for Peace, Human Rights and Democracy respectively endorsed and approved by the Twenty-eighth Session of the General Conference of UNESCO. The translation into national languages and preparation of national plans for their implementation are immediate tasks of governments. Regional and international co-operation could be foreseen for the production of materials on human rights and democracy, revision and development of textbooks, in particular in history. The Associated Schools Project and its spectacular extension can be a valuable instrument in the promotion of this education. Multilingual education as well as the promotion of mother tongues and languages of minorities are also necessary ways of creating a climate of understanding and peace, while international co-operation in the field of language teaching can be promoted within the LINGUAPAX project.

Secondary and vocational education can no longer be organized in terms of teaching/learning a long list of contents and the mastering of some intellectual skills. Those objectives could be accepted in the 1960s, when only 10 to 20 per cent of each single-age population group was enrolled in secondary education. Now that over half of the teenaged population have access to secondary education, the issues deal with how to help them select learning alternatives linked with their future work or learning options, and where they can find relevant

knowledge they need to understand everyday life situations or to carry out activities connected to the ever-changing reality of their lives. Learning experiences in secondary schools should be linked with everyday life and the working world to complement the gradual introduction of active and participatory education, and to ease transition to the labour market.

The true policy question on secondary and vocational education goes to the heart of the excellence versus equity arguments: should all students, regardless of past performance, current aptitudes or vocational interests, be receiving identical curricular experiences in secondary education? In any case modern secondary education must (i) promote respect for the law, (ii) provide opportunities for reaching social consensus within a democratic context, (iii) encourage freedom of speech and respect for other's opinion within a pluri-cultural social context, (iv) support the independent operation of justice as part of democratic practice and (v) increase the ability to systematically explore technological facts and principles, and master the basic ideas of massive technological development. Secondary schools should also give special attention to communication skills, mathematics and science.

It is essential that the approach to teaching at the post-compulsory level involve students in the production as well as the consumption of knowledge. This change involves alternative methods to the usual traditional didactic methods: project work, group discussions, seminars, systematic analysis based on study visits, or question sessions with guest participants whose activities are relevant for the students. Participation of the local business community and opportunities for dual technical education as well as internships should be actively pursued. Opportunities for work or play with computers should be encouraged. A detailed analyis of teaching and learning of foreign languages, including the pros and cons of a few hours per week versus short-term immersion courses, should be carried out. In ad-

dition to developing the ability to handle computer languages, there are role games (for example, *SimCity)* that stimulate the ability to create alternatives, make decisions in the face of uncertainty, programme use of resources, and take into account complex relationships with environment and development problems, and that motivate participants to persevere for hours with the game.

Learning and training opportunities for marginalized at-risk youth are a complement of the improved secondary education, an element of an effective strategy to combat crime and violence among youth and to reinforce a culture of peace by increasing access to knowledge and work. The fight against drugs and AIDS can benefit from extracurricular activities and youth programmes offered by secondary schools and from community libraries operated in close relation to or even within the secondary school itself. There are more and more innovations in this area with UNESCO playing a clearing-house role, leading co-operation among world-level specialists. Many aspects of the education system need to coordinate their activities.

Pre-service teacher training needs to be looked at seriously. Teachers' main role today is to give advice on access to various information sources, help to cope with specific problems and learn with the students by following well-designed outlines or guides. This new role implies an important change in pre-service training as regards designing and providing active learning. Better teaching strategies for reading and writing as well as mentoring should be included in pre-service training. Selection mechanisms to increase commitment should go hand in hand with incentives for improving pre-service training measures to improve the level of training of the teachers already in service.

Pre-school education is the first stage of life-long learning and as such should be made available to all children. It is particularly important for urban-marginal and rural pupils. Pre-school teachers can interact with primary teachers if

primary schools make space available for preschoolers as a result of lower population growth and reduce the number of repeaters. When active and participatory learning prevails in primary education, pre-schoolers can be integrated into first grade classrooms when space is available. Educational television programmes, parent-training programmes and mass media campaigns on early stimulation can also complement or replace pre-school education. Preschool education can initially be delivered with assistance from the mother or a relative. This will help keep the cost of pre-school projects similar to that of primary education until universal pre-schooling is attained (pre-school classes need to be small and the unit cost can easily be twice that of primary school).

Special education can be provided in all countries implementing personalized and group learning by mainstreaming most children. Special education is an example of the need to look to the diversity of the basic learning needs and is a key element of educational equity. UNESCO has been working on the special needs in the classroom project in most LAC countries.

Lifelong education is vital to ensuring functional literacy. Research carried out by UNESCO in nine countries confirm the problems that most adult workers have as regards writing.

Countries are making special efforts to train university academic staff. Owing to the low academic level of most university staff, university students today are usually educated via a rote learning method based on outdated books. The academic level of university staff is a function of low salary levels and limited opportunities for graduate studies. University faculty salaries have been declining in real terms and are unlikely to be substantially raised in the near future given the economic situation of most LAC countries. The central issue of matching increasing demands on and expectations from higher education with a scarcity of resources requires the mobilization of all actors and stakeholders in order to raise investment in higher education. Higher education is an important social investment and requires adequate allocations from public funds as well as an earnest search for new approaches to funding, based on participation by all those who either directly or indirectly derive benefit therefrom, including the economic sector, local communities, parents, students and the international community. Broadening the resource base should be accompanied by systematic efforts on the part of higher education institutions themselves to increase their cost-effectiveness and efficiency.

Graduate education programmes should be expanded to stimulate research and to train university faculty members. These programmes are usually developed by pooling resources for doctoral programmes, fellowship grants to less well-trained faculty, research grants and ongoing research projects. Public funds can be used to raise salaries for the small elite of senior researchers (about 10 per cent of the university faculty) of international standing able to staff graduate programmes (and at risk of moving abroad). The cost of a programme involving research grants for such an elite group and doctoral fellowships should be near 20 per cent of public financing of the university undergraduate programmes.

Education think tanks at national level are needed to provide effective long-term responses to the challenges presented above and the new tasks. They should function in a relative autonomy and on a permanent basis, undertaking analysis of the education system in order to diagnose problems, causes and issues at national level. If resources are available, their remit could extend to contracting external research and evaluations, carrying out reliable comparisons of the local education system with foreign experiences, supporting educational development projects and research designs, and evaluating results, and proposing alternative policy issues for discussion by governmental, parliament or ad-hoc groups. In this respect studying autonomous school organization systems (such as those functioning in Uruguay)

or current practices regarding long-term members of the justice system could prove useful.

LAC production and use of education research findings should be subsidized to increase the efficiency of the education systems. Research is an integral part of graduate work, but its application involves the continuous development of the regional and national exchange networks. Research on design and evaluation of learning materials should be privileged. Available research findings should be used in diagnosing educational problems at national and local levels, in identifying causes and alternative solutions or successful projects, and in designing policies. Given that benefits from educational research cannot be appropriated by researchers, there is a need for public subsidies to this activity. Some 1 per cent of the education budget should be allocated through externally reviewed project funding. LAC regional networks such as REDUC might contribute to the think tanks as well as to the potential expansion of the Internet. Furthermore, UNESCO will re-enforce specialized publications and PROMEDLAC's Regional Information System. As for LAC Member States, they also should reinforce their own capacity for increased information gathering and exchange.

The above-mentioned networks could also co-operate in the attainment of long-term UNESCO projects such as those referring to the *General History of Latin America* and the *General History of the Caribbean*, the UNITWIN/UNESCO Chairs Programme, the Bolivar Programme for university/industry re-inforcement and other co-operative projects that facilitated improvements in educational planning (REPLAD), adult education (REDALF), bilingual education, multi-grade education and special education (PICPEMCE), or educational statistics.

As far as lifelong education is concerned, not enough attention has been given to identification of key problems, particularly problems directly affecting classrooms and schools at both primary and secondary education levels. There has been a certain reluctance to cope with the real problems and too much time devoted to solving irrelevant problems. The checklist of problems and main causes presented in this document is intended for use in carrying in-depth analyses in each country that can generate public support.

Countries are building social support for feasible long-term strategies

Providing relevant information to the public helped reaching a social consensus on key long-term educational policies in several countries. Public opinion may become aware of alternative ways and means to improve education by discussing controversial issues. However, other countries lack appropriate mechanisms for such discussion. Consensus mechanisms may reduce the power of political coalitions and parties, while strengthening democracy. Professional analysis might dismiss simplistic statements from conventional wisdom.

The first step in designing successful strategies to reform education in line with the key elements supported by a social consensus is the identification of groups affected by low quality and lack of equity in and research into the causes in order to identify the positive discrimination measures need for real reform. Groups and interests that will be affected by the reform processes must also be identified and taken into account. A real reform usually means gradual introduction of complex changes rather than drastic sudden changes.

Although it seems that all possible education changes have already been tried out, most have dealt with institutional aspects. An effective pedagogic reform that may increase the quality of education is now just starting. This is the reason for UNESCO to focus on comparing experiences among countries and to plan joint activities for undertaking experiments and evaluations.

UNESCO, as an inter-governmental organization with a world mandate, will certainly co-operate with LAC countries in designing and implementing recommendations and strategies

that can be adapted to each country's reality. The Organization will also pay increased attention to co-ordinating resources, and sharing and comparing ongoing experiences carried out in Member States coping with similar problems. UNESCO will encourage comparisons between expected results and evaluating findings, and will target its activities towards the most relevant issues relating to improving quality and equity in education in Latin America and the Caribbean.

FIFTH INTERNATIONAL CONFERENCE ON ADULT EDUCATION - REGIO-NAL PREPARATORY CONFERENCE
(Brasilia, 6-8 November, 1996)

REDALF. Regional network for training of personnel and specific support in literacy and youth and adult education programmes

The meeting involving Latin America and the Caribbean that will define the regional contributions to the agenda of the V World Conference on Adult Education "Adult Learning: Key for the 21st Century" (Hamburg, July 1997) has been convoked and is presently being sponsored by the various United Nations organizations, and the national government and non-government organizations concerned with youth and adult education.

UNESCO through its Regional Office for Education (Santiago. Chile) and Latin America's Adult Education Council (CEAAL), has made the initial arrangements to summon said organizations. ECLAC, CINTERFOR/OIT, UNICEF and GTZ have been invited to take active part in the event.

Brazil's government gratefully accepted the designation as host country for the Regional Conference to be held in Brasilia, on November 6 to 8, 1996.

The organizational strategy to be used at the Regional Conference, envisages broad participation by the various countries' public and non-government institutions, national specialists, and the mass media. To this end, activities have been planned culminating in meetings which address those topics suggested in the preparatory document elaborated for these national meetings. The contributions of the various countries to the Regional Conference may touch on other aspects relevant to the construction of a future education with the participation of youths and adults.

National meetings will be held starting mid-March and through September 1996. Each group must elaborate a summary synthesizing the proposals submitted at each national working session. Information will be forwarded to UNESCO prior to September 1996.

EVALUATING STUDENT PERFORMANCE. CLASSROOM RESEARCH: COMPLEMENTARY PEDAGOGICAL ACTION

Ubiratan D'Ambrosio*

Although most of this work is related to mathematics, both the discussion and analysis presented here, are of a general nature and valid for all other subject matters contained in the school curriculum.
Evaluation emerges as a judgmental appraisal on the ability of students to perform academically which, paradoxically, is implemented by those responsible for its inevitable failure, the teacher.[1] We bemoan the fact that students are victims to a brutal and inefficient system while paying little heed to a second –perhaps less conspicuous– casualty, the educators themselves. Those who choose to undertake such an emotionally fraying profession, under socially and financially humiliating conditions, who are often blamed for the –inevitable– failure of a misguided system bent on repairing rather than reforming, are veritable silent heroes of our modern society.

As of late, performance evaluation through tests as well as research findings, have been subjected to profound scrutiny. The spiralling school failure, repetition, and drop out rates, have rekindled the debate on evaluation. Concern is universal. Researchers specialized on education have also been accused of directing their research and using their findings in the subject areas of their Masters or PH.D. theses, which bear little or no relation to the actual classroom education being delivered.

In general terms, these observations are not justifiable. Although it is true that most theses end up pigeonholed in libraries, we must admit that every piece of research, their findings and the publications they give rise to, have to do with education as a whole, and with the pedagogical action.

Regrettably, through neglect or inaccessibility, these may never become part of the teacher's arsena. Because teachers have been abandoned to their common sense and didactic manuals, important education innovations have missed their intended mark. This state of affairs is not unique to Brazil; on the contrary, it has taken pandemic proportions.

A case in point. Many of our education institutions adopted the system of passing a cycle –two or three years– rather than a school year. Despite the availability of indicators that vouch for the wisdom of the cycle system and argue for even more extended cycles –eight and three years– resistance by teachers, par-

---

* Ubiratan D'Ambrosio. Original article in Portuguese: "Avaliaçao de Rendimento do aluno. Pesquisa, em sala de aula: Ações pedagógicas complementares".

[1] In the United States, a teacher being sued by parents over the low academic performance of their children is not uncommon. In fact, teachers' associations often insure their members against such eventuality. I have information on similar occurrences here in Brazil.

ents and students, have prompted a return to traditional testing schemes; while there has even been talk of implementing nation-wide examinations.

Actually, the subject should not be nearly as controversial, since nothing seems to favour one system over the other. None of the research has convincingly demonstrated that evaluations, *as currently implemented*, constitute performance indicators. Quite the opposite in fact, important research has shown that performance in a given course has no incidence on subsequent courses, thus negating a possible connection. Particularly in mathematics, there is an evident inability to transfer knowledge to a new situation.

Two exercices for classroom teachers

i) Give a test, correct and hand out the results as you normally would do. Keep the corrected tests. *Without warning*, give the same test three months later. As before, correct them and compare the results. Discrepancies should be obvious, that is, results do not reflect assimilation by students, even by those who passed the test the first time around.

ii) If you are teaching equations using a, b, c ... and coefficients x, y, z ... as unknowns, try using x, y, z as coefficients and ask the students to solve for a, b, c. However, do not forewarn them.

The above, points to the little relevance there is between evaluating through tests and examinations and actual learning. True, students pass tests they have been prepared for, but, it is essential that the distinction is made between training and educating. I have already commented on the excellent job done by teachers in preparing students for university entrance examinations where they become genuine master "trainers". However, I must insist that training does not constitute education, at least not in the sense of shaping future generations so they can fully exercise their rights as citizens, giving and taking what society, as a whole, demands from and owes to them.

Evaluation is directly linked to the philosophy of education advocated by all of us. The learning phenomenon, it is interesting to note, is present in every animal species, and is closely linked to survival. Man is no different. One learns to breathe, eat, walk and so on. The evaluation that accompanies that learning experience is intrinsic to the process. If you do not learn to eat, you starve; if you do not learn to walk, you stay put!

The post-medieval western tradition that has governed our education for the past four-hundred years, focuses on the intellect as its prime concern, and regards it as something partially or totally detached from the body. We speak of "a sound mind in a sound body" only as a concession to the ancient Roman tradition. Particularly in Brazil, this is purely symbolic as any promising young athlete who is failing important subjects –specially mathematics– will be willing to tell you.

I am reminded of the times when I worked for Sao Paulo's State Educational Council. On numerous occasions I rejected parents' applications requesting the promotion of their sons based on their having passed mathematics, although they had flunked other subject matters. Their thinking went:if he/she passed math, it should be enough. The rest is superfluous. My opposition to failing students, never lend itself to encouraging a libertine interpretation of the current educational system. And, placing a greater value on one discipline over others or on one type of knowledge over all others is, in fact, a form of intellectual libertinism.

What is more important: learning point 3 or point 5? What do we know about what is important for an individual in terms of life-long learning? What do we know about better meeting his/her eagerness to know, explain or act? As regards students enrolled in the same class; what do we know about them? That they belong to the same age-group? What does this mean? How would this individual –student– behave in his/her natural setting, that justifies supervising, repressing or forcing a change in this behaviour, so that he/she can become part

of a society that follows normalcy,[2] behavioural, health and knowledge criteria, set forth by this self-same society? When will we be giving that being (entity) the chance of being (existing)?

The dichotomy between making and knowing goes back to 17th century cartesianism. Since then, western philosophy has been dichotomizing human behaviour between body and mind, matter and spirit, knowing and making, manual and intellectual endeavors. Since then, learning theories have evolved which separate repetitive knowing/making from dynamic knowing/making, favouring the former. The model implies expectations which, in turn, favour knowing as knowledge and making as production; production is measured by the model through a *quality control* mechanism, and knowledge through *evaluation.* Actually, both share the same niche within the model as well as a main characteristic: they are static. In other words, evaluation as currently practiced, resembles a quality control test for a mass-produced good. It has little to do with people in its fullest sense.

Creative knowledge, that which accompanies artistic pursuits, is poorly understood; speculative knowledge, that which accompanies intellectual endeavors, is practically impossible to ascertain. Thus, systems emerge that circumvent the difficulties inherent to that which is creative and to that which is speculative. It is extremely hard to measure innovation. Hence, that which is easiest to measure, mass-produced –a model of repetitive knowing/making– is developed through an evaluation, in the guise of quality control.

The analogy goes farther when mass-production systems overflow into production and education. The concept of "scientific management" introduced to industrial production systems by F.W. Taylor in the early 1900's, is strongly linked to the learning of mathematics. Under the principle of mass-production –applied to education–, the student becomes a car in an assembly line, i.e., the process' *objective,* which is automatically furnished with an engine, a body, and wheels, which represent curricular *contents,* by an assembly-line worker trained to make optimum use of his allotted time, that is, making use of a pre-determined *methodology.* Education is analogous to taylorism in its curriculum and its components, *objectives, contents* and *methods.* However, like in the assembly line setup, a control must be made at each stage, to ensure that the engine was installed and that it is working properly. At the end of each course the student must take an examination while, continuing the analogy, at the end of the assembly line the car must be driven off and tested to verify compliance with market specifications. In my opinion, this is not education. It is merely training individuals to do a specific thing. The objectives are intellectually wanting, good enough –perhaps– to prepare an individual for routine jobs, but not nearly good enough for educating the citizens of a modern, democratic society.[3]

The critical component must prevail in this education modality. In this regard, and in connection with the taylorism analogy, Ole Skovsmose's[4] leading work is strongly recommended.

How can we further these reflections? A first item would have to deal with the curricu-

---

[2] The discourse on normalcy, on what is right, constitutes one of the most fascinating topics the modern world has to offer. It should rightfully take priority on reflections over education, behaviour, health and criminality. I highly recommend Anna Maria G.H. Schmitt's powerful Masters thesis entitled "O Fetiche da Formaçao Escolar e Académica", Universidad Federal Santa Catarina, Florianópolis, 1994, soon to become –hopefully– a book.

[3] See Ubiratan D'Ambrosio's: "Cultural Framing of Mathematics Teaching and Learning" in Didactics of Mathematics as a Scientific Discipline, eds. R. Biehler, R.W. Scholz, R. Strasser and B. Winkelmann, Kluwer Academic Publishing, Dordrecht, 1993; pp. 443-445.

[4] See Ole Skovsmose's "Towards a Philosophy of Critical Mathematics Education", Kluwer Academic Publishers, Dordrecht, 1994.

lum. How to define it. As with taylorism, which establishes a production style and serves as a strategy to execute it, the curriculum may be defined as a strategy for educational action. Upon analyzing the curriculum, three components are readily identifiable: objectives, contents and methods. Obviously, these three components are all part of the same process which is illustrated by the following cartesian-inspired rendition.

Clearly, objectives, contents and methods must be mutually consistent.[5] One of the main reasons that account for the failure of modern mathematics, is the fact that content change was not accompanied by a parallel change in objectives and methodology. The difficulties arising from implementing the use of computers and calculators in schools are still severe, due to the emphasis on preserving traditional contents and objectives: mechanical skills and solving standard problems.

Calculators and computers must go hand in hand with a reformulation of contents, leaving behind the curricular deadwood –such as the solving of artificial and rather uninteresting problems– whose only claim to fame is having been there for a long time, and pressing on to modern subject matters that could not be tackled without the aid of this technology. Education as it is conceived today, cannot afford to train someone to reproduce concepts that are detached from reality, in other words, to develop totally artificial tests and examinations. In the words of Robert Reich, current United States' Secretary of Labour: "standardized tests are still a very accurate method for measuring the few things that go beyond the ability of children to answer to standardized tests".[6]

This quotation leads us to reflect upon standardized tests, an even more useless and deceitful way of evaluating than regular testing and examinations. Unfortunately, in many countries including Brazil, standardized tests are being proposed as an education enhancing initiative. I would like to make myself perfectly clear with regard to tests and examinations which reveal practically nothing about learning and create enormous distortions on educational practices. In fact, in addition to revealing little, tests have a negative impact. On this subject, refer to Teresa Amabile's research programme contained in a book released ten years ago, but with which few educators are familiar.[7]

Someone could say: if evaluation is needed in everything we do, why is it not required in education? And he would be right; evaluation is necessary and can be implemented more adequately, which is what I intend to show in the next pages.

The educational process is comprehensive and, it really always yields positive results, albeit, often not those sought. Throughout life, learning happens naturally, without the intervention of schools or teachers. In the classroom, what is being taught through that holistic concept of education? A lot, about a lot of things, which probably have little to do with what the teacher has in mind. Evaluation is a means of verifying how much of the teacher's message came across, if the objective –transmitting ideas, not training– had been met.

In the case of theoretical studies, this can be accomplished through an analysis of how the class was received by the student, which contents stayed with him/her following the teacher's attempt at transmitting something. This could take the form of a class evaluation-report handed to the teacher and keyed to certain rules:

---

[5] For a more profound discussion on curriculum, please refer to my book "Da Realidade a Açao: Reflexoes sobre Educaçao e Matemática", Sumus Editorial, Sao Paulo, 1988.

[6] Robert B. Reich, "The Work of Nations", Vintage Books, New York, 1992; p. 227.

[7] Teresa Amabile, "The Social Psychology of Creativity", Springer-Verlag, Boston, 1993.

1. identification of the student, the teacher, the subject matter, the topic covered, date and grade;
2. a page long summary of the class content;
3. relevant bibliography and references different from those suggested by the teacher;
4. comments and suggestions on the class, topic, discipline in ten lines or less.

Why the proposal? Let us analyze point by point.

1. In every classroom session the student must identify the topic being covered and insert it in the subject matter that is part of his on-going study programme. This helps him keep a continuity of topics, class after class. The name of the student and teacher must be included since, curiously enough, on many occasions at the end of the term, the student ignores the teacher's full name and vice versa. This information is important to both parties. Repetition helps retain in our memory, facts we are interested in knowing.
2. The suggestion regarding a brief written account of the class content, is intended to encourage the writing of a synthesized version. A stirring lecture which encourages note-taking lends itself to writing an extensive report. But, if there is a space limitation, comprehension becomes the organizing principle. Besides, the ability to synthesize ideas within pre-determined spaces, is a must in every activity of our daily lives.
3. The opportunity the students gets to comment on lecture-related subjects is most important. He/she feels appreciated. Occasionally, it will introduce the teacher to a new author or work.
4. Does the student feel his course-expectations are being met? What could the teacher do to improve his class presentation? For teachers, knowing his/her performance is being appraised is stimulating.

However, perhaps the most important aspect of all this, is that the teacher through this instrument (report-evaluation), has at his disposal one of the richest educational research tools. Reading and analyzing these reports, fol-lowing a straightforward synthetization technique, places the teacher at the research level and enables him to orient and execute his educational action plan inspired on the students' expectations, while making the educator aware of the existing constraints and conditions that govern his function. This is one of the most interesting proposals I have come across with, and it happens to be the brainchild of Rafaella Borasi. It is intended to give teachers an active hand in the definition of their own pedagogical action.[8] In fact, everything points to future mathematics teachers performing as researchers. The reader is encouraged to read the work of Beatriz Silva D'Ambrosio, who has made important observations regarding this aspect of future education.[9]

This proposal acknowledges that teachers are immersed in an on-going professional enhancement process and, this being the case, nothing could be better than having the recipients of his/her instructional practice provide the elements for self-analysis. Thus, teachers become interested in finding out how much did their students actually learn. If his message fell on deaf ears, his obligation is to back-track and tackle it again perhaps using a new approach. If, on the other hand, the message was understood in general lines, but the reports show that some students did not grasp its essence, it falls to the teacher to find out what may be preventing those students from learning like the rest, help them if needed, encourage them if necessary. It is a form of evaluat-

---

8 Rafaella Borasi, "Learning Mathematics Through Inquiry", Heinemann, Portsmouth, 1992. Borasi's research on learning mathematics associated to reading-writing and error analysis, are also important papers in this area. Of particular interest are Rafaella Borasi and B.J. Rose's "Journal Writing and Mathematics Instruction", Educational Studies in Mathematics, vol. 20, No. 4, November 1989, pp. 347-365, and R. Borasi's "Capitalizing on Errors as Springboards for Inquiry": A teaching experiment, Journal for research in Mathematics Education.

9 Beatriz Silva D'Ambrosio, "Formaçao de profesores de Matemática para o século XXI: o grande desafio", Pro-Posiçoes, vol. 4, No. 1 (10), março 1993, pp. 35-41.

ing as a whole, where rejection is not an alternative, but making him aware that there are things he ignores, is. Once he is cognizant of this fact, the responsibility for not knowing –be it for lack of interest or learning capacity (most difficult to define)– must fall to the student himself, whether an adult or a youth.

As educators, our duty is not to reject individuals. Rejection as well as the selection of individuals to assume certain responsibilities or perform specific tasks, is the mission of other professionals and institutions, usually those which represent segments of society concerned with screening citizens; but that is not education.

The time has come for me to define education: *education* is the strategy society uses aimed at providing each individual with the necessary tools to attain his/her creative potential, and develop his/her capacity to work with others in common actions that seek common goals. As educators, our mission is to develop this strategy to its fullest expression; mathematics teachers, will use mathematics as the instrument with which to instrumentalize this ambitious mission. We believe mathematics serves this purpose, hence we defend its permanence in the curriculum.

Our first concern is education, the student, not mathematics. Those who place their discipline ahead of everything else, are wrong; they are not educators, but merely specialists. Clearly, they do provide a valuable service to society, but educators, they are not; they simply are not.

In the case of practical studies, the report-

evaluation entails the execution of a task, not unlike a creativity indicator. If an attempt was made to teach an individual or a group to do something, let the individual or the group do it. Many teachers, prisoners of formal evaluation techniques, will obviously see in this a concession to tests and examinations. Absolutely not. To do something means to materialize a project. For instance, when studying mathematical models the idea is to construct a model of something that interests the student himself, and not so much the reproduction of techniques, the demonstration of mechanical skills or of the ability for solving standard problems. In these cases, creativity is absent, and so is the ability to use variegated knowledge to face a global situation. The project method, for teams, reveals something about the way individuals interrelate, how they join hands in the pursuit of common objectives, how they learn to discern among leaders and followers. This should only serve to guide the teacher in his work with individual students, provide an insight into the student's personality, and, based on this knowledge, fulfill his role as educator. Mathematics applied to projects, is the vehicle we use to catalyze the process.

In closing, evaluation must provide guidance to teachers in the performance of their professional activities, yet never become an instrument for rejecting or holding back students actively engaged in building their theoretical and practical knowledge structures. Rejecting, selecting, ranking, and screening individuals, are activities foreign to the mission of the educator.

STUDENTS REALLY WANT TO LEARN

Marilyn Atherley*

Most teachers have recognized the fact that they are also counsellors in the classroom. It is impossible to help someone learn without really knowing that person. We need to know how they think, feel and respond to situations. Educational training is incomplete without some psychology courses. Teaching and counselling must be specially blended together.

One of the key issues for young people is respect–respect for their thinking, respect for their capabilities and respect for their capacity to learn. The more of this respect they get, the more they learn and the more they want to learn.

One of the greatest obstacles to their learning is confusion. They feel confused about what is going on around them, about adults' reactions to them and about the information (or lack of it) that is presented to them.

A good teacher knows that his or her roles include guiding the student through the learning process, not to be an authority and to help the student keep his attention clear. The teacher then trusts that the learning will take place. The teacher needs to hold out high expectations to the student and to offer appropriate challenges. The information here is to help teachers to fulfill these roles.

Some people say that parenting is perhaps the hardest most underpaid and undervalued job. Teaching, I think, runs a close second. Teachers, like parents, deserve complete respect and admiration for doing this job so well over these past hundreds of years.

The process of learning

Learning can be defined as the ability to take in new information, check it against previously acquired and stored information, evaluate it and store it for further use. Then take that new information and respond appropriately to the present situation.

* Marilyn Atherley. B.Sc., M. Ed., M. Phil, is presently pursuing a Ph.D. in Education at the University of the West Indies. She has been a teacher for 18 years. Also a Re-evaluation Counselling Teacher, she leads teacher workshops and support groups including an Educational Change group.
From: The Study Centre An Educational and Family Resource Centre 109 Eastern Main Road, St. Augustine, September 1995.

If we are to consider this definition then there are some things that learning is not. It is not responding rigidly to situations. It is not cramming of information and regurgitation. It is not conditioning.

What interferes with learning?

Learning can be interfered with at different stages:
– Interference with the storage of information process. E.g. information going in mixed up with other signals such as unnecessary noise.
– Difficulty in comparing and contrasting the new information with the old e.g. not sufficiently clear codes and clues stored with the information.

– Inability, at the moment, to come up with an appropriate response to the situation. e.g. when the brain is shut down and so depends on rigid responses previously clued in with a somewhat similar incident (but not exactly fitting the present situation).

Leaning can therefore be interfered with by both internal and external factors. The internal factors can be actual physical damage to the brain at birth or later, physiological problems within the system (chemical imbalances, damage to the nervous system etc.) or internal feelings which were allowed to accumulate and to take up the attention that should be used for learning.

The external factors include: the learning environment (structure of classroom, physical comfort etc.), material to be learned and practices of the teacher.

The emphasis here is on the unreleased internal feelings and their effect on learning i.e. when the learning difficulty is the result of an emotional problem.

Learning blocks

In order for learning to take place then, the learner must be feeling good-must not be tired, hungry, depressed, frightened, embarrassed, confused, bored etc. We can think of ourselves and how we don't think straight when we are angry, or how we don't concentrate when we are depressed or hungry.

Several factors can be responsible for the learner not feeling good and not being able to concentrate or experiencing this temporary shut down.

Unreleased painful or unpleasant feelings

From very early in life we have unpleasant experiences from needing to be fed or held, being in wet diapers or falling down to being physically or emotionally abused. At these early stages in our lives we are never allowed to completely release all these feelings that come up. None of us was allowed to cry as

much or as loudly as we would have liked to sometimes. We were never allowed to get rid of our angry feelings. We were accused of throwing tantrums and we were sometimes even punished for that.

I remember once when my daughter was about two years old and my mother was around. My daughter got upset about something and proceeded to do what she knew was best for her-make noises and get rid of the anger. My mother tried to stop her with the usual "Behave yourself!" comment. So I calmly told my mother it was okay and she just needed to get rid of some angry feelings. My mother's response was, "What does a two year old know about being angry?"

So at what age do we begin to feel angry? Or at what age should we stop shutting it away and deal with it? If we are not taught from early to deal with these feelings then more than likely we do have difficulty later on knowing how to handle them. Then we are expected to somehow know what to do when we get hurt or angry.

We can think of the amount of these pent up, stored away feelings we have from early in life through school. Whenever something comes along to remind us of these feelings that we had to stuff as far away as possible to stay out of trouble, then they can take up our attention again. So we don't need to go through unpleasant experiences all the time, we just need to have the feelings registered once and then have them being occasionally or constantly pulled up.

For some of us a teacher with a tone of voice like an authoritarian or abusive parent can remind us of some to these feelings. An unpleasant remark or a criticism can pull something back up. A place that looks familiar, a smell associated with an unpleasant experience all of these can remind us of some pent-up feelings. Having these feelings come back up can confuse us. In addition to interfering with learning, the young person has great difficulty understanding and knowing how to handle these bad feelings and knowing

how to handle the result can sometimes look like delinquency or disruptive behaviour.

Criticism and invalidation

If a child is criticized or invalidated too often then that child gives up trying. The child, hearing too often that he can't do something well enough, will start believing it of himself. If the teacher or parent (or any other adult) expresses low expectations of the child then the child eventually feels there is no point in trying to achieve anything or to aim too high.

We usually either live up to what is expected of us (no matter how little it is) or we set out to prove otherwise. The latter can be an additional struggle for us and can lead to more frustration and disappointment.

Humiliation

Especially for poor academic performance or not coming up to the teachers' standards can also lead to low self-esteem and lack of self-confidence. If the child is humiliated for her first attempt then she will be too scared to try again or to try harder for fear of being further humiliated if she doesn't quite make it.

Lack of control or autonomy

Children are motivated to learn when they have some choice over what they learn and when they learn it. We all can think of topics or even subjects, that we were forced to study in school. Some of us can remember struggling to keep up with the pace of the class. Some of us did in fact put aside all our feelings and thoughts and just crammed the work. Some of us managed to do well in those subjects, well at least we passed the required exams. But how much of it do we really remember now? And wouldn't it have been much better if we had enjoyed what we wanted to learn? Then school may not have seemed like something we just had to endure and get out of and never want to experience again.

Inability to read

A reading specialist once told an interesting story of a young boy who was accused of disruptive behaviour in the classroom. He would hit another student or stir up trouble for no apparent reason. It was later discovered that he did this whenever he anticipated that he would be called on to read aloud in class. He felt it was better for him to cause a disruption to distract the teacher and the others from discovering that he could not read.

Too much information too fast

If a student is bombarded with information that she cannot process at a comfortable rate she will feel overwhelmed and this will lead to shutdown. Different students have different capacities for taking in information and take different lengths of time to process and store that information. The student must not be made to feel stupid or incompetent because of this difference.

Removing the learning blocks

Clearing the attention

Most students come to class predisposed to shut down. They come with a lot on their mind about home and family life that is not going so well. Some are anxious about their performance in school. Some are under the strain of unreasonable expectations put on them.

A few minutes to be listened to will make a big difference, especially at the beginning of the day. Start the day or the class period with each person having a few minutes to talk about what has been going on for them, either to the group, or in pairs. At the same time students are taught to listen respectfully, completely and without interruptions, criticisms and invalidations.

During class when you notice that their attention is drifting indicated either by general shutdown, inattentiveness or restlessness, stop

and change the activity. Play a short game, get the students to move around a little (doing something positive, not the very distressing hands up and out exercise). Perhaps you can get them to go and pay a compliment to someone in class that they don't usually have a lot of contact with.

Allow brief intervals for processing of information. Prevent the overloading. Stop every fifteen minutes or so (or whenever appropriate) and allow the student to think quietly about what they have been studying or listening to and to perhaps talk about it. This will also give them a chance to notice what they don't understand or are not clear about.

Listening

Teach the students to listen to eath other in turns. Everyone needs to be listened to occasionally. This helps to clear up thinking and express negative thoughts and feelings in a situation that does not cause harm to anyone.

The student will eventually learn how to ask a classmate or friend to give them a few minutes of attention to express themselves when they feel the emotions coming up and they can sense that they will do something that might get them into trouble.

When a child is very disruptive and it is necessary to send them out of the class for a brief cooling out period, it helps to send someone with her Good attention from another human being always helps.

Team Teaching/Peer Tutoring

Students who have understood something well or quickly can be encouraged to help the slower ones. The quick student benefits from having to teach someone - it helps her to know that she does in fact understand the work and it gives her a sense of accomplishment. Often peers can find ways of relating better to each other than adults can to a younger person. The slower one also feels encouraged by the fact that his peer can learn this so maybe he can too.

Validation and Positive Reenforcement

Use praise freely and often. You can always think of something positive to say to a person. Make sure to praise effort and improvement and not just performance. "I see you have got two more correct this time" rather than "You got 10 wrong again!" or "You only got 4 right!"

Don't punish for not learning or not getting something right. No student gets something wrong on purpose. And a learning difficulty is never entirely the child's fault. Beating or punishing will not help the child to figure out and correct a learning difficulty. This only leads to more shutdown.

Giving choices

Give a choice of assignments, of topics to be studied, of methods of presentation of assignments where possible. As much as possible allow students to have some input in what they must learn and how to show what they have learned. Remember people learn and express themselves best in different ways.

Setting up rules and regulations

Discuss with the students the rules and regulations of the classroom. They will be more inclined to follow rules that they understand and that they have been consulted about. This does not mean that you have to be permissive with them. You, the teacher, have the final say in this, and you must see that the rules are followed. But it helps when there is some open discussion with the students. Rather than present them with a list and say this is what you must do and not do because I say so, spend some time asking for their suggestions, and talk about why the rules are necessary.

You may be pleasantly surprised at the limitations and guidelines they will impose on themselves and what they won't tolerate from their classmates. It also helps to avoid students breaking rules just to be rebellious. They won't rebel against something they have decided on.

They also appreciate the respect you show them.

Interruption of put-downs

Students appreciate an atmosphere that does not allow insults and put-downs and they feel safer knowing that you will stand up for everyone. This lifts the threat of embarrassment and humiliation that tends to make some students very shy and withdrawn

It is especially important not to allow negative comments and "jokes" that are about someone's race, economic class, background, religion etc. These are very hurtful, but most times the victim has to pretend she isn't bothered by it. In fact what we do is internalize it and then begin to feel ashamed of ourselves and our own people.

Have positive discussions and sharing of everyone's background. Teach them to be proud of who they are and to be always respectful of each others' differences.

Equal participation

Encourage equal participation in class. When there is time for discussion share the time equally. Make sure everyone speaks at least once before anyone speaks a second time. It is important for everyone to know that they do have something valuable to contribute. Discourage comments especially negative ones, while it is someone's turn to speak.

Release of emotions

Set up special times for releasing emotions. This is an important activity which clears the attention. This can be done in several ways:

Talking and listening time: This is special time set aside for each person to have a turn to talk and express himself and be listened to and supported. Sometimes someone may have difficulty talking, they may be deeply distressed or shut down. Give them a turn anyway and continue to pay them good attention while they

use their time in anyway they want. Some suggestions for talking and listening time:

– Let the sudents take turns to scan pleasant memories of when they learned something.
– Tell about their early experiences of school what was good, what was difficult, what they liked/disliked.
– Take pride in all that they have learned (including talking, walking, thying their shoelaces etc.)
– Appreciate themselves and their intelligence.
– Talk about when they "faked" or pretend to know something; how they felt, how they would have liked it to be.
– Talk about what they feel confused about or times when they felt confused and what would have been helpful then.
– Relate their expectations of themselves as students.
– Talk about other people's expectations of them as students.

All through this keep the atmosphere and tone positive and validating. Discourage any put-downs, criticisms, interruptions. Encourage the speaker to express their feelings completely. Keep reminding them that having negative or bad feelings does not make them a bad person and getting rid of these will allow the real person to surface.

Playing games: Especially those that encourage positive physical contact. Go outside and do this if possible so that they can rnake a lot of noise. Remember what it was for you as a child to run and scream and play and how attentive and "out" you were after.

Soft pillows/cushions: Have these available for banging or screaming into. Use these particularly when you see anger coming up in someone.

Role playing: This helps students to express frustration and step out of the victim role for a while and so feel more empowered and not so hopeless and helpless. The student, for example, gets to play the role of the person who is hurting her and gets to be in charge of the situation. Have you ever noticed how

children like to play teacher and once they are in that role they inevitably boss around the students?

Keep reminding them that it is only for the purpose of clearing out some feelings and not for real life. At the same time help them to come up with alternative behavioural responses to their victimization.

Goal setting

This is a very empowering activity. Help the students to set realistic goals, not necessarily limited by what you think about the student. Break it into short term steps that can be easily accomplished and set indicators of the accomplishment. Discuss with them obstacles they anticipate and how they will handle then. Review these goals periodically and keep encouraging them.

The teacher as counsellor

It is important for you, the teacher/counsellor to have support for yourself. It is necessary for you to notice the times you yourself are getting reminded of some of your earlier experiences with school and learning. These will get in your way of reacting flexibly at that moment.

You may also need to share your thoughts and feelings about what it is like for you to allow students to release their emotions as different from what we have learned before: that teaching is about passing on information and not "disrupting" the class.

At times your own hopelessness and despair about the whole situation will come up. You need to clear that out, to be reminded of your own good thinking in all this and to keep noticing the positive effects you are having on your students.

You need allies, getting together with other teachers to share time to talk, release, think, listen to each other and validate each other.

Be creative and have fun with the students.

Remember, learning can and should be fun and so should teaching.

**REVAMPING PARAGUAY'S ADULT LITERACY AND
ADULT EDUCATION DEPARTMENT - TOWARDS PERMANENT
EDUCATION FOR YOUTHS AND ADULTS**

**REDALF. Regional network for training of personnel and specific support in literacy
and adult education programmes**

Ministerial Decree No. 252, of March 12, 1996, turned the former Adult Education and Literacy Department into the Permanent Youth and Adult Education Directorate. The demise of the Ministry of Education and Cult, granted the department the category of Directorate.

Concurrently, Paraguay officially joins REDALF backed by the Directorate's solemn commitment to funnel the efforts of both civil society and the State, towards the promotion of plans, programmes and projects which address pluriculture, illiteracy, post-literacy, basic education, and youth and adult education for productive and socially meaningful work, with special emphasis on economically deprived areas, women, ethnic groups, peasants and other minorities.

REPORT OF THE EFA MID-TERM REVIEW OF THE LATIN AMERICAN REGION (1990-1995)

UNESCO-SANTIAGO*

Even though it is agreed that Jomtien has made a profound impact in the Region, the goals of the Education for All Declaration (March 1990) have already been taken into consideration in the Major Project for Education in Latin America and the Caribbean, particularly in the Declarations and Recommendations made during the Ministers of Education Meetings in 1991 and in 1993.

The present review is the product of the examination of the national reports received by UNESCO from Chile, Colombia, Costa Rica, Guatemala, Honduras, Mexico, Nicaragua and Panama, (see Bibliography) as well as a summary of the discussions that took place during the Regional Meeting on Educational Policies sponsored by UNESCO and UNFPA (Santiago de Chile, 29-31 January 1996). Ten countries were represented in this Seminar to examine progress achieved between 1990 and 1995, what is known as the Mid-Decade Review, of the implementation of the World Declaration on Education for All.

The subjects of equity and quality of education remain an important preoccupation for all countries of the region and measures are being taken to improve them. Most of the participants in the Seminar considered that there are still problems and difficulties in attaining equity in the region because of lack of continuity of public educational policies; large numbers of illiterate adults; insufficient social participation in education; in some instances too much autonomy by the regions (provinces or states); low teachers salaries and little criteria for allocation of national educational investment. On the other hand, during 1990-1995, there has been a notable increase of coverage of basic education in spite of the fact that there still remain important groups of the population living in rural or marginal urban areas, and in spite of geographic isolation, lack of teachers, problems of infrastructure, double shifts in school, lack of equipment or other such difficulties.

Political and social consensus for education

Educational legislation has been enacted in most countries during the period covered (1990-1995); there are national plans for education in many of these countries and on-go-

ing processes of educational reforms, including curriculum reform, however there is still need to reach a real social consensus for education in some of these countries.

A great majority of the Latin American countries have included education in the agenda of priorities. This is shown in the legislation on education which has been enacted between 1990-1995 (In Paraguay (1992), Argentina and Mexico (1993), Colombia (1994), Chile, Nicaragua, Panama, and Venezuela (1995) , and in Brazil (1996).

There is increasing participation of the different sectors of society in education. The actors have diversified and concentrated more attention in educational problems. This is why there is an increase in reaching national consensus which define political compromises and lines of action to promote education and improve its quality. At the same time, this participation becomes a guarantee of continuity of educational policies. According to the reports received, national plans exist in Argentina, Brazil, Chile, Colombia, Costa Rica, Honduras, Guatemala, Mexico and Panama.

The majority of the countries considered have on-going processes of educational reforms, the purposes of which coincide with the recommendations of Jomtien as they seek to promote access, permanence and completion of basic education for all children; as well as equity in terms of educational opportunities and the quality of the education they receive. These policies have tried to give attention to the diverse factors that influence the educational process.

In the national documents received, there is ample evidence of educational reforms, including curriculum reform in Argentina, Brazil, Chile, Colombia, Mexico and Paraguay. These include an important thrust towards decentralization (core national curriculum) and the modernization of the Ministries of Education; increases in national budgets for education (with the exception of Ecuador and Mexico); as well as a move towards major autonomy for the schools.

In spite of the progress achieved, in some countries there are still difficulties to initiate or to deepen the processes which lead to political and social consensus around the priorities of education for all. This difficulty is related to the scarce mobilization of non traditional technical, financial, or material resources (from the productive sector or other public or private sources). This is also true of the programmes which articulate the school and the world of work.

According to the discussions in the Regional Seminar and the documents received, in Brazil, for example, in 1992, the Ministry of Education takes the first Plan in the Framework of Education for All and discusses a Ten-Year Plan with parents, teacher trade unions, political parties, municipalities, etc, using all means at its disposal such as the mass media. This process is completed in 1994. A national consensus is reached on the need to improve the quality of education in the country. As a result, a basic salary is established. Since then, there has been a change of Government, but work continues, the implementation of mechanisms to improve salaries, overcome financial disparities, etc. A curriculum reform has started with national parameters and an Educational TV Channel has been created to impart 4 hours of programmes for basic education.

In Chile, the General Educational Reform has started, together with a curriculum reform, on the bases of consensus and the previous creation of new political (Ministerial) and technical conditions. There is nevertheless a necessity to go slowly and to continue integrating resources.

In Colombia, there is a permanence in the educational policies thanks to the National Plan for Education (covers ten years). There is a National Policy for Sexual Education and the introduction of other new subjects in the school curriculum.

In Costa Rica, a national plan called Educational Policies Towards the XXI Century has been launched (1995-2005).

In Nicaragua, after Jomtien, a National Plan for Education was designed called "With All, for All". There was a consultation at all levels, initiated in 1991 which ended in a National Congress to adopt the Plan. UNESCO and

UNICEF gave financial and technical support for the initiation of this Plan in 1992. This Education for All National Plan of Action is incorporated in the "National Plan of Human Development, Infancy and Youth" (1992-2000) and in the "Strategy to Overcome Poverty".

In Mexico, the objectives of Education for All were incorporated in the National Development Plan (1989-1994). These proposals were introduced in a Programme of Educational Modernization in the Public Education Secretariat.

Venezuela's Ministry of Education has drafted a National Plan of Action which gives the principal lines of action, but there is a lack of consensus and agreement which guarantee continuity of actions. The educational reform is in its first phase and it is concentrating in teacher training, school administration and financing. The curriculum reform has not yet started however.

Pedagogical processes and teacher training

The problem of quality is very much affected by the insufficient training of teachers, but also by the absence, in many countries, of higher level teacher training. Teachers salaries are lower than those of the other professions and the training of new teachers is poor. Research and reflection are needed in order to improve in-service teacher training and the upgrading of teachers. In some countries measures are being taken to improve the teaching profession through economic stimulus or on the basis of better results. New modalities such as distance education are also being used.

In the discussions of the January Regional Seminar, one of the most important barriers to improving the quality of basic education is the lack of dynamism in the teaching/learning process. Educational practice shows that the curriculum being implemented is very poor in relation with the approved programmes and plans, which affects the real quality levels, particularly in the most deprived social sectors.

It is for this reason that there is an emphasis in assigning a central role to the school and the classroom in pedagogical processes, which in turn is translated into increased autonomy by the school. At the same time, there is an increased effort to reformulate curriculums, contents, methods and materials. In addition, there are continuous efforts to implement or initiate processes for measuring the quality of learning.

The problem of quality is very much affected by the insufficient training of teachers, but also by the absence, in many countries, of higher level teacher training.

In spite of the fact that it is widely recognized that teacher training is a key element in the improvement of the quality of education and that in some countries important steps have been undertaken to improve it, there still is a lack of an integrated treatment of the problem of the teacher profession. Some of the reasons given by the Seminar´s participants are the following:

– The teacher salaries have a lower level than that of other professions, below the needs and expectations of the teachers, thus making it difficult to recruit better students;

– The training of new teachers is very poor, because there is a lack of contact between training institutions and other higher education institutions, or research institutions; as well as with the reality of school practice.

– In-service teacher's training or the upgrading of teachers is an area where more research and reflection is needed. There are no appropriate formulas to face the heterogeneity of needs and conditions and overcome problems such as the poor emphasis in technical and didactic aspects, the weak value given to practice, as a source of knowledge, the preference given to formal courses, in detriment to training in situ. The deficiencies mentioned are more severe among teachers working in difficult and poor areas and call for targeted attention.

Measures are being undertaken to improve the teaching profession. In Brazil, Chile, Costa Rica, and Mexico, economic stimulus are being offered to the teachers who are producing better results. In Colombia there is an increased participation of the teachers' trade unions in decision making and there are proposals to have differentiated salaries for teachers according to results.

In the case of initial teacher training, in 1996, Argentina has suspended entry to students for the first year of the teaching career, to restructure the teacher training profession. In-service teacher training is being concentrated in mathematics (problem solving) and spanish language (comprehensive reading, text production). It is being offered to some 50.000 teachers, 10% of the schools are being given follow-up.

In Colombia there is an on-going reform for teacher-training, like in Argentina, the students entry is also closed. The Universities are strongly intervening in the reform for pedagogical training, which is being oriented towards a disciplinary training. In Panama, the Teacher Training Institution (Escuela Normal) will become a Higher Education Institution (April 1996).

In Brazil there is a National Plan to develop basic education and improve the status of teachers. This Plan provides additional funds from the state (15% of the resources dedicated to education). These resources estimated to be 12 billion US dollars will be given according to the number of students. The expenses by student and by year have been calculated to be US $ 300 which is above the amount recommended by UNESCO or ECLAC (US $ 215).

In each State 60% of the budget will be destined to teachers's salaries. This percentage will permit the increase of the medium salary of teachers to US $ 300. The Plan proposes a structural change, its approval depends on the decisions taken by the National Congress, which will happen soon. Amendments in the Constitutional Reform are being analyzed by the Congress with the personal support of the President of the Brazilian Republic. This Plan will promote equity in the distribution of resources in the country.

In Chile, the strengthening of the teaching profession has been recognized as one of the five principal objectives of the educational policy. In 1991, the Statute of the Professionals of Education was approved, by which the salaries of teachers has improved 69% between 1991 and 1995. The different programmes for the improvement of the quality of education include components of in-service teacher train-

ing which, in 1995, covered the training of 60.000 teachers.

In Costa Rica, in 1994, a special teacher training programme was launched for schools having one teacher only, in co-operation with the National University. Some 2.496 teacher training activities have been organized recently. Furthermore, there is a new programme for in-service teacher training which is given through integrated workshops which include creativity and artistic and cultural subjects. These workshops promote the participation of the community. The Project for Learning Improvement in Marginal Urban Schools has trained 1.400 teachers in their subjects areas and in values education.

In Ecuador, in-service teacher training will have an important improvement during the second phase of the educational reform, starting in 1996.

In Guatemala, in-service teacher training has been straighten for all levels of basic education, on subjects such as mathematics, evaluation processes, educational administration, pedagogical leadership, special education, social sciences and natural sciences, population and environmental education, research and participative processes. An important advance has been the creation, by the Ministry of Education, of a National System for Educational Training, which has reached 40.000 primary education teachers, 6.000 primary school directors, 400 pedagogical orientators, 245 educational supervisors, 22 department directors and 16 professionals of the technical-pedagogical department.

Distance education is also used for teacher training: 200 teachers and 400 tutors have been reached this way. There is also a B.A, for Primary Education, 120 pedagogical orientators have been received. A Masters in curriculum has reached 25 participants. The National Programme for Bilingual Education, (PRONEBI), is also developing teacher training for bilingual education. It has trained 806 bilingual promoters, 1.600 bilingual teachers, 16 technicians and 50 supervisors. It has also produced 30.775 materials and didactic resources in four Maya languages.

In Honduras, the Centers for Teacher Training have trained 18.267 teachers, or 66% of the total number of basic education teachers. More than a million and a half textbooks have been produced, as well as methodological guides, booklets and other auxiliary materials. Efforts are also being undertaken to improve curriculum adapting it to the realities of the country, incorporating contents on Population Education.

In Mexico, the teaching career has been established and promotion is being given according to results, in-service teacher training is being promoted and thanks to the National Agreement for the Modernization of Basic Education, with the support of private editorials, in 1993, teachers received 800.000 books and 900.000 didactic guides in all different subjects. Furthermore, in 1993 a System for the evaluation of the Teaching Career was applied for teachers, supervisors, directors and support personnel, 780.151 teachers were evaluated.

Since 1990, Nicaragua has drafted and approved a Law and its regulations for the Teaching Career. In addition, a Project of School Autonomy has been launched which requests voluntary donations from the parents, is giving increases to teacher salaries, 50% to 80% raise is evident in secondary education centers (48% of the total) and in 328 primary schools (7.3% of the total in charge of the Ministry of Education).

In Nicaragua there is a reduction of 3.7% in the enrollment to teaching careers. The Ministry of Education is making efforts to organize in-service teacher training. In 1995, there were 3.976 empirical teachers enrolled in professionalization courses, 98% of which were assumed by the Ministry of Education.

In Panama, since 1994, some 6.891 teachers have benefitted from special courses including subjects such as sexual education, drug and AIDS prevention. These subjects are included in the teacher training curriculum of the Teacher Training School Justo Arocemena.

In Venezuela a Regional Center for Teachers Support has recently been created to respond to teacher training needs and in-service training.

The Major Project for Education Regional Network PICPEMCE gives support to the improvement of the quality of teacher training in the region.

School coverage, quality and equity

During 1990-1995 there has been a notable increase of the coverage of basic education in spite of the fact that there still remain important groups of the population living in rural or marginal urban areas who are not included in the education system; and in spite of geographic isolation, lack of teachers, problems of infrastructure, double shifts in school, lack of equipment, lack of attractive proposals for youth; lack of knowledge of social diversity. This is why widening of coverage must utilize strategies that take into consideration the particularities and the basic needs of diverse population groups.

The groups which are presently out of the school system, and who have not been able to profit from the improved coverage which has been produced in the last few years are mainly: early childhood (0-4 years old); children who are school age but because of their situation may not attend school (mainly children living in rural and marginal-urban areas); persons who require special education (handicapped mainly); youth and adults who deserted school or could not initiate their schooling, or who wish to pursue their education.

In spite of this, according to the country reports received, in the majority of the countries one can observe a notable increase of the coverage of the majority of the levels in the educational system. In addition there are a number of programmes and strategies which have been designed to improve the situation of the schools which are left behind, either because of their location (rural areas), or because of specific needs of given populations which require greater flexibility from the education system.

In Chile, there are no problems of school coverage and there is a rather low rate of school desertion. There are, in addition, massive programmes focused on the improvement of the quality of schools in poor areas, with rather

positive initial results. In 1990, the average achievement of public schools was 58.9%. In 1994 it was 67.7%. In the same period, the specially supported schools of poor areas (900 Schools Programme) increased their average from 52.1% to 61.6%.

In Colombia the "Escuela Nueva" programme has been extended to all rural schools that now cover most of the country.

In Costa Rica, school coverage of the primary education level increased 16.6% between 1990 and 1995. School retention is 6.1% in the rural areas and 15.5% in the urban areas. School desertion is 1% in the urban areas and 5.1% in the rural areas.

In Guatemala, there are two programmes, one in the Spanish language, which covers 93% of the total population and another in Maya and Spanish thorough bilingual intercultural education programmes which cover 7% of the population. Furthermore, the National Programme for Bilingual Education was extended in 1992 to include 4 more Maya languages, and 400 additional schools. The programme covers children speaking 13 different Maya languages. About 1.240 schools from pre-school to the 4th grade, the 400 additional schools offer complete basic education. The extension now covers 100.000 students. These efforts are being strengthened thanks to the impulse which has been given to indigenous concerns through agreements of the Government and its representatives and the Declaration of the Decade of Indigenous People by the UN.

The Guatemalan Ministry of Education has given impetus to school coverage through a National Programme of Self-Management for Educational Development (PRONADE), which has as its goal to attend 200.000 students. Since 1993, the National Fund for Peace (FONAPAZ) has helped build 113 schools and the Funds for Social Investment (FIS) in 1994 had built 25 schools. Since 1993, 960 schools were offering evening classes.

In Honduras, school coverage is of the order of 86%. There is nonetheless a problem of school retention for more than the 3 first grades, as 50% of the students abandon school before completing the third grade. This problem is more acute in rural areas. The cost per student is about US $ 74. Parents must assure US $ 21 for uniforms and school supplies. Nonetheless 73% of the population lives in extreme poverty, making it difficult for most parents to send their children to school. Furthermore, only 74% of the schools have 6 grades. The rest of incomplete schools are 17% in the urban areas and 83% in the rural areas. 36% of the children enrolled in 1988 succeeded in the sixth grade. School repetition diminished from 13.2% to 11.4% in 1994. School desertion has also been reduced from 3.7% in 1990 to 3.3% in 1992. Different strategies are being used to improve this situation.

In Mexico, school coverage is increasing thanks to the impulse being given by compensatory programmes (for example the "Instructores Comunitarios Programme"); curriculum reform, textbook production and teacher training programmes. A special programme was designed for out-of-school children 10 to 14 years old. The programme which started in 1990 has reached 144.313 children.

Since 1980, the enrolment ratio in Nicaragua went from 50% to 75%. In 1994 it was 78.6%. This is due to the fact that the Ministry of Education created a National Council for Education with representatives of the religious, political, intellectual sectors, as well as educators. This happened as a result of the First National Congress on Education of 1991. In spite of this, there are still some 200.000 children out of school. Curriculum transformation in Nicaragua, the provision of textbooks, in-service teacher training programmes, the reconstruction of schools, the Integral Nutrition Programme, are all part of the strategies to help schools in marginalized urban and rural areas improve their quality of educational offer.

In Nicaragua, curriculum transformation is helping primary school children complete 6 years of schooling; programmes are being offered to children above 15 years old; rural multi-grade schools and intercultural bilingual education for indigenous populations, including youth are also being implemented. In summary, there is an improvement in infrastructure, improved teacher training, textbooks and improvements in the reduction of desertion.

In Panama, between 1990 and 1994 there was a 2.1% increase in primary school enrollment. Data from the Ministry of Planning shows that in 1991, the rate of schooling was 93% for children aged 6 to 11 years old. Since 1990, the percentage of students finishing primary education has increased. In 1989, it was 78.3% of those who started in 1984. In 1993, 80.1% finished school from those who started in 1988.

UNESCO produces updated information on the situation of education through its publication "The State of Education in Latin America and the Caribbean" in the framework of the Major Project Regional Information Network SIRI.

Expansion of pre-school education

There has been a gradual increase of pre-primary education, but the private sector has grown faster and there are numerous examples of programmes conducted by the non-formal sector. There is also an increase of programmes addressed to indigenous populations in their mother tongues and ample evidence of support given by UNICEF, the World Bank and the World Food Programme. The countries showing greater increases in this field are: Argentina, Brazil, Chile, Colombia, Costa Rica and Mexico.

In Argentina, the Federal Law of Education contemplates 10 years of basic education including one year of pre-school education. This has not been achieved completely but it is gradually being realized.

In Chile, between 1990 and 1995, there was an increase from 19% to 22% of pre-school coverage of children aged O to 5 years old, and the average of children aged 5 years old is 82.9% in 1995. New programmes are being planned for the next years.

In Colombia, in 1994, 110.662 children were enrolled in pre-school education. Efforts are being made to increase enrollment rates with the help of other institutions. Basic education covers 9 years and there is a generalization of grade 0. Nonetheless, there is a difference in the application of policy in the different regions.

In Costa Rica, in 1995, 73% of the pre-school population was covered. The majority of the programmes addressed to pre-school children are given under non-formal education. There are also other programs which include the integral education of children and youth, in this context, 700 educators and 200 parents have been trained. Itinerant teachers have been trained to support integral pre-school for children. Several didactic guides have been produced for incorporating the parent in the educational process or to include subjects such as the protection of the environment.

In Guatemala, pre-school education covers some 20% of the population. Most of it is offered in urban areas, but there are also efforts to reach the indigenous populations living in rural areas through bilingual education. The Ministry of Education has a Programme for the Integral Attention to the Child, which has 248 centers with the participation of the community. It covers 75 communities in 40 municipalities. In 1994, almost 25.000 persons benefitted from this programme, including parents. The programme has received support from UNICEF and the World Food Programme. At least 320 children who have just returned to Guatemala are being attended by a special programme in 6 communities of the country.

In Honduras, in 1995, there was an enrollment of 72.286 pre-school children in 1.176 formal education institutions, 73% in urban areas and 27% in rural areas. In the rural areas, there is a non-formal education structure, the Community Centers for School Initiation, which in 1990 covered 12.000 children in 385 centers. An increment was produced in 1994 with the increase to 829 centers, benefiting 35.985 children, with the help of 2.319 voluntary workers. Both modalities reached 25% of the total pre-school population in 1994. There are other programmes which support pre-school education such as school feeding programmes.

In Mexico between 1990 and 1994, there was an increase of 29% in enrollment of pre-school children, in the formal system. In 1993, the reform of educational contents of initial education was completed and 837 courses were

offered to 19.457 teachers, and more than 2 million educational textbooks and materials were distributed.

Between 1990 and 1994, non-formal education covered the training of 732.013 parents and a million children from rural, indigenous populations and marginal urban areas. At the end of 1993, the Project for the Development of Initial Education covered 141.544 children with the help of 108.880 trained parents.

A strong effort was made to provide schools with teaching materials (104.466 packages), musical instruments (34.822), audiocassettes, music books (69.644 packages), etc. In 1991, a project entitled "Reading Corner" was launched. This project is present in 14.461 schools, 80% of these schools are in rural areas and 20% in indigenous areas.

In Nicaragua, there has been an increase in pre-school education through non-formal means, supported by the community. During the last five years, coverage grew by 53.7%. The State covers 77.3% of the pre-school centers. The rest is covered by the private sector. The non-formal modality will be strengthened with the financial support of the World Bank and UNICEF, and will include parents and community participation.

In Panama, pre-school education is obligatory by law (1995). In 1993, coverage was 26% at the national level, 37% were in urban areas and 13% in rural areas. In 1994, 35.863 children benefitted from pre-school, 24.678 in official centers and 11.185 in private centers. In 1994, the official sector improved coverage for 8.6%, even though the number of classes diminished 12.2%. Teachers numbers grew 7.8% and the enrolment grew 9.7%. The problem remains however in the rural areas. In the non-formal area, the Community and Family Centers for Initial Education covered in 1994, 2.800 girls and boys. This programme started in the San Miguelito District with important social and economic problems, to improve desertion and grade repetition rates.

In Panama, pre-school education is favored by a National Council for Interinstitutional Coordination for Child Development and the Pact for Panama's Children signed by the First Lady

and the Ministries of Justice, Education,Labor, Social Affairs, UNICEF and other NGO's and Civic Clubs.

There are several large scale non-formal education programmes being carried out in Latin America. A programme conducted by the Catholic Church in Brazil called Coordenaçao Nacional da Pastoral de Criança; Know your Child Programme in Chile, the Atlantic Coast Project In Colombia and the Colombian Institute for Family Well-Being in marginal urban areas; Pre-School Education Programme in Ecuador, EDUCO Programme in El Salvador, Parents' Education Programme in Mexico, and Early Childhood Education in Panama.

Efforts to improve the quality of basic education

The subject of equity and quality of education remain an important preoccupation for all countries, as was mentioned by the participants of the January Seminar and in the countries reports, measures are being taken to improve them through legislation, educational reforms, decentralization and the increased autonomy given to the schools.

With respect to equity, compensatory programmes have been designed to respond to the needs of particular groups of the population who, because of isolation or social marginalization, have not had access to education services or study in very disadvantageous conditions. In this respect we can recall what has been said about indigenous populations.

These compensatory programmes include support to schools in rural areas or marginal-urban areas. Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico, Panama and Venezuela are offering such programmes. Even though most of the countries have literacy or bilingual education programmes, the participants of the Seminar feel that much remains to be done in order to improve coverage and the quality of these programmes.

In Argentina, a compensatory programme is being implemented to improve infrastructure, teacher training, provide equipment and institutional guidance. Since 1993, US $ 130 mil-

lion has been invested in this programme for 10.000 basic education schools (39% of the public schools almost 2 million students), all outside Buenos Aires area which has a different budget. The programmes have a pedagogical impact. There is an evaluation system implemented yearly. The results of the last test given to seventh graders were highly positive, as two of these schools received the best results in mathematics.

Furthermore, in Argentina there is a programme called "Incentives to Initiative" to prevent drop-outs in the poorer schools, through the promotion of school projects. There is also a programme called "New School", which is based upon the Colombian "Escuela Nueva" pedagogical model, by which the students have a more active participation in the class.

In Brazil there is an important Project being implemented in the North-East Region which is the poorest region and covers 9 States. This Project is being implemented with the financial support of the World Bank and is for a total of US $ 600 millions. In this way it is expected to contribute in school coverage, in the prevention of school repetition and the fight against illiteracy.

The Brazilian National Programme for School Textbooks contributes to the universalization of education and the improvement of its quality through the distribution of books throughout the country. It covers yearly some thirty million students, guaranteeing books from the first to the eight grade. In 1994 it distributed 60 million books and in 1995, 110 million (the higher number of books distributed in the history of this programme). At present there is an on-going process of decentralization for the distribution of books. In addition, the programme sponsors the production of textbook catalogues; the creation of teams by subject matter and the convening of Seminars on textbook production and evaluation.

In Chile, there has been the creation, improvement, extension, diversification and better targeting of governmental programmes of educational equity. Some relevant achievements are: 33.600 classroom libraries (one for

each classroom from the first to the fourth grade of all the public schools and 3.400 additional libraries for each fifth and sixth grade classroom of poor areas schools); food provision for 820.000 students; health coverage for all the students from the first to the fifth grade; two or three textbooks freely provided for each student of the basic level. There are two special programmes known as the "900 Schools Programme" and the "MECE Rural Programme", which give support to the public schools that have lower average achievement scores and in the poorer or isolated areas of the country.

In Colombia, a PASES Programme has been designed to increase enrollment. In addition, in 1992, there was a 100% textbook provision to students;school furniture had been provided to 65% of the schools; 50% of the teachers had been re-trained and 50% of the school buildings had been repaired At present, in the urban areas, there are small libraries in 100% of the schools, textbooks have been given to 90% of the students, furniture has been provided to 50% of the schools and 93% of the teachers have been trained.

In Costa Rica, in 1993, was initiated a Programme for the Improvement of General Basic Education (PROMECE) to guarantee solid human resources and improve the quality of life. This was achieved through targeted attention to marginal urban schools and rural schools, particularly those who have only one teacher, 1400 rural schools have been reached. Other compensatory measures include the creation of "Leader Schools", the introduction of computers in the schools, and the establishment of special bonus for poor children (78.810 in 1994). There is also the provision of scholarships, school materials and uniforms (91.000 children from rural schools) and school feeding programmes (477.474 students reached in 1994). In addition, Costa rica is offering special education programmes to single mothers (47.000), to prisoners and to indigenous groups. Some 700.000 students have been given access to Social Security.

In Mexico, between 1990 and 1995, special support was given to rural and indigenous edu-

cation. The number of schools increased by 69.9% in rural areas and 11.7% in indigenous areas. the number of teachers and students also increased. In order to reduce grade repetition, school desertion and improve efficiency, in 1992, compensatory programmes were launched in Chiapas, Oaxaca, Guerrero and Hidalgo. Later, it was extended to other 10 more areas. Some 330.966 packages of teaching materials were distributed in 15.906 schools to benefit 1.302.615 students. Books (218.900) were printed in seven indigenous languages and distributed among the students of the first two grades, bibliographic material was also distributed, all totaling 2.646.555 books. The Programme "Reading Corners" allowed for the distribution of 159 literary works in 74.489 rural, indigenous and poor urban schools in 8.000 communities and in 101.848 non-complete schools.

In terms of quality, Chile has a system to measure the quality of learning achievement (SIMCE) and there are numerous efforts to improve the general efficiency of the schools. Similar systems are being implemented in Colombia and in Costa Rica.

In Ecuador, an innovative experience is going on in 10% of the schools, with the support of the World Bank and the IDB. There are 83 Matrix Educational Centers, as they are called, in the rural areas, 29 in the urban areas, for a total of 112 schools of 9 grades. These matrix centers provide multiple services to improve the quality of education in surrounding schools. The matrixes have been granted considerable autonomy.

In Guatemala, USAID is supporting the Ministry of Education through a Project called BEST. This project started in 1991 a Testing Center to evaluate learning acquired. The first tests were applied in 1992 to evaluate mathematics and language in the third grade and was applied nation-wide. The project has also developed an Information System; a Project to promote girls education until the sixth grade and a New Unitary School, implemented in 100 schools which have one to two teachers.

In Mexico, thanks to compensatory programmes applied between 1990 and 1994, na-

tional rates of school desertion were reduced from 5.3% to 3.4%; school failure from 10.1% to 8.3% and terminal efficiency improved from 56.4% to 63.6%. The number of textbooks for students increased 70.3% and for teachers 643.8%. A National Evaluation of Education System was applied, covering more than 5 million students, 180.064 teachers of 44.365 schools in the whole country. Another programme designed to Reduce the Educational Lag has also evaluated 50.455 students, 3.068 teachers, 308 directors in 842 schools. Some 15.971 parents have also been interviewed. Mexico also participated in the Third International Evaluation of Educational Progress of students aged 9 to 13 years old, in sciences and mathematics, 4.380 students of 204 schools were evaluated in 21 municipalities.

In Nicaragua, the success rate of primary education went from 11.6% in 1990 to 22% in 1993. During this period, the average duration in school went from 4.5 years to 4.9 years. Nonetheless, desertion went from 2.7% to 2.9%. According to a UNICEF Report, desertion of girls is double than that of boys, particularly in rural areas. In terms of repetition, boys repeat 31% and girls 27%. In the urban area repetition is 22% whether in rural areas is 31%. A Directorate for Evaluation has recently been created.

In Panama, in 1994, a National Commission for the Improvement of the Quality of Education and its Modernization was created by a Presidential Decree. In addition, there has been an introduction of testing and evaluation which have given satisfactory results. 80.000 tests of mathematics and language were conducted for the 6 and 9 grades. The public schools performance was the same as the private ones. There was also a reduction in the number of school failures by 12.5%.

In Venezuela, compensatory strategies are being used such as the provision of school textbooks, the creation of classroom libraries, the provision of uniforms and other school materials and the rehabilitation of infrastructure. In addition, a food programme is being implemented by civic associations with the participation of parents.

Attention to individual special needs

Important advances have been made in some countries to integrate children with special needs in the regular schools (Argentina, Chile, Colombia, Ecuador and Guatemala), nonetheless there is still much to be achieved in this particular area.

In Chile, since 1990 there is a Decree which regulates the integration of this kind of children in the regular school. In Costa Rica, there is a special programme to promote the integration of children with special needs in pre-school education.

In Guatemala, there is a strengthening of support for special education: in-service teacher training of regular and special education teachers; technical support to special programmes; production of support material; participation in special events.

In Honduras, there is a Project for the Integration of Pre-School Handicapped Children into regular pre-schools and an Integrated Plan to provide health and education.

In Mexico, between 1990 and 1994, special education enrollment increased 33.3%. This was due to the creation of 280 special centers, representing an increase of 14.9% in the number of schools, 2.208 teachers were involved in this type of education. Special textbooks were produced and in co-ordination with the National Commission for Free Textbooks, 12.244 books were produced and distributed in Braille. An alternative measure being used in the regular schools to respond to the needs of students is the Service Units to Support Regular Education.

In Nicaragua, since 1990, there has been an impulse given to special education through non-formal means such as networks based on the community. In this period, there was an increase of 49% coverage. The State covers 77% of the centers (formal education) and 23% of the centers organized in private homes (non-formal education).

In Panama, there are several Governmental entities in-charge of promoting special education for children. In 1992 a Council for the Attention of Handicapped Children was created, which among others, seeks funds for special education. In addition a National Council for Interinstitutional Coordination for Child Development was created to co-ordinate efforts of the different institutions, which includes attention for children under 6 years old. A Directory for Services for Handicapped Children has also been produced. The number of Special Education Schools was 26 in 1994.

UNESCO has been given support to programmes which promote the integration of children with special needs into regular schools.

Absolute illiteracy, youth and adult basic education

Absolute illiteracy rates have been reduced in most of the countries. Brazil, Guatemala and Mexico are implementing special programmes towards this end, including programmes offered by radio in the mother tongues. There are some examples of adult education programmes in most countries, but there is a need to extend and improve the coverage of basic education to out-of-school functional illiterate youth.

According to the national reports received, in Brazil, the North-East Project financed by the World Bank, which covers 9 States, will be offering literacy programmes.

In Chile, 5% of the population is illiterate. There is nonetheless a serious problem with 300.000 youth with incomplete basic education and about 1.500.000 youth without secondary education, but there is little financing to solve their problems. In 1994, a Law for Indigenous Populations was adopted which includes the promotion of bilingual education. The Government will start supporting these programmes in 1996.

Like other countries, Colombia offers evening courses for youth and adults through a Life-Long Education Programme. In addition, efforts are being made to launch a permanent literacy and adult education programme using the mass media. The Government is also planning on launching a National Plan for Reading.

In Costa Rica, illiteracy rates are 7%. Most

of the public supply of literacy education is given through evening basic education courses to youth and adults. In 1993, 2.896 graduated successfully. Ten integrated Centers for Adult Education have been created. Illiteracy is being dealt with by non-formal education programmes which introduce community education. In 1993, more than 20.000 persons benefitted from a literacy plan launched in the poorest regions of the country. In 1994, a test was conducted to evaluate the efficiency of literacy programmes and 60.2% persons trained succeeded in these tests. Recently, the Ministry of Labor has signed an agreement with the Ministry of Education to give literacy programmes to employed illiterate adults, so far, 3.597 have benefitted from this programme.

In Guatemala, illiteracy rates are particularly alarming in rural areas were 77% of the population are illiterate. Furthermore, 56% of the total female population are illiterate. It is for this reason that the Guatemalan Government created CONALFA (National Literacy Committee) and allocated to it 1% of the total budget. Between 1985 and 1993, CONALFA has succeeded in reducing illiteracy rates from 52.3% in 1985 to 41% in 1993, this effort was recognized recently through a UNESCO Honorable Mention of the International Reading Association Prize. CONALFA offers programmes for children and youth (9 to 15 years old) who have no access to school. There are also programmes promoted by the Catholic Church, which are addressed to indigenous populations and are offered in the Maya languages.(Salesianos, etc.)

The Guatemalan Out-Of-School Directorate is covering some 4.455 persons in economic –productive projects in 10 departments of the country. There is also an Out-Of-School Modular Education Programme for illiterate adults and employed children (10 to 14 years old). In 1994, 1.663 persons, including 321 children benefitted. Other programmes are carried out for employed children by other Governmental Offices.

In Honduras, there are several programmes for functional education for adults having reached the sixth grade level. There are Centers for Popular Culture, offering vocational training. In 1990, an Education Project for Work (POCET), was launched with the support of FAO, to provide vocational training in rural areas. Two million persons participated in this project. Another programme which is also offering literacy courses is the Programme for the Development of Refugee and Repatriated Persons (PRODERE).

In Mexico, during 1990-1994, there was a reduction of illiteracy rates from 12.4% in 1990 to 9.7% in 1994. This was due to campaigns which reduced illiteracy by 21.8% during this period. Literacy programmes reached, between 1990-1993: 1.922.725 persons, of whom 1.163.323 were made literate. Adult Education programmes were launched to support literacy through the radio or the use of materials in different subjects such as health, ecology, culture, community work, human rights, etc.

From 1990 to 1993, 3.328.904 adults benefitted from these programmes which incremented coverage by 24.9%. Primary education for adults increased by 6.1%; secondary education by 74.8%. The number of literates which increased in primary and secondary education went above 100% in both cases. Non –formal training programmes for employment have covered, between 1990 and 1994 some 1.962.191 adults.

In Nicaragua, illiteracy rates grew between 1990 (23.1%) and 1994 (31.3%). From the total, 40% are women and it is more acute in the rural areas (45%). Most of the literacy programmes are offered by non-governmental organizations. The Ministry of Education offers primary and secondary levels at evening schools. Recently, a Ministry of Social Affairs was created to offer health, education and create temporary employment for the most disadvantaged groups (indigenous populations, persons demobilized from the army, women heads of household, orphans, repatriated persons, poor peasants, etc.) There is also a programme to include secondary education students in literacy programmes on a voluntary basis.

In Panama, the national rate of illiteracy was 10.7% in 1990, with 44.3% of illiteracy among indigenous populations. Between 1990 and

1993, 8.935 adult illiterates were covered by educational programmes. The budget invested in literacy increased from almost US $ 3 million to US $ 8 million in 1994. A special literacy programme through the press (6.343 adults reached) was developed with the financial assistance of UNESCO (1992-1994). The IDB has also given support to a project for literacy and education for work in marginal urban areas (1987-1993), this project was offered to marginal populations and to indigenous populations and it covered 13.424 persons. New bilingual education programmes are being launched with the support of UNICEF, Canada and UNESCO.

In Venezuela, the literacy programme is being revised and there is an Office for Indigenous Populations Education in the Ministry of Education. Rural schools are being included in the MECE Project supported by UNESCO and UNICEF.

UNESCO gives support to bilingual education programmes and basic education for youth and adults in the region through the Major Project Regional Network REDALF.

New challenges of education

Secondary education and its links to the world of work

In the national reports, little has been mentioned about secondary education and its links to work. This is probably due to the fact that secondary education is not considered as part of "basic education" as such.

In Argentina, there are three years of polymodal education, which follows the basic education cycle which has now a length of ten obligatory years. The polymodal education has been prepared in consultation with the productive sector, among others. Some 1.400 secondary schools have already been provided with special equipment to be used in this type of education.

In Chile, there is a Ministerial Programme for Training and Development of Technical Education which offers technical assistance and teacher training to improve technical educa-

tion. The reform of the secondary level initiated in 1995, includes the strengthening of the general skills required in the modern labor market, the improvement of science teaching and the introduction of technology in the general curriculum (including an informatics laboratory in each State supported secondary school and its linkages to national and international networks).

In Costa Rica, a new law is giving impulse to technical and vocational education through the financing of teacher training, infrastructure and equipment. In addition, special Didactic Productive Units have been created in these schools to benefit women's entry into the labor force.

In Guatemala, there are two secondary education systems, one is called "basic" and the other is called "diversified". Half of the students go to one or the other. The majority of the establishments are private and are situated in the urban areas. The diversified cycle has an equal number of women and men students. Estimates show a national deficit of secondary level education (15 to 20 years old) of 68.6% in the basic cycle and 86.4% in the diversified cycle.

In Mexico, secondary education coverage increased between 1990 and 1994 by 7.2%. This was due to efforts concentrated in building infrastructure: buildings and roads. Teachers increased to 9.6% and schools buildings increased to 15.7%. TV coverage of secondary school increased by 31.8% in 1994. In 1994, 618.570 secondary students were reached in 10.439 schools, 11 million textbooks were produced as well as 1.518 TV programmes. There is also an open system by which students may combine study and work. Between 1990 and 1994, a total of 698.620 persons benefited from this possibility. Of these, 88.9% completed the baccalaureate, 10.8% received post-graduate courses and 0.3% went on to receive the middle professional level.

During 1990 and 1994, in Mexico, technical and vocational education increased by 14.4% during this same period. The number of teachers grew by 8.1% and of students by 3.5%. More than two million persons benefitted of

these programmes. The Secretariat of Education made contracts with 13 federal institutions, increasing the number to 51 institutions during this period. Scholarships were offered for an equivalent sum of 90 days of the minimum salary. School libraries were installed (196) and books distributed (329.937).

Education and peace, human rights, democracy and the environment

Education and peace, human rights, democracy, sexual and environmental education, drugs and AIDS prevention, are some of the new subjects which are slowly being introduced in the national curriculums of the countries of the region. UNESCO and UNFPA are collaborating in these efforts through technical and financial co-operation including contents of Sexual/Population Education in the curricula, the production of teaching/learning materials and teacher training.

In Argentina, the recently-approved minimum essential contents curriculum includes sex education and environmental education as cross-cutting subjects. In Brazil, the Educational T.V. Channel, recently established, produces 4 hours programming for basic education on subjects such as community relations and citizenship. In addition, there is a national consultation in process to approve curriculum contents on sexual education, education for the environment, for health and community relations. This process in being given support by UNESCO and UNFPA.

Chile has conducted contests, with the help of UNESCO, on textbook production on issues of peace and human rights. In Costa Rica there is also an effort to introduce values education in the school curriculum which includes the peaceful resolution of conflicts, as well as health issues and the gender perspective. In Mexico, adult education promoted the use of educational materials on health issues, living conditions, ecology, culture, community work and human rights.

In Guatemala, the school curriculum includes concepts of peace, democracy and solidarity.

In addition, population education, the education for work, the conservation of the environment and human rights have been included, materials on these subjects have been produced, and workshops for in-service teacher training have been carried out. In the case of Population Education, the Government set up an Intersectorial Commission for Population Education, which includes representatives of the different sectors of the society, including the Catholic Church, and which has approved the contents to be included in its curriculum.

Different projects in Guatemala, including a UNESCO/German Project, have been promoting initiatives in the context of civic education and the promotion of human rights. The Human Rights Procuraduría is promoting educational programmes for children and adults (teachers, community leaders, etc.). The Human Rights Office is developing a Popular Education Programme with the support of the newspapers.

In Nicaragua, there are particular efforts to include contents and methods to help prevent conflict. Three modules have been developed for primary school teachers and community leaders to promote peace, for psychosocial well-being in the community and to face situations of war and after the war. Three guides are also being used for education and attitudes of peace and the development of the family and the community. Curriculum transformation includes subjects such as: environmental concerns, democracy and peace, tolerance and the gender perspective.

The Rights of the Child is one of the subjects which has been included in the in-service teacher training conducted in Panama. In addition, a special national prize has been offered, with the support of UNICEF, to promote the publication, by the press, of the Rights of the Child.

Population/Sexual Education is being included in the education programmes in Bolivia, Brazil, Costa Rica, Colombia, Dominican Republic, Ecuador, El Salvador, Honduras, Panama and Peru, with the support of UNESCO and UNFPA.

Education, informatics and the use of the mass media

The use of non-conventional means of education is largely been used. There is an increase in the educational supply through distance education; an extensive use of radio and television for literacy and adult education, besides children's basic education and the press is also being put to the service of education. The use of informatics and networking is also increasing in Brazil, Chile, Costa Rica and Panama.

Numerous countries reported using distance education (Argentina, Honduras, Guatemala Panama). Brazil envisages the creation of a Ministry of Distance Education, and in Panama, distance education has been used for teacher training in educational research, planning and administration at the local level, evaluation and project design, among others.

With respect to the use of television, Brazil is already implementing 4 hours of basic education through a TV channel, transmitted nation-wide via satellite. The first phase will cover 50.000 schools, with the provision of basic infrastructure for reception, recording and utilization of the programmes. Colombia is opening spaces to the Universities in Channel 4, and in Panama there are two educational TV channels.

In Mexico, the radio and TV educational programmes increased between 1990 and 1993 by 39.3% in TV and 151.6% by radio. Secondary education has been transmitted through television thus increasing secondary school coverage to 31.8%. In 1994, 1.518 TV programmes for secondary education were produced. At least 20.967.714 books were distributed to school libraries, public libraries and higher education libraries.

In Venezuela there is an Educational Television Channel which is receiving support from the Association of Iberoamerican Educational Television. It has produced a special programme for teaching tutors in the teaching of Natural Sciences.

Radio programmes are being used in several countries to provide literacy, adult education,

bilingual education, general education, as was mentioned in the national reports of Costa Rica, Ecuador, Guatemala, Honduras, Mexico, and Panama.

In Guatemala, there are several programmes transmitted by radio in the Maya languages, some of these are: The Popular Movement for Education "Fe y Alegría"; the Guatemalan Institute for Education by Radio; the Radio Nahualá in Sololá, which is a radio programme for the development of women in K'iché language.

In Honduras, the General Directorate and the Educational Communications Enterprise have been providing integral basic education through the radio to reduce illiteracy. It started in 1993 and it has covered 40.630 persons in the first level and 558 persons in the second level. Subjects included relate to the three Rs, population education, natural sciences, rights of women, social studies, civic, legal and democratic education and family education.

In Costa Rica, there is a radio programme being offered to support literacy programmes and in Panama, literacy is offered through the radio with the support of Mexico and Spain.

The press is widely used to support education. There are special educational supplements in Argentina, Bolivia, Chile, Colombia, Ecuador, El Salvador and Peru. In Honduras the press is helping with literacy and adult education through the "El Heraldo" newspaper.

With respect to the use of informatics and networking, in the country reports we find that Argentina has started a Telematic Network which benefits 400 schools and includes contracts with universities.

In Chile there is a Network called "Enlaces", maintained by the governmental Programme MECE and technically managed by seven regional universities under the coordination of the University of La Frontera. In 1995, this Network served 212 primary and secondary schools and in 1996, it will include 412 schools. The Government has passed the goal of 50% of the primary schools and 100% of the high schools connected to Enlaces in 19 institutions including universities.

Costa Rica and Panama are also investing in introducing computers in all primary schools.

In Costa Rica, the use of informatics is being introduced in the Ministry of Education to improve management procedures. Since 1990, 24.000 primary education students have benefitted from courses in informatics. A center of informatics called KIOSKO has also been created to offer teachers pedagogical orientation. A new programme for youth and adults is also being designed which includes the use of television, radio, computers and the press.

In Panama, the Mobilizing Project for Education for All (UNESCO/UNDP), trained 734 teachers and 159 leaders in educational informatics. With the financial support of the Educational Insurance, computers were installed in 44 schools. An intermediate strategy called "Open Doors" was developed.

Research and information for decision making

Little information has been provided in the national reports on the use of available information or achievement results or the findings of research of education for decision making. This is a crucial problem in the region which has also been mentioned in " The State of Education in Latin America and the Caribbean" (UNESCO-Santiago, 1996); which must find a solution in the coming years if we are to improve the quality and equity of education.

There are some examples of the promotion of research we wish to note: In Guatemala efforts are being made to promote educational research in subjects such as family educational patterns in the Maya communities; the community school, evaluation of the impact of the educational decentralization at the national level, of local councils of education, etc. And in Panama , the Mobilizing Project for Education for All (UNESCO/PNUD) created a National Research and Innovations Project for Education and promoted links with the Major Project Networks.

Administration, planning and management of education

The ministries of education have been modernized in most countries and have been freed from the direct administration of the schools and teachers. These measures have allowed for a deconcentration and an adequate articulation between the regular administration and *ad hoc* compensatory programmes. Problems arise however, when this modernization does not cover all instances in the National Government (statutory norms and regulations of personnel, slow procedures, etc). In some countries (Argentina, Chile, Ecuador) there are movements towards increased autonomy by individual schools.

In Argentina, the Federal Law of Education was adopted in 1993, which accompanies the final decentralization of the education system to the provinces. This meant a profound restructuring of the Ministry of Education. The consensus of the Federal Council of Education facilitated the approval of a national curriculum setting forth basic minimum contents and allowing the provinces to elaborate these minimum contents and create their own curricula. Advances have also been made in the modernization of educational management, which is now based on a series of special programmes rather than the traditional bureaucratic structure.

The programmes are highly decentralized. The implementation is directly under the responsibility of the schools. The central level defines the programmes and financing. The Province generates technical documentation, selects schools and presents an executive project. Local executing units are constituted and funding is transferred directly to them.

Programmes have a pedagogical impact. The central level distributes textbooks, dictionaries, etc. to the students or it creates classroom libraries. The first grade textbooks are replaced each year, the rest are replaced in 20% of the schools. Each school presents an institutional project to receive extra funding. The educational policies promote autonomy of

the schools: the schools formulate plans, decentralized models to conduct compensatory policies and evaluation formats. These compensatory measures are made to improve equity.

In Brazil, there are mechanisms which facilitate the provision of funding directly to the schools for buying materials, teacher training, etc. giving preference to the poorest of the schools.

In Chile there is a strong administrative decentralization towards the municipalities and the private sector. At present there is a move towards a pedagogical and curricular decentralization. There is nonetheless insufficient agreement on the role of the National Government and the other partners. There is also concern about how decentralization will affect equity. (36.4% of the primary and secondary schools are under private management, but only 8.8% of all schools is totally paid by the family; the other 81.2% is financed totally by State subsidies).

In Colombia, the educational reform is being implemented, in what is called "Certified Regions" following the Education Law adopted in 1994. There is pedagogical decentralization and increased autonomy by the schools through institutional educational projects. Furthermore, the Central Government, through the Technical Secretariat of the Ministry of Education supports the consolidation of regional plans and evaluates the autonomy of these in order to facilitate the management of resources. Until now, there are ten regional plans in the 33 certified regions.

In Costa Rica there have been important advances in deconcentration of educational management and administration at the Ministry of Education level and a move towards greater administrative independence by the schools. There is a project for the training of educational administrators in coordination with the University of Costa Rica, and efforts are being made to provide training to teachers for their new administrative role.

In Ecuador, a program to decentralize functions to the provinces is under way. Projects financed by the IDB and the World Bank financed decentralized quality-improvement and equity programs in the poorest schools in rural and urban marginal areas, but curriculum reform is still slow. Modernization of the Ministry of Education has also started.

The National development Plan and the Program for the Modernization of the Public Education Secretariat of Mexico (1989-1994), promotes decentralization of educational administration to the regions to increase their creativity and initiative. The 1992 National Agreement established the federalization of the educational system. During 1993 and 1994 there was a reform of the curriculum for primary and secondary education. The Public Education Secretariat is now in-charge of providing norms and is not directly involved in the execution.

In Nicaragua, there is an administrative restructuring of the Ministry of Education through a collegiate direction, the reduction of personnel and the use of informatics. Nicaragua is implementing the transformation of the curriculum in the first four grades of the primary school, and has started with the teacher's training curricula. In the last three years, the Ministry of Education has implemented projects of School Autonomy and the Municipalization of Education, as means of deconcentration. The first transfers administrative functions to the centers and promotes financial support from the parents, of which 50% is destined to the improvement of teachers salaries or infrastructure. In these autonomous schools there has been a creation of School Councils with the participation of teachers, students and parents.

In Venezuela, decentralization started in 1995, through a Law for the Transference of Competencies and the signature of two agreements. The election of new governors will favor transference of responsibilities beginning in 1996. The process of reorganization and restructuring has started. In 1996 a strategic plan will be designed. There is however resistance from the teachers unions to replace the present structure. Some intermediate strategies are be-

ing implemented such as the unification of the educational authorities of the state and of the Ministry of Education. There is a total deconcentration from the Ministry towards the state and the schools. The Ministry itself is being restructured and reorganized. The Pedagogical Project for Schools has started to allow schools to formulate plans, programmes and projects destined to correct difficulties in the teaching process.

The processes of educational decentralization and school autonomy are being given support by UNESCO and UNFPA through the Regional Network of UNESCO REPLAD of the Major Project and through the UNFPA Population Education projects.

Financing of education

According to the information received, during 1990-1995, important increases have been made in the financing of education, nonetheless, the participants of the January Seminar referred to the increasing tendency of the countries of the region to invest more in higher than in basic education, although this was not indicated in the country reports.

In Argentina, important advances have been made in agreements between the national government and the provinces and in a sustained increase of the educational budget.

In Chile, public and private educational funding rose from 2.6% of the GDP in 1990 to 4.5% in 1994, and there is a governmental commitment to raise it to 7% of the GDP at the beginning of the next century. In 1994, the educational budget was allocated in 62.8% to the pre-school and basic education level; 16.8% to the secondary level and 18.5% to higher education; 1.9% was dedicated to cultural extension.

In Colombia, public spending for education has been growing slowly. In 1980 it was 2.3% of the GDP and in 1993 it was 3.1% of the GDP. (It is however inferior to most of the countries in the LAC region). In 1994, of the total education budget, 31% was for basic education, 28% for secondary education and 19%

for higher education. Public spending for education has increased in the last two governments. At present it is of the order of 4.2% of the GDP.

In Honduras, between 1990 and 1993 there was an increment in the education budget of 71%, but most of this increase was destined to teachers' salaries. In 1994, 47.3% of the education budget was destined to primary education; 16.4% to secondary education; 0.7% to adult education. The private sector contributes little to basic education; its help only covers 5% of the school population.

In Nicaragua, during the last five years, between 34% to 61% of the educational budget has been given to the first four grades. Of these funds, 80% is destined to teacher salaries and other related social investments. Of the total budget for education, 61.3% are destined to primary education. In 1990 it was only 34.3%.

In Panama, the educational budget increased 13.4%. For the pre-school and primary levels the increase during these five years was 16.5%, but in the total investment on education it has diminished 34.5%. In spite of this reduction, the cost per student increased 13% in the pre-primary and primary level; 15.9% in the secondary level and 21.9% in the university level. Scholarships given by the Institute for the Training of Human Resources increased from 262 in 1990 for the primary level, to 1.545 in 1994. Nonetheless, the numbers are superior in the secondary level.

According to the new Law of Education, in Panama, public spending cannot be inferior to 6% of the GDP of the previous year. The municipalities will dedicate 20% of their budget to primary education and 5% to physical education for primary and secondary level.

In Venezuela there is consciousness that there is a need to increase investment in education, however the 1996 budget for education remains the same as in 1995.

International cooperation

International co-operation was mentioned as being important for promoting continuity in

public policies; to support educational reforms in the form of technical and financial co-operation; to strengthen technologies and programmes using the mass media (radio and TV); to support the use of informatics and the exchange of information among countries; to strengthen educational statistics, the development of evaluation systems, and the creation of indicators for the evaluation of the quality of education.

All along this document we have mentioned financial support from international sources to the educational programmes in the countries. In this section we will give some additional examples:

Between 1992 and 1995, UNESCO and Germany launched a Central American Textbook Development Project.

Chile has a US $ 240 million loan from the World Bank for pre-school and basic education, which covers the period 1992-1997, and a new US $ 206 million funding, partially financed by the World Bank, for the reform of high school level during the period 1995-2000.

In Costa Rica, financial support has been received from UNESCO, IDB and other sources. including the World Food Programme. USAID has given support to a programme for youth and adults and funds have been received from Spain for technical education and from France, England and Netherlands for other educational projects.

Since 1991, external aid has been supporting educational investment in Nicaragua. Between 1990-1995, Nicaragua has received US $ 34 millions from the World Bank, US $ 30 million from US AID and US $ 432.500 from the IDB.

Between 1992 and 1993, UNESCO and UNDP financed a Mobilizing Project for Education for All in Panama. This project was successful in promoting national and international resources for basic education. The national total financing was of the order of US $ 111.000. International technical support was US $ 85.000. Other organizations which contribute to basic education are OAS, Andrés Bello Convention, UNFPA, UNICEF, the World Bank and IDB.

Between 1990 and 1995, UNFPA contributed US $ 20.250.000 to the execution of education projects and in population and communications programmes in Latin America, many of which were conducted in co-operation with UNESCO.

Conclusions

If we examine closely the advances in the achievement of the recommendations of the Education for All Conference and of the Major Project for Education in Latin America and the Caribbean we can safely conclude that much progress has been achieved during the 1990-1995 period, although much remains to be done.

As we have seen, the subjects of equity and quality of education remain an important preoccupation for all countries and measures are being undertaken to improve them. The status of teachers, salaries and training have been improved in some countries in the region but are still far from adequate. Programmes for pre-school education, special education, bilingual education and adult literacy have to be strengthened, although some interesting and innovative programs are being initiated.

According to the participants in the January Seminar, the principles and thought of Education for All have been, to a large extent, incorporated into the planning and thinking in most of the countries in the region. However, in many cases educational policies do not sufficiently reflect the broad definition of basic education (do not include secondary education) or give a clear definition of basic learning needs. It is important to see how to translate words into practice. This would imply consensus on the criteria to define quality and the educational needs of the country.

The participants felt that International Organizations, including UNESCO, have an important role to play in promoting continuity in national educational policies. (With frequent changes of Government, International Organizations sometimes provide the only institutional memory, and can thus play a key role in keep-

ing Education for All on the educational agenda and helping ensure that plans are transformed into action). The same is true, it was said, for facilitating the exchange of information and in advocacy work.

With reference to the Major Project for Education in Latin America and the Caribbean, as was made evident particularly in the external evaluation conducted by the UNESCO-SANTIAGO REGIONAL Office for Education, the time has come to formulate a new educational proposal that will consider present needs and incorporate new advances.

Bibliography

Foro Consultivo Internacional sobre Educación para Todos. América Latina, Principales Cuestiones de Política para el debate sobre Educación para Todos. Revisión de Medio Decenio de Progreso en el Logro de la Educación para Todos. París, December 1995.

Ministerio de Educación de Chile, División de Educación General, Acciones Realizadas para Satisfacer las Necesidades Básicas de Aprendizaje en el Contexto de la Educación para Todos, Chile's report.

Ministerio de Educación de Colombia. Metas y Objetivos Intermedios de Educación para Todos.

Ministerio de Educación de la Nación Argentina. Programa I, Mejor Educación para Todos. Plan Social Educativo. Acciones Compensatorias en Educación.

Ministerio de Educación de Nicaragua. Hacia una Educación para Todos. (Mid-term national report).

Ministerio de Educación de Panamá, Proyecto UNESCO/UNDP Movilizador de Apoyo a Acciones Relevantes de Educación para Todos y Proyecto UNESCO-Alemania Elaboración de textos y Material de Lectura para la Educación Básica en el Istmo Centroaméricano; Comisión Panameña de Cooperación con la UNESCO. Examen de los Progresos de Educación para Todos en Panamá-1995.

Ministerio de Educación Pública de Costa Rica. Educación para Todos. Mid-decade report.

Ministerio de Educación Pública de Honduras. Dirección General de Planificación Educativa. National report on Education for all (Jomtien Conference follow-up).

Núñez P., Iván. Abriendo una Ventana al Mundo. Informática, Comunicación y Educación para Todos. El Caso de Chile. Santiago de Chile, November de 1995.

Regional Office for Education in Latin America and the Caribbean, UNESCO-SANTIAGO. The State of Education in Latin America and the Caribbean, 1980-1994.

Proyecto UNESCO/Alemania. Avance en el Logro de Metas en Educación para Todos a Mediados de la Década del 90. El Caso de Guatemala.

Secretaría de Educación Pública de México. Dirección General de Planeación, Programación y Presupuesto, Subsecretaría de Planeación y Coordinación. Acciones para Satisfacer las Necesidades Básicas de Aprendizaje: Evaluación de Media Década. México.

UNESCO-SANTIAGO Regional Office for Education, Mid-Decade Review of Progress in Literacy and Basic Education in the Latin America and Caribbean Region, Summary Report by the UNESCO-Santiago Office. Santiago de Chile, 31 July 1995.

SUBSCRIPTION

The Bulletin of the Major Project of Education in Latin American and the Caribbean Region is a fourmonthly publication edited in Spanish and English by the UNESCO/SANTIAGO Regional Office for Education in Latin America and the Caribbean.

Institutions or individuals wishing to continue receiving this bulletin are asked to kindly fill in the form below and send it to our address Enrique Delpiano 2058, Casilla 3187, Santiago, Chile with a postal US dollar check payable to UNESCO.

The subscription cost for Latin America and the Caribbean (Spanish or English version) is US$ 15. For the rest of the world is US$ 20.

SUBSCRIPTION

I wish to subscribe to the Bulletin of the Major Project of Education in Latin America and the Caribbean for one year (3 issues per year).

☐ Spanish edition

☐ 1 year: Latin America and the Caribbean, 15 US$
               Rest of the world, 20 US$

☐ English edition

I am enclosing the amount of ———————— (sending expenses are included)

Name ————————————————————————

Adress ————————————————————————

————————————————————————

————————————————————————

————————————————————————

(Please type or print clearly)

Signature

UNESCO/SANTIAGO Publications