

EDUCATION REFORM PROGRAM

(BO-0133)

EXECUTIVE SUMMARY

BORROWER AND GUARANTOR: Republic of Bolivia

EXECUTING AGENCY: Ministry of Human Development, through the National Secretariat of Education (SNE).

AMOUNT AND SOURCE:

IDB:	US\$80 million (SF)
World Bank (IDA):	US\$40 million
Parallel Financing:	US\$38.8 million
Local Counterpart Funding:	US\$45.4 million
Total:	US\$204.2 million

FINANCIAL TERMS AND CONDITIONS:

Amortization period:	40 years
Disbursement period:	8 years
Interest rate:	1% during the 10-year grace period, 2% thereafter
Inspection and supervision:	1%
Credit fee:	0.50%

PARALLEL FINANCING: The World Bank (IDA) and the Governments of Germany, the Netherlands, Sweden and others.

OBJECTIVES: The long-term objectives of the Bolivian Government's proposed twenty-year Education Reform are to establish an efficient and equitable system of education which provides 100 percent coverage at primary and secondary levels, and offers the range of scientific, technical/vocational and higher education opportunities to meet the nation's need for skilled manpower. In the short-term, through the proposed Program and with donor co-financing, the Government intends to tackle the major problems of basic education. In line with the broad developmental objectives, therefore, the Program objectives are to increase the internal and external efficiency, and the equity of the basic cycle of the education system. It supports a number of pedagogical, legal and administrative reforms whose purpose is to remove obstacles to change and improve efficiency, and an investment program which would equip Bolivia's most disadvantaged pupils with the resources and guidance they need to succeed in their education.

- DESCRIPTION:** The Program would support administrative and educational reforms through the financing of: (a) institutional or system transformation and strengthening of the education system; (b) improvement in pedagogical quality; and (c) program support and monitoring. While improvements to the institutional framework would directly benefit all non-university levels, quality improvement interventions under the Program would focus exclusively on the primary level.
- ENVIRONMENTAL CLASSIFICATION:** The Environmental Management Committee, at its meeting of January 11, 1993, classified this as a Category II operation.
- BENEFITS:** The proposed Program would support the first critical step in a long-term process of reform and improvement to strengthen the quality, efficiency and equity of basic education for all Bolivians. Improved relevance and quality of basic education will result in better-trained and trainable manpower for the economy in the medium- to long-term. Realignment of priorities in sectoral spending will redress imbalances in resource allocation, thereby enhancing both efficiency and equity in the use of public sector resources. Support for deconcentration of the education system will build institutional capacity at departmental and local levels, helping to lay the basis for decentralization. Implementation of a streamlined organizational structure for the SNE, combined with objective technical criteria for hiring and continued training, will form the basis for developing capacity at the national level for policy formulation, curriculum development, and pedagogical support. Introduction of mechanisms for community participation in key educational decisions will fortify the efficiency and transparency of service delivery and resource use by making the system responsive and accountable to its clients. The exercise of their new responsibilities will strengthen communities' ability to express their demands and organize and manage self-help activities - all prerequisites for true decentralization.
- RISKS:** There is unanimous agreement in Bolivia that the education system is failing and that reform is needed. Nevertheless, the education reform strategy under consideration is ambitious and difficult; it must be envisioned as a process, involving not only a complex set of actions, but also the participation of many diverse groups. Opposition is expected from those who stand to lose economic and political power,

specifically entrenched bureaucrats and leaders of the teachers' union. Managing the reform process will require firm commitment and strong leadership by the Government over several Administrations, as well as sustained support from the international community. Beginning the reform in the first year of a new administration will help to ensure continuity of strong leadership during the critical first years of the reform program. The planned public awareness and consensus-building level (communities and teachers) will help the Government to build support by providing accurate information on the purpose and nature of measures to be taken and on what to expect and when, and by including these groups in the process itself. Adopting realistic implementation timetables, training for both administrative and teaching personnel, and judicious application of technical assistance will help to ensure that measures will be taken in a timely manner and in accordance with its announced schedules.

While there is a potential risk that poor execution of the Program in its different components could affect Program outputs, mechanisms ranging from intensive, day-to-day monitoring and supervision of the Program - - both in Bolivia and by Bank headquarters - - have been incorporated, as have exhaustive annual reviews, to be carried out in close coordination with the Government of Bolivia, the World Bank and other donors. These mechanisms also include provisions which enable adjustments to be made in all aspects of the Program as needed and at any time, in accordance with established annual monitoring and supervision benchmarks pertaining to expected outputs, with an agreed-upon implementation schedule defining events and sequencing, and with the Government's Policy Letter expressing political commitment to the Program. If at any moment during execution a problem occurred, Program inputs would be adjusted - - as well as disbursements, if necessary - to assure that expected outputs are obtained. This is the execution mechanism that has been agreed upon by the Bank with the Bolivian Government and with all other donors, and safeguards have been incorporated into the respective contracts to assure it is adequately funded and carried out. Thus, the risk of poor Program execution is minimized.

EXCEPTIONS TO
BANK POLICY:

None.

**THE BANK'S
COUNTRY AND
SECTOR STRATEGY:**

Since 1985, the Bank's assistance strategy in Bolivia has focussed on support for economic reform through support to public administration, transport infrastructure, agriculture, energy and mining, and ultimately, the social sectors, particularly in response to the consequences of economic crisis and the adjustment process. As this process has matured, and as the Government which took office in August of 1993 has moved to the implementation of a round of second-generation reforms, renewed emphasis has been placed on, and the Bank has supported: unbinding the country's productive and export potential; strengthening key public sector institutions through executive, legal and judicial reform; improving natural resources and environmental management; and finally, broadening the access and improving the quality of basic education to all citizens.

**SPECIAL
CONTRACTUAL
CONDITIONS:**

As a condition precedent to the first disbursement of the financing ^{1/}, the borrower will be required to fulfill the following requirements to the satisfaction of the Bank: presentation of the cooperation agreement duly signed by the National Secretariat of Education and the National Secretariat of Community Participation, in terms substantially similar to those of the model previously approved by the Bank (paragraph 3.7 of the document); evidence of the formal creation of the National Technical Pedagogical Services Unit [Unidad Nacional de Servicios Técnicos Pedagógicos - UNSTP] of the National Secretariat of Education, designation of its personnel, definition of its organizational functions, and implementation of the Manual of Procedure (paragraph 3.8 of the document); implementation of the Manual of Procedure of the Monitoring and Support Unit [Unidad de Apoyo y Seguimiento - UNAS] of the National Secretariat of Education (paragraph 3.11 of the document); and presentation of the cooperation agreement signed by the National Secretariat of Education and the Social Investment Fund, in terms substantially similar to those of the model previously approved by the Bank (paragraph 3.21 of the document).

POVERTY CATEGORY:

As set forth in the Eighth Replenishment Document, AB-1704, it has been determined that the proposed Program fulfills the poverty targeting criteria inasmuch as it supports basic education, while a significant majority of the Program beneficiaries are poor, according to the conditions prevailing in Bolivia.

^{1/}The draft contract is available for perusal by the Executive Directors.

I. FRAME OF REFERENCE

A. Introduction

- 1.1 Bolivia was one of the first countries in Latin America during the 1980s to adopt a far-reaching economic adjustment program aimed at restoring price stability and restructuring the economy. The country has reduced inflation (to about 8.5 percent in 1993) and regained modest real growth (about 3.2 percent in 1993) through a program of tight fiscal and monetary policies coupled with structural reform and complemented by reduction of the debt and debt service burden. The structural reforms were designed to reduce state participation in the economy, to improve public sector finances, to foster private investment, and to enhance productivity and competitiveness. Nevertheless, Bolivia's economy remains fragile: prices for its major exports are in decline, it is vulnerable to adverse developments for a small number of markets and commodities, and it is heavily dependent on external aid. Moreover, the modest economic growth achieved in the past five years has not afforded much reduction in poverty. Government estimates suggest that over half the population is poor; the effects of poverty are felt especially by vulnerable and marginalized groups--women, children, and the indigenous and rural population. Although social indicators show some improvement compared to levels of ten years ago, they remain among the worst in the western hemisphere.
- 1.2 The challenge at present for the Administration which came into office in August of 1993 is to remove the remaining barriers to investment and growth and to continue redefining the role of the state through a round of second-generation reforms. To meet this challenge, Bolivia has designed a program including reforms in four critical areas which aim to: unbind the productive and export potential of its natural resources by providing an improved legal and institutional framework to support private investment and improvement of key economic infrastructure, and by attracting private management and capital into these sectors through the Capitalization Program; strengthen key public sector institutions through reorganization of the executive branch, civil service reform, and legal and judicial reform to enhance efficiency, public credibility and simplify procedures in these areas; improve the management of natural resources and environmental protection; and finally, broaden the access and improve the quality of basic education to all citizens. This latter area constitutes the Education Reform.
- 1.3 To guide the review of the Education Reform Program, a Conceptual Framework has been prepared which appears as Annex I-1 and is intended to help the reader envisage and understand the Program as a whole. In essence it summarizes the sector diagnostic; outlines the related project components which derive from the needs detected in the diagnostic; proposes actions and expected results of the

Program; and describes methods of verification of those results with their underlying assumptions.

B. Overview of the Bolivian Education System

1. Antecedents of Education Reform

- 1.4 Bolivia's existing system of public education was shaped by the reforms of 1952, which sought to make education more widely available and more democratic. Influenced by the European pedagogical philosophy of the preceding decades, the system was characterized by a high degree of centralization and an intent to achieve uniformity in educational attainment. The focus of reform was an expansion of the number of schools and teachers. A dual system of rural and urban schools was set up, each having its own management and its own teachers' associations. The intention of this dualism was to recognize and satisfy the differing needs of rural and urban areas. Basic salaries in rural areas were higher than urban and professional entry qualifications for teachers were easier in an attempt to recruit and retain teachers who would have to work in difficult conditions. Furthermore, in order to retain rural teachers, transfer from one system to the other was restricted.
- 1.5 Central to education policy were the elimination of illiteracy, basic education of peasants and disadvantaged groups, promotion of Bolivian culture, national integration and the promotion of science and technology to encourage national reconstruction and improve the country's productive capacity. In 1955 the Bolivian Education Code was enacted. With these objectives the Code also adopted an occidental pedagogy and implicitly rejected many facets of indigenous education which in retrospect might have contributed more to the social development of the nation. The language of instruction was Castilian. The growth of enrollment, especially among indigenous groups, and the spread of literacy since 1955 indicate the degree to which the reform was a success.
- 1.6 The Code was revised in 1967. The Consejo Supremo de Educación, headed by the President of the Republic, was established. Reforms in 1968 and 1969 emphasized science and technology and their role in national reconstruction. Shortly after, in 1969, a national literacy and adult education campaign began, with the objective of increasing the participation of peasants, workers and artisans in "la Vida Nacional". The first National Pedagogical Congress in 1970 further espoused the role of education in Nation Building, advocating a return to national values and excluding all foreign influence. It considered professionalising the administration of education, placing responsibility for planning and administration under a centralized Ministry of Education rather than the Presidency, involving teachers more in the control of education, unifying the dual urban and rural streams and promoting mass participation in the management of national education.

- 1.7 Reform in 1973 reasserted many of the prevailing ideas, extended coverage, improved quality and widened the remit of the education sector to include a technical baccalaureate. More importantly, it included education as a component of integrated rural development projects such as the "Proyecto Educativo Integrado del Altiplano". Other reforms, decrees and laws were enacted from time to time. One established and reinforced the financial and academic autonomy of the Universities, placing them beyond the administrative control of the Minister of Education. Another guaranteed the right to employment as a teacher to those who entered teacher training colleges, regardless of the national need for teachers.
- 1.8 Following the reforms of the 1980s, the GOB committed itself to modernizing education in line with the needs of a multicultural, democratic state. The "Libro Blanco" of 1987 and the "Libro Rosado" of 1988, written with substantial contributions from the current Minister of Human Development, espoused: (a) financial and administrative decentralization to give each region a more dynamic role in the organization and management of its education; (b) an education decentralization to permit local variations of the curriculum in line with local resources and needs, with regional technical - pedagogical teams; and, (c) social participation in schooling at the local, regional and national level.
- 1.9 Few of the reforms since 1955 were fully implemented due to lack of funds and to political instability. In place of a sector wide reform, concern at the quality of state education was expressed through the growth of schools managed by the private sector, NGOs and religious groups, especially among lower income communities. The performance of these schools has been a yardstick against which the quality of state managed education has been measured.

2. Basic Education: Management and Administration of the System

- 1.10 Until the new Administration came to power in August, 1993 and the approval of the Education Reform Law in July, 1994, responsibility for urban education lay with the Ministry of Education and Culture (MEC), while the Sistema Escolar Campesino (SEC) ran schools in rural areas. A new Ministry of Human Development was legally created in September, 1993 under which fall National Secretariats for Education (SNE), Health and Labor. The SNE assumed the role, the staff and the structure of the former MEC, including responsibility for rural education.
- 1.11 The provision of education was and remains the responsibility of the State and a right of all children. It was and is to be free 1/, universal and compulsory. Public schools serve the majority of Bolivian children. The private sector, including

1/ A matriculation fee of about US\$3.00 per semester is levied, ostensibly for the purchase of books and consumables. In fact this charge is rarely related to the intended purchases.

church schools and for - profit establishments, teaches about 13% of preschool and basic school children in urban areas, 17% of intermediate students and 22% of secondary students. Philanthropic church groups and other NGOs also educate substantial numbers of pupils, probably around 10% to 12% of enrollment. These include Fe y Alegría, Yachay Huasi, Escuelas de Cristo, Escuelas Populares Don Bosco, Save the Children Fund and Un Maestro Más, amongst others.

- 1.12 Urban schooling occurs in three cycles over twelve years. A basic cycle (ciclo básico) lasting five years and an intermediate cycle (ciclo intermedio) of three years constitute the compulsory core grades 1 to 8, for children aged six to fourteen. For a small number of children a secondary cycle (ciclo medio) lasting four years and covering grades 9 to 12 precedes higher education (educación superior).
- 1.13 The structure of rural education differs slightly. Schools are organized into Núcleos covering grades 1 to 5, Sub Núcleos, Escuelas Seccionales covering grades 1 to 3 only, Núcleos Escolares Selvícolas, Escuelas Vocacionales o Técnicas y Escuelas Normales Rurales.
- 1.14 In both systems children typically attend school for between 4½ and 5 hours per day for 185 days per year. The total attendance of 830 to 900 hours per year is below the world average of 1000.
- 1.15 A national map of educational conditions (Mapa Educativo Básico, MEB) was compiled in 1993 and its results incorporated into the national system of education information. Details of the size and coverage of the system are given in Annex I-2. The MEB noted that 1,424,578 children attend basic school and a further 287,938 students attend secondary school. According to UNESCO, apparent gross enrollment rates are 97% for boys and 85% for girls with apparent net rates 88% and 78%. The National Census of 1993 recorded just over 1,500,000 in the age range from six to fourteen inclusive. Boys outnumber girls by about 23,000. However, undercounting by the Census in certain regions of the country makes it impossible at present to estimate accurately the number of children who do not enroll at school, a problem which is compounded by the presence of over-aged repeaters and late starters and non attendance even of enrolled children. Accurate enrollment rates cannot therefore be calculated but UNESCO's estimates appear optimistic.

Basic Cycle: Summary of Enrollment by Cycle, Sector and Gender (MEB)

TYPE & LEVEL OF SCHOOL	BOYS	GIRLS
Public Urban Grades 9 - 12	84,450	82,042
Public Urban Grades 6 - 8	102,713	99,909
Public Urban Grades 1 - 5	205,169	205,041
Public Rural Grades 9 - 12	33,044	20,981
Public Rural Grades 6 - 8	67,494	46,395
Public Rural Grades 1 - 5	292,483	262,528
Private Grades 9 - 12	33,939	33,482
Private Grades 6 - 8	27,423	26,204
Private Grades 1 - 5	45,513	43,716
TOTAL (1,712,526)	892,228	820,298

3. Basic Education Infrastructure

- 1.16 In the public sector there are about 10,745 school premises, of which 1,102 are urban and 9,643 are rural. In fact 12,270 individual schools exist, of which 2,336 are urban and 9,934 are rural. The differences between the number of premises and the number of schools arises because many schools, especially urban, share sites and premises but operate as independent institutions, usually in shifts. Given the similarity between rural and urban enrollments, it will be seen that rural schools are much smaller than urban. Most urban school buildings are owned by the SNE, 88% have piped water, 89% have electricity, 54% have mains drainage and 63% benefit from public waste collection. In terms of construction, 55% of urban schools are brick built, 53% have cement floors while 20% have brick and 14% have wood, 56% have corrugated iron and 41% tile roofs (see Annex I-3 for details).
- 1.17 5,237 rural schools are owned by the communities in which they are located while a further 3,838 are owned by the SNE. Schools in rural areas tend to operate on one shift. They are often unable to offer the full range of grades and teach children of different ages and grades in the same room with the same teacher - multigrade teaching. The quality of construction is markedly inferior to urban schools. Only 27% have piped water, only 13% have electricity, only 4% have mains drainage and only 2% have public waste collection. For water they rely on wells and rivers, for sewage disposal on septic pits and for waste disposal, on any open space. The principal construction material is adobe (78% of schools) though roofs and floors are similar to urban schools. An inventory of school conditions shows that buildings, furniture and

equipment in rural schools are overwhelmingly below acceptable standards, 9,211 being classed as having poor buildings and 9,185 having inadequate furniture. Only 52 rural schools were regarded as providing a good quality service to their pupils (see Annex I-4 for details).

- 1.18 The official private sector operates 447 Urban and 271 Rural schools. In addition there has been a rapid growth in the number of small, single class, one teacher schools, usually run from a teacher's own house, without adequate support and supervision.

4. Basic Education Teachers

- 1.19 Urban schools are staffed by 42,000 teachers, of whom 23,500 speak solely Castilian and 18,500 speak Castilian and one or more indigenous language. Rural schools employ 38,000 teachers: 12,000 are monolingual in Castilian and 26,000 are proficient in an additional indigenous language. Urban teachers are predominantly female (66%) while only 45% of rural teachers are women. Rural teachers tend to be younger. High turnover, poor record keeping and fraudulent claiming of salaries result in marked differences between the numbers of teachers on the payroll and the numbers appearing for work. Recently, all teachers were obliged to re-register in order to verify their existence, their qualifications and their status. The MEB and the results of the re-registration are being amalgamated to update the payroll and the teaching establishment as part of the reform process.
- 1.20 Although teachers' salaries comprise an inordinately large share of education expenditure, individual salaries are low. A teacher in the basic cycle of a rural school typically earns about US\$993 per year while an urban counterpart receives about \$1,666. At "ciclo medio", the gap closes somewhat, rural earnings average US\$1,318 while the urban average is US\$1,667. Rural salary scales are in fact higher than urban in an attempt to staff rural schools. However, the use of less qualified teachers, the small size of rural schools and the limited number of posts of responsibility restrict both the career opportunities of rural teachers and their overall earnings. Despite low earnings, teacher time is an expensive resource. Teachers are contracted to undertake only fifteen contact hours per week, school holidays are long, and teacher productivity is limited by the quality and availability of training and teaching materials. From the teachers' point of view, limited earnings in education often make it necessary to engage in a second job. The creation of opportunities to increase earnings within the education sector and raise teacher productivity would make a major contribution to improving the efficiency of Bolivia's teaching force.

5. Secondary, Vocational and Higher Education

- 1.21 Secondary schooling is unified and serves about 40% of males and 35% of females in the secondary age group, mainly graduates of the

urban stream. Of the 2,336 Urban Schools, 781 offer the first cycle of secondary schooling - "Intermedio" and 555 offer the second cycle - "Medio". In contrast, out of 9,934 rural schools, only 1,692 offer "intermedio" and 627 offer "medio". A much higher proportion of private schools offer "intermedio" and "medio" cycles; 521 and 447 respectively.

- 1.22 Universities, eight of which are public and one private, are subsidized but not supervised by the SNE. Annual intake was about 90,000 in 1987. In addition, under the control of the SNE are 27 Escuelas Normales in which teachers are trained, vocational and technical - professional institutions managed by the Servicio Nacional de Educación Técnica (SENET), programs of adult education within the Servicio Nacional de Alfabetización y Educación Popular (SENALEP), special education, extra-curricula education, cultural extension, The Educational Press and The Book Bank.

6. Analysis of the environment in which education is provided

- 1.23 Bolivia presents its educators with a number of acute problems: foremost among them is demography. Firstly, with an estimated population of 6,420,792 ^{2/} and an area of 1,098,581 square kilometers, population density averages under 6 people per square kilometer (/km²). The most densely populated Department is Cochabamba (19.6 inhabitants/km²) while Beni and Pando have the least dense occupation (1.29 and 0.6 persons/km² respectively). Communications are poor. Access to a substantial portion of its people is therefore difficult and costly.
- 1.24 In the long term the problem of access will reduce because of the second demographic feature, the tendency of Bolivians to migrate from rural to urban areas. In the short to medium term however, the movement of people imposes an additional burden on the state, requiring additional facilities in destinations without a commensurate release of facilities in the zones which people leave. In 1950, 26% of the population of 2,704,165 lived in urban areas: by 1992 this percentage had risen to 58. ^{3/} The third demographic characteristic is the rate of population growth which has been 2.5% per annum for several decades and is one of the highest in the region. The regional average is 1.9% per annum (CPP, 1993). The structure of population includes a high percentage of young: 42.5% are below the age of 15, compared with a regional average of 36.2%. The resulting dependency ratio of 0.89, combined with the low level of income leaves little available for education.

^{2/} Censo Nacional de Población y Vivienda, 1992. La Paz, Mayo 1993.

^{3/} Quoted in "Escuelas y Aradas: Situación de la Educación Regular y Educación Técnica No Formal Rural en Bolivia. Adalid Contreras B. and Epifania Martínez B. (CEP-JICA) La Paz. Marzo 1994.

- 1.25 A fourth feature of Bolivia's people is their linguistic diversity. Annex I-5 shows the distribution of the nine major language groups and the thirty recognizably different languages. About 40% of Bolivians speak Castilian as their mother tongue, 45% speak Castilian but not as their mother tongue and 15% do not speak Castilian at all. This means that for 60% of children the language of schooling is a foreign language and for fully one quarter of this 60% that language is completely unintelligible.

7. Analysis of the performance of the education system

- 1.26 Bolivia's system of public formal education has been characterised by chronic underfunding and inefficient use of the limited resources available. The content of education is not well suited to the needs of the pupils nor the nation. Many pupils are alienated by schools whose language is foreign to them and whose culture is dismissive of their way of life. What little they learn does not equip them with the skills they need to earn a living and to live harmoniously in a multicultural nation. The external efficiency of education is therefore low. At the same time the education system itself does not use its resources to best effect. Salaries absorb almost the entire budget and yet teachers are ill prepared. The system's internal efficiency is thus low. A full description of these aspects of performance is set out in Annex I-6. Finally, the resources devoted to, and the advantages conferred by education in Bolivia benefit the better off considerably more than they benefit the poor.

8. Administration and Planning

- 1.27 Those who plan and manage education usually lack skills and simple resources such as offices, transportation, data handling and archiving capacity. Senior management, from the Minister of Education down, change frequently. In doing so they fail to take the long view of educational planning which is so essential. Additionally, they fail to provide the requisite leadership and control which the system requires. It is symptomatic of the weaknesses of the former MEC that responsibility for the rehabilitation of schools fell to a specially designated unit (the FSE, later the FIS) and that the research and planning of the education reforms had to be initiated and carried out since 1991 by the Ministry of Planning through its specially established Equipo Técnico de Apoyo a la Reforma Educativa (ETARE). The managers and administrators of the education system and school principals are invariably teachers who are promoted from the classroom without any training in management and administration.
- 1.28 In addition to the deficiencies outlined above a number of inter-related structural problems adversely effect the internal efficiency of education: (a) the need to use certain school infrastructure for two and sometimes three shifts per day results in a short school day, Bolivian children receive only about 80% of world norms for tuition hours; (b) the short school day gives

teachers time to supplement their meager salaries with a second job but current regulations forbid that job to be teaching a second shift; (c) school maintenance is poor and the resources inadequate; (d) the centralisation of educational management coupled with poor communications and a lack of managerial skill; and, (e) the absence of any objective measures of performance for pupils, teachers, texts and materials and the system in general. Finally, until the completion of the MEB there was almost no reliable national data on education and a lack of confidence in the data which are collected routinely at the local level. The MEB provides a baseline for the future development of time series data as well as a framework in which subsequent data for planning may be collected and used. While currently available data is inadequate for micro or planning, there has been sufficient research undertaken by the ETARE to enable the broad trends and major needs to be identified.

9. The Impact on Equity of the Education System

- 1.29 The division of basic education into rural and urban systems was originally intended to discriminate positively in favor of the hitherto deprived rural areas. While coverage did increase in rural areas, perversely it has increased much faster in towns and cities. Students attending school in urban areas have a much higher chance of promotion from each grade and eventually graduating. In 1985, almost 82% of the students attending basic school in urban areas advanced to the next grade, whereas only 50% of those attending rural schools progressed. It is estimated that 80-90% of basic rural students lack text-books compared to 40-50% of basic urban students. Almost one-sixth of all children never attend primary school. And while only 36% of urban children complete the full cycle of education, that low figure is twelve times the rural completion rate of 3%. Bolivia is the only country in Latin America which maintains separate rural and urban systems.
- 1.30 Due to the difficulties of recruiting teachers for rural areas, untrained and unqualified staff, called "interinos" are often engaged. The curriculum differs between rural and urban areas. The debate on whether it is desirable to have two curricula has raged for years. The result is clearly inequitable as rural schools have a curriculum that is outdated and irrelevant.
- 1.31 There is a marked difference between male and female participation. Although the first year enrollment rates for boys and girls indicate that parents appear to make as much effort to enroll girls, they seem to leave in larger numbers than boys very early in the education cycle. Interestingly, the number of females in the higher grades is almost equivalent to the number of males. Nonetheless, 67% of the illiterate population in Bolivia is female and in many rural communities all females are illiterate. Nationally the female literacy rate is twice the rate for males. Secondary coverage, which caters mainly for the graduates of the urban stream, is limited to about 40% of males and 35% of females in the age group. At higher levels female participation drops

sharply: while 23% of males appear to be enrolled in some form of higher education, the enrollment rate for females is only 10.5% of the age group.

- 1.32 A final inequity results from the funding of universities, which, with an annual enrollment of only about 90,000 absorb an estimated one quarter of all resources devoted to education. Tuition costs at tertiary level are nominal. The social class origins of entrants tends to be high. Higher education, as presently structured, thus constitutes a massive regressive transfer to better off, the opportunity cost of which is serious under-funding of the primary sector covering about 1.5 million children. The Universities are one of the major sources of opposition to the reform program and in the current reforming climate of Bolivia can be viewed as anachronistic self serving political dinosaurs.

C. Bank Strategy and Lending Program in Bolivia

- 1.33 Since its inception through the present, the Bank has approved 107 loans to Bolivia reaching over US\$2 billion. Currently, there are 24 loans in execution totaling over US\$906 million, of which US\$494 million (54 percent) has been disbursed. Specifically, IDB involvement in the Bolivian education sector to date has been modest. In the 1960s, five loans were approved to various universities totaling US\$2.4 million. The sixth and last education loan approved by the Bank to Bolivia was in 1977 to the Universidad Mayor de San Andrés, La Paz (Loan 527/SF-BO), in the amount of US\$9.7 million with US\$580,000 in non-reimbursable technical cooperation, in addition to co-financing from the Government of Canada for US\$7.9 million, to finance a national system of technical education at the secondary level through the SENET.
- 1.34 According to the Bank's strategy in Bolivia, investment in the social sectors and particularly in education will play an important role during the 1993-1995 period as reflected in the current CPP (January, 1993), based on the high priority assigned to those sectors within the Government's Social Sector Strategy, and on the Bank's 8th Replenishment objectives.

II. THE PROGRAM

A. Context

- 2.1 The Program is called a reform because the changes which the Government of Bolivia is bringing about are far-reaching and will establish an education system whose purpose and content are radically different from the preceding four decades. It is not a "sector reform loan" ; in the case of Bolivian education a sector reform loan with rapidly disbursed funds would be inappropriate because the changes required are unlikely to be verifiable within the normal disbursement period of a sector loan. Acute resource shortages in the education sector and a limited capacity to absorb additional resources, combined with an exceptional willingness to take whatever steps are necessary to modernize and democratize education, have produced the need for an extended term of flexible support while making the traditional forms of "conditionality" inappropriate.
- 2.2 There are two key aspects to this support. Funds are to be disbursed according to a detailed but flexible timetable matched to the nation's absorptive capacity and in line with normal IDB loan procedures. This can be conceived as meeting measurable "input objectives". At the same time, attention will be paid from the outset of disbursement to the desired "outcome objectives" - the decline of repetition, the improvement of cognitive performance, etc., which have been set out in the Conceptual Framework for the loan (Annex I-1). The early measurement of educational outputs at the macro level poses acute technical problems, to solve which, proxy indicators will be used, while simultaneously developing the evaluative capacity of the SNE. In order to keep a close watch on the emerging impact of the Program and the relationship between ends and means, it is proposed to: (a) engage a high-level educationist to guide the Bank and the Government; and (b) hold annual donor reviews.
- 2.3 The Education Reform Law, passed on July 7, 1994 sets out the framework for a unified, deconcentrated education system of education management. The Law describes the structure of Popular Participation in relation to education (the counterpart Popular Participation Law, itself, was passed April 20, 1994, and is described separately beginning in Paragraph 2.11). It describes the content, process and purposes of education, specifying that education shall be bilingual and multicultural. It defines roles and responsibilities in broad terms throughout the system. These two laws give the authority and framework of law to the Program which the Bank would support.
- 2.4 The GOB's long-term objectives are to establish an efficient and equitable system of education which provides 100% coverage at primary and secondary levels, and offers the range of scientific,

technical - vocational and higher education opportunities to meet the nation's need for skilled manpower. The GOB seeks to eliminate illiteracy at source. It aims to make education an engine of social and economic development, a mechanism to promote social and political stability, improve the quality of life for all and a means to achieve national unity through the recognition of the country's diversity. It will promote the protection and sustainable management of the country's resources and conservation of its environment. The time frame in which it plans to achieve these aims is two decades.

- 2.5 In addition to meeting the challenge outlined above, the country must generate the resources to educate an additional 40% to 50% of school age children over the next 20 years. It is estimated that by 2001, the percentage of GDP devoted to education will have to rise from 2.7% to 6.0%, and the share of the budget devoted to basic education will have to rise commensurately.
- 2.6 The commitment of the GOB to fulfill these objectives by undertaking specific institutional and financial policy actions within the Education Reform is reflected in the Letter of Sector Policy, Annex II-1, signed by the Government of Bolivia. It is important to note, however, that establishing financial and economic targets, without a sound expenditure plan to increase the supply of effective educational resources, is alone insufficient to generate the necessary changes in educational practices to bring about the reform. For this reason, the targets contained in the Policy Letter have to be viewed in conjunction with the physical progress of the Program rather than conditions to trigger disbursement. As in other projects, disbursement will depend on the satisfactory progress of investment, with the added safeguard that the review process will seek to assure that the investments are contributing to the achievement of the desired program objectives at a much earlier stage in the project cycle than normal.

B. Program Objectives and Strategies

- 2.7 In the short term - during a proposed execution period of seven years - the GOB intends to tackle the major problems of basic education. In line with the broad developmental objectives therefore, the Program objectives are to increase: (a) the external efficiency; (b) the internal efficiency; and (c) equity of the basic cycle of the education system. The Program supports a number of legal and administrative reforms whose purpose is to remove obstacles to change and improve efficiency, and an investment program which would equip Bolivia's most disadvantaged pupils with the resources and guidance they need to succeed in their education. While the individual reforms and investments may contribute to the achievement of more than one objective, the individual targets within each objective can be schematized as follows.

- 2.8 In order to improve the external efficiency of education the reforms will seek to make education more responsive to society. Specific objectives to be achieved within the duration of the Program are to: (a) adopt a curriculum, including content, teaching methods, timetable and language of instruction, which satisfies the learning needs of students and the skill requirements of the nation; and (b) promote the local development, administration and supervision of education.
- 2.9 The educational strategies to achieve these specific objectives include the analysis of learning needs, the development of a common core curriculum focussing on behavioral learning objectives, development of course contents, learning methods, teaching materials and the introduction of an evaluation system. In addition to the common core curriculum, decentralization will, in due course, permit and require local variants of the curriculum to reflect the reality in which children live so that their learning will progress from the concrete to the abstract and from the familiar to the unknown in line with sound pedagogical practice. A key element of the improvement will be the adoption of mother tongue instruction for the early years of the primary cycle, aimed at overcoming the handicaps indigenous communities face in the early school life. The twin features of a scientific emphasis and local variations of the curriculum will enhance awareness of, and concern for the local environment and by extension, the global environment.
- 2.10 Administrative reforms aimed at improving the responsiveness of education to society's needs include the deconcentration of administration to regional and local levels and the establishment of procedures and laws to promote popular participation in decision making and service delivery.
- 2.11 Communities will be equipped with the legal rights and obligations to participate in the management of education in their locality. Councils for the community oversight of administration at each level will be established under the regulations of the Popular Participation Law. Grass Roots Territorial Organizations for example will have responsibility for determining who shall supply schooling in their territory and for monitoring the flow of resources to their region. At a slightly more local level Schools Councils, made up of parents and community members, will have the power to approve the selection of education staff, budgets, yearly operating plans and teaching materials for the local components of the curriculum.
- 2.12 The recruitment of teachers, however, will continue to be a centralised function of education for the foreseeable future for a number of reasons. Because teachers are Civil Servants, the power to recruit and dismiss them has to lie with the same organisation that pays them. Based on the Popular Participation and Education Reform laws, school, "núcleo", sub-district, and district education boards will have responsibility for overseeing the

education authorities' exercise of responsibilities at the corresponding level and the power to recommend the hiring, promotion, and firing of educational authorities, principals, and teachers. Notwithstanding this responsibility, only the central government will continue to have the authority to actually hire and fire under the law.

- 2.13 While some countries have experienced nepotism and patronage in recruitment at the central level, others have suffered from local nepotism and patronage. On balance it was felt that while in theory decentralisation may be thought to improve the operation of "the market" for teachers, in Bolivia the solution to weaknesses in teacher recruitment and performance lies in the establishment of sound recruitment practices: establishing objective and transparent entry qualifications, setting performance evaluation mechanisms, defining promotion criteria and following agreed disciplinary procedures. All these are to be incorporated into the Program through the regulations being developed under the Teaching Statute ("Estatuto Docente").
- 2.14 The training of teachers to be carried out under the Program will form an integral part of the role of the pedagogic coaches who are full time permanent staff of the Ministry. These posts will give a career structure to the teaching profession which rewards good performance and keeps within the education sector the accumulated expertise of good teachers. The training they carry out will be defined and refined on the basis of the permanent supervision process and the continuous identification of training needs. It will be closely related to the classroom work of the teacher and the monitoring of pupil performance. It is difficult to identify a mechanism by which "competition among suppliers of teachers' training" could be created when there is little evidence that such suppliers abound in Bolivia. It is also hard to envisage how this function could be detached from the work of the pedagogical coaches without simultaneously destroying their supervisory role and leaving them under-employed. The compensatory and equity aspects of the Program may be jeopardised if the quality of the in-service teacher training varies: in the absence of adequate accreditation and certification measures it would be impossible to guarantee the quality of the training offered without participating closely in its design and delivery. Finally it is hard to justify the additional costs needed to offer the necessary margins to remunerate entrepreneurs and their inclusion would considerably raise costs.
- 2.15 Under the Law, ownership of school infrastructure is transferred to the municipalities, along with the obligation and resources for the upkeep of schools and the replenishment of materials. Many rural schools are already the property of the community. With the passage of the Popular Participation Law the supply of teaching materials becomes the responsibility of the Municipalities. Regional centers, with the appropriately trained and qualified staff, will be established to provide technical, administrative

and pedagogical support for local management. Periodic national and local evaluations will ensure that the curriculum remains appropriate to the needs of the community over time.

- 2.16 To improve internal efficiency the Program would establish a capacity to ensure that most children will complete the obligatory cycle of education within the prescribed time and equipped with the cognitive skills - reading, writing, computation, etc. - according to the norms for their age. Specific objectives to be attained by the end of the Program are: (a) to eliminate grade repetition; (b) to reduce the time required to complete each grade equivalent of schooling from one and a half to one year; (c) to eliminate desertion caused by academic failure; and, (d) to eliminate wastage of resources.
- 2.17 In order to achieve these objectives a range of strategies will be pursued. Parents will be encouraged to enroll all their children in the first grade at the appropriate age. Once enrolled children will follow a more individualized learning program which will break down the formal divisions between grades. Instead, it will allow pupils a two year cycle to complete a modular program of studies designed to attain specific learning objectives. The program of studies will be structured in terms of cognitive objectives, related to the age and grade of the child rather than by lists of subject matter. Individual learning achievement will be tested by objective, criterion referenced tests, thereby eliminating teacher subjectivity, permitting a detailed diagnosis to be made of why failing children fail and facilitating remediation. Students having difficulty with individual topics will be allowed to spend more time on them and make up the time elsewhere, thus avoiding the need to repeat a full year. With reduced repetition, desertion will fall.
- 2.18 Investments in teaching materials, teachers' guides, reference books and initial stocks of consumables will enhance the amount and quality of learning which will take place. Teachers will be better managed and better trained. All teachers have recently been registered to verify their existence, their role, their qualifications and place of work. The number of "ghosts" will be reduced and individual salaries increased accordingly. A system of performance evaluation will be introduced and opportunities made available for teachers to increase their earnings by taking on additional responsibilities and improving their qualifications. The entry to "Escuelas Normales" will be limited to the likely future demand for teachers and the SNE will resume the authority to transfer teachers to schools where they are needed. Incentives will be provided for teaching posts in difficult locations.
- 2.19 In the short term teachers will be trained in specific skills required for second language and multi-grade teaching. In the medium term the system of teacher training, via the "normales", will be upgraded in line with the needs of the new pedagogy and currently practicing teachers will be generally upgraded in both

knowledge and teaching skills. Henceforth, teachers will receive technical support and supervision of their teaching through a nationwide system of pedagogical advisers to be established under the Program. This is of particular benefit to the single teacher rural schools. Teachers will have access to resource centers to be established at "núcleos" under the Program. The "nuclear" structure of rural education will be reinforced so that the centers are better able to support the peripheries. The staff of the SNE will be relocated to the regional structures and trained as needed and logistical support will be provided in their formative years.

- 2.20 Teacher attendance and conduct will be monitored by the community and support provided by the community as needed under the framework of Popular Participation referred to above. The physical conditions of schools and their furnishings will be improved through close coordination with the FIS. Finally, the cognitive performance of pupils will be measured systematically and norm referenced at the national level by the National System of Education Measurement (SIMECAL), giving a clear indication of what schools are achieving.
- 2.21 To improve equity the program will: (a) increase access to cover 76% of rural and 92% of urban school age children by 2001 4/; (b) reduce desertion caused by socio - economic deprivation; and (c) seek to equalize educational opportunities and learning outcomes regionally, by sex and by social class.
- 2.22 Many of the strategies which promote efficiency also foster equity. The common core of the curriculum will ensure that all children in school will acquire basic skills. Mother tongue school induction programs will overcome the hurdle faced by children who do not speak Castilian. SIMECAL will highlight regional and social class disparities in pupil performance and enable compensatory measures to be taken. Popular Participation, greater accountability associated with decentralization, improvement of teacher quality and school resources in marginalized areas and measures to retain more children in school for the requisite number of years will all contribute to creating a more equitable system. Additional curriculum development components which promote equity include removing sex-role stereotypes from teaching materials and developing a multicultural dimension to reduce prejudice and break down discrimination, especially against indigenous groups.

4/ By the end of the Program it is expected that net enrollment in the early grades of school, which are the first to benefit from the Program, will be closer to 100% and as these children pass through the system upper grades will eventually show fuller participation.

- 2.23 Major strategies to equalize educational opportunity are Bolivia's institutional reforms. 5/ The Urban - Rural division of the education system will end. The management and delivery of education will move closer to the beneficiaries, pupils and parents. To prevent the emergence or enlargement of regional disparities after deconcentration, a unified central SNE will retain responsibility for the common core curriculum, the SIMECAL, setting teacher training and administrative personnel performance standards, formulation of broad policy, and the composite national investment plans and operating budgets.
- 2.24 Additional specific strategies to promote equity will focus on increasing the enrollment and attendance of girls and include public awareness of the benefits of education, and training for teachers and school administrators in meeting the special needs of girls. Special measures will be needed to overcome the problem that many smaller rural schools only offer the first three grades and parents are reluctant to allow daughters to live away from home. Peripatetic teachers, scholarships for girls, lodging near schools with the upper grades and distance learning are all under consideration.
- 2.25 The structure of education finance will be modified to better reflect the proportion of beneficiaries at each level and their families' economic means. In the medium term this means reducing the share of state funding for higher education, improving the efficiency of higher education, raising the level of accountability of the higher education sector, introducing cost recovery mechanisms to better equate private and social rates of return to higher education and the introduction of scholarships to permit the participation of indigent students. The university sector has already made moves towards increasing its own public accountability and the Reform Law has introduced an accreditation system (Sistema Nacional de Acreditación Académica - SINACRE) which will focus attention on tertiary level performance.

C. Program Description

- 2.26 The first seven-year phase of the Education Reform will include comprehensive components of: (a) Administrative Reform, with support to education management; and, (b) Educational Reform. Its total cost will reach US\$204.2 million, of which the Bank would finance up to US\$80 million through the proposed Program, with the remainder to be financed by IDA, other donors and local counterpart. The main Program components are described as follows, while the Cost Table, which identifies the specific components to be financed by the Bank, appears at the end of this section. These components would also be supported by the Bank

5/The Education Reform Law, Art.4^a. Ch. 4. "To construct an intercultural and participatory education system which makes possible the access of all Bolivians without discrimination."

with non-reimbursable technical cooperation, whose Plan of Operations is included in Annex II-3.

- 2.27 In accordance with the Cost Table, the Bank's contribution of US\$80 million would finance: (a) provision of office space and upgrading at the District level, US\$5.483 M (A.2)(each line item of the Table is hereafter indicated in parentheses); (b) the establishment of an education management information system, US\$1.033 M (A.4); (c) provision of information and technical assistance to community organizations, US\$144,000 (A.7); (d) salary increases for teachers, US\$20 M (A.8); (e) development of a core curriculum grades 1 through 8, US\$10.645 M (B.1); (f) development, production and distribution of textbooks, materials for teachers and students, and teachers' guides, US\$23.644 M (B.2); (g) training in the use of bilingual and multigrade materials, US\$2.574 M (B.3); (h) development of an education assessment program, SIMECAL, US\$1.955 M (B.5); (i) computers and learning programs for the "núcleos", US\$2.674 M (B.6); (j) institutional strengthening to the Unidad de Apoyo y Seguimiento, UNAS, US\$1.25 M (C.1); (k) technical assistance, US\$6.485 M (D); and, (l) financing costs, US\$4.113 M (E.1, E.3).

1. Administrative Reform

- 2.28 A first step has been to determine how many staff the SNE employs, their location, job designations, qualifications, aptness for the job they are doing, future role and training needs. The task involves two stages. The Mapa Educativo Básico (MEB), completed in March 1994, verified the existence of all schools and teachers and determined their age and the languages they speak. A registration process begun in March 1994, required all SNE staff to present their cédulas, qualifications, payroll data, experience, location and post held. Data collection was completed in May 1994, and by October 1994 the two studies will be amalgamated for eventual incorporation into the current payroll and establishment of data bases for the Ministry of Finance and the SNE. The objective is to ensure that only real employees are paid, staff are appropriately placed and receive the salary corresponding to their work. The MEB, including 11 person months of international consultancy, was wholly funded by the Swedish International Development Agency (SIDA) as part of project preparation. The registration was managed by the ETARE and data collection, processing and analysis were contracted to local consultants (items A.1 and D, "OTHERS" in the Cost Table).

a. Staff rationalisation and relocation (A.1)

- 2.29 In the deconcentration the Central and Departmental Offices of SNE will lose about 450 technical and administrative staff and the Districts will gain 1000. The profile of the corps of staff will change as the numbers of pedagogical supervisors (advisors) and curriculum specialists increases. Staff will be encouraged to apply to relocate, where appropriate, in equivalent posts in the

new structure but those within five years of retirement age who are unable to take up a new post will be encouraged to retire prematurely while those with more than five years of service remaining who are unable to fill another post will be offered severance packages. The total cost of severance payments and early retirements is estimated at US\$4.1 million to be paid by the GOB out of the local counterpart funds (item A.1 "LOCAL" in the Cost Table). The net additional recurrent costs of the additional 550 staff in the districts is calculated for the life of the Program at US\$13.6 million but do not appear in the Cost Table. The additional recurrent costs associated with these appointments will also be financed by the GOB's counterpart contributions. Temporary specialists to help with the reform process will be funded by the Bank and external agencies (item A.1 in the Cost Table).

b. Staff development at central and deconcentrated levels
(A.3)

- 2.30 175 person months of expertise will be required to train and reorientate technical, professional and administrative staff in the new structure in informatics, curriculum development and implementation, teacher upgrading, the adoption and use of bilingual education and working with community groups. Training will take place at central, departmental, district and "núcleo" levels and will be funded by IDA and the GOB (item A.3 "OTHERS" and "LOCAL" in the Cost Table).

c. Training and orientation for community organisations and parents (A.7 and D)

- 2.31 This component provides training and orientation for the public at large, as well as for parents and community groups, about their rights and participation mechanisms under the new structure. It will finance, among other items 68 person months of expertise who will provide specific training in the community management of education, including the vetting of budgets, the assessment of allocation, the monitoring of school activities and community contributions to the operation of the school. The support will continue for five years and be funded externally by the IDB, IDA and the GOB (items A.7 and D, "IDB", "OTHERS" and "LOCAL" in the Cost Table).

d. Establishment of an education management information system (A.4 and D)

- 2.32 A pilot information system will be implemented nationwide, increasing the availability of data on resources, staffing, salary payments, and the supply of certain education inputs. The training and orientation, delivered mainly through 45 person months of technical assistance as well as the nationwide implementation of the system is to be funded by the Bank, Sweden

and GOB (items A.4 and D, "IDB", "OTHERS" and "LOCAL" in the Cost Table).

e. Incorporation of community participation in administration
(A.5 and D)

- 2.33 Community participation requires a more transparent approach to the management of resources, with built in checks and balances commensurate with the new roles and responsibilities for managing education. Technical assistance to design the system and train administrative staff in its use is to be funded externally (items A.5 and D under "IDB", "OTHERS" and "LOCAL").

f. Teaching force management system (A.6)

- 2.34 A supreme decree will define the framework for the certification, contracting, assignment, promotion, evaluation and remuneration of teachers. Approximately 19 person months of technical assistance will be required to make the framework operational and to train staff to administer it. The cost is to be borne entirely by IDA and "OTHERS", item A.6.

g. Provision of office space (A.2)

- 2.35 Offices required at central, departmental and district levels will need adapting to new purposes and rehabilitating. Surplus offices at central and department levels will be sold where possible and eventually the proceeds invested in the sector, probably beyond the end of the Program, given the slow procedures to be followed in the disposal of public assets. Central and Departmental offices would be financed by the IDA and the GOB, while the equipment at the District and Departmental Offices would be financed by the IDB and the GOB (item A.2 in the Cost Table)

2. Educational Reform

- 2.36 This component comprises curriculum design and development; design, production, purchase and distribution of textbooks and teachers' guides; purchase and distribution of school equipment, materials, and reading and reference books; training for pedagogical coaches, school principals, and teachers; transformation of pre-service teacher training; and establishment of programs for educational assessment and for research and experimentation. The principal input will be the contracting of consultancy services to provide technical leadership and undertake many of the technical tasks.

a. Development of a core curriculum grades 1 through 8 (B.1 and D)

- 2.37 The development of the core curriculum will require over 2,000 person months of technical assistance and temporary support, in order to study basic learning needs, define learning objectives

and content for core curriculum modules at each grade and level, for each subject, and to carry out tests and pilot projects, evaluate them and finalise texts of modules for production and distribution (items B.1 and D, to be financed by all donors and local funds).

b. Development, production, and distribution of textbooks, materials, computers and teachers' guides (B.2, B.6 and D)

2.38 The new, humanist, pluricultural curriculum which is to be implemented in schools requires a combination of activities prior to its operation: review of current experiences, both mainstream and experimental; specification of materials, texts and test; development and selection of enrichment materials and selection of audio visual aids, charts, computers and computer learning, etc. (items B.2, B.6 and D, to be financed by all donors and local funds).

2.39 The materials would instill appreciation for cultural diversity and seek to improve the image of girls and women in Bolivian society. The packages would be modular to facilitate the early testing and subsequent production and distribution of the packages. Additionally the modular presentation of materials accords with the self paced, cyclical learning approach which will be followed, especially in multigrade schools. Each module would require about half a school year for students to complete, for a total of 16 modules at primary level. New curriculum modules to be developed over five years will benefit about 360,000 students. Full development of the modular curriculum and production and distribution of all materials will take about eleven years and benefit the entire primary school population (about 1.4 million students each year).

c. Interim measures (B.3)

2.40 To overcome the acute shortage of learning materials while the new curriculum is under development two measures are proposed:

- A bilingual education program developed and tested in Bolivia with assistance from UNICEF will be revised and extended to general use. The program includes textbooks, materials, teaching guides, and teacher-training programs aimed at teaching basic reading and writing skills in the mother tongue in the early grades while progressively switching the medium of instruction to Spanish. As the new curriculum for bilingual areas is introduced, the use of the interim materials will be phased out.
- UNICEF has also helped to develop materials to facilitate multigrade (or multigroup) teaching techniques for urban and rural use. Dissemination of current materials would improve the effectiveness of rural teachers during the transition (item B.3, to be financed by all donors and local funds).

d. Classroom materials for pupils (B.2)

- 2.41 Schools generally lack maps, posters and games, and reference and general reading books. Packages of about 50 books per classroom adapted for age and level will be made available. The number and composition of packages would be adjusted for rural populations. Approximately 20,000 packages will be distributed, benefiting 1.7 million students per year when fully distributed. These materials have a useful life of 8 years. The packages include games, musical instruments, blackboards, radios, cassette players, consumables and other equipment. Replacement of materials during the Program period would be financed from beneficiary contributions.

e. Materials for teachers (B.2)

- 2.42 Teachers also lack materials. 1600 "núcleos" would be given resource centers serving an average of 6 schools. Each would be equipped with reference books and aids for teachers and a mimeograph machine. About 60,000 teachers at primary and secondary levels will benefit.

f. Production and distribution of teaching guides and other pedagogic aids (B.2 and D)

- 2.43 A number of teachers routinely design lesson plans and materials. A nationwide competition, inviting topics from teachers and curriculum development specialists, was held during project preparation. The competition involved teachers in the process of the reform, permitted an assessment of the ability level of the best teachers in the system, providing information for the development of teacher training programs and other materials, and produced materials that are usable by the average teacher. Teaching guides for years 1 - 8, arising from the results of the competition, will be developed, tested, produced, employing 15 person months of technical assistance, and distributed to about 45,000 teachers.

- 2.44 About 180,000 copies per year of a Teachers' Newsletter will be produced. It aims to disseminate information on training opportunities and activities planned under the Reform as well as providing general pedagogical information. It will be prepared by a team appointed for the duration of the Program. Distribution will be to about 50,000 teachers.

g. Training for pedagogical supervisors (Coaches), teachers and school principals (B.2 and D)

- 2.45 The new pedagogical supervisors or "coaches" will conduct training for both school principals and teachers and provide support on an ongoing basis. Introduction of this program requires intensive training of coaches, provision of instructional materials for use by coaches in training school principals and teachers, and

provision of self-instructional for teachers to strengthen basic skills on their own with periodic supervision and instruction from coaches.

- 2.46 The coaches will have no administrative responsibility; they will be responsible for all in-service teacher and school principal training within their area. On average, coaches would cover two núcleos (12 schools) each. The Program will finance the initial training of coaches, as well as technical assistance for the development of further programs. Approximately 900 coaches will be trained over a four year period. The programs will be designed with international help and delivered by the education department of the University of Cochabamba among others. To design courses in a range of eight supervisory subjects will require 81 person months of expertise, while to conduct the training will call for 192 months of temporary assistance. KfW has agreed to finance these.
- 2.47 Coaches will conduct workshops for teachers in their areas. Workshops will coincide with production and introduction of modular instructional packages based on the new core curriculum and include instruction in the use of teaching materials and library resources, multigrade teaching techniques, and, where applicable, the teaching of Spanish as a second language based on bilingual educational materials. The Program will finance the production and distribution of instructional materials as well as logistical support for the training seminars. Twenty thousand (20,000) teachers would be trained by pedagogical coaches during the Program.
- 2.48 Many teachers require remedial training in classroom methods and basic skills such as reading comprehension, writing, mathematics, and science. However, their needs are highly individual, varying by background, experience, and the level they teach. To fill this need, self-instructional materials will be provided, which teachers would study at their own pace, with support from their coaches, but without the logistical expense of special courses. About 86 months of additional assistance would be required to review alternatives and develop training instruments. The Program will finance the production and distribution of such materials. An estimated 50,000 teachers would benefit from the self-instructional materials during the Program period.
- 2.49 School principals will have both administrative and pedagogical support roles. They will participate in training seminars along with teachers and will receive additional training in school administration. Workshops for about 7,200 principals will be conducted by pedagogical coaches during the Program.

h. Conversion of teacher-training schools (B.2 and D)

- 2.50 To overcome the problem of poor initial teacher preparation the reform will revise the role of teacher training schools. Each

"escuela normal" will prepare a plan for transformation, focusing on one of the areas of emphasis defined under the Reform, and each would enter into an agreement with a public or private university to help develop and carry out its plan. Of the 27 "normales", six will convert to bilingual education teacher training institutes; 18 will convert into centers for training primary level teachers and/or school administrators and three will close. University graduates will also be eligible to teach, and universities will be able to offer accredited programs in specialized teacher-training, school administration, and pedagogical supervision. The project would support the development of the program through financing of scholarships for study abroad for up to six persons (one year each) and through 560 months of technical assistance and logistical support for development of the transformation action plans.

i. Education research and pilot programs (B.4 and D)

- 2.51 This component would support approximately twelve complementary studies necessary for the development of the curriculum, including the identification of learning objectives, needs of the various ethnic groups, gender-related issues pertinent to primary education, the impact of migration on primary education, and problems related to the quality, efficiency, and equity of secondary education. It will also support the development and implementation of proposals for experimental programs at school and local level. In addition, 50 selected núcleos would serve as models for application núcleos, which would submit proposals and evidence of fulfillment of selection criteria. Model núcleos would receive incentives in the form of supplemental school equipment or books. 122 months of research and consultancy are needed (items B.4 and D, to be financed by other donors and local funds).

j. Development of an education assessment program (SIMECAL)
(B.5 and D)

- 2.52 There is currently no measure of how the school system performs with respect to defined learning goals. Once the goals themselves are defined, monitoring and continued improvement of the programs, materials, and methods developed to accomplish them will require periodic assessment of student achievement, most likely in Grades 3 and 5, though a learning readiness test on entry to school would be a useful diagnostic device for compensatory pre-school programs. The Program will finance technical assistance and logistical support for the establishment of a unit to develop and initiate a program of sample-based education assessment at the primary level. In addition to establishing the unit the technical assistance would prepare baseline data according to regions, sex and socio-economic conditions, on current, that is to say pre-reform levels of pupil performance, in order to measure the impact of the reforms. The Unit will seek consensus on what are the baseline skills, prepare a sample, and establish a capacity in the

SNE to perform annual sample based tests of pre-assigned grades in key skills.

- 2.53 The main requirements are for 25 months of technical assistance in testing and educational measurement, long term training in psychometrics, assessment, item writing, and educational measurement for staff of the central SNE, computers and data collection / data processing materials. The staff of the SNE will also require training in the interpretation of assessment data and the design of compensatory learning programs. Eventually, by 1998, the SIMECAL will have a wider scope, possibly at the level of a census, and the results will be incorporated into the national education management information system (items B.5 and D of the Cost Table, to be financed by IDB, other donors and local funds).

k. Incremental salaries (A.8)

- 2.54 In order to engage the teachers' interest in the reform and initiate the revised salary structure for teachers, the new "Estatuto Docente" provides for salary increases as a one-time increase during the Reform's first phase, for which the SNE is seeking support from the IDB to the value of US\$20 million over the duration of the Program (item A.8 of the Cost Table). The incremental funding will facilitate the introduction of a staff appraisal system and provide opportunities for teachers to increase earnings by engaging in the preparation of teaching materials, undertaking additional responsibilities, pursuing additional qualifications and training and working in difficult conditions. Disbursements to finance this component would be authorized on an annual basis, subsequent to reviewing the Government's budgetary allocations.
- 2.55 This component should not be construed as a permanent recurrent cost of the Reform, but rather, as a one-time compensatory adjustment to teachers' salaries in line with the upgrading and improvement of the teaching profession, in order to finance a short-term budgetary financing gap of the Government, which is to be phased out over the disbursement period of the IDB loan.

l. Program support and monitoring (C.1 - C.3, and D)

- 2.56 Additional technical capacity, equivalent to 42 person months, will be supplied to SNE during Program execution. First, a Technical Services Division will be established in the new SNE, with responsibility for all technical aspects of the reform and for coordinating implementation. Second, a new Management Information Technical Division will assume responsibility for coordinating the development, application and user support for the management information system. These two divisions will become part of the permanent structure of the SNE. Third, a special Monitoring and Support Unit, staffed by consultants and support personnel under temporary contracts, will be established.

Finally, a special unit for public communications will be established to mount a program of public information and consensus building at national, regional, and community levels. This campaign began in 1993. The Program will finance the special units for Monitoring and Support (items C.1 and D, including IDB, other donors and local) and for Public Communications (item C.3, other donors and local). The Program would also finance temporary technical personnel under the new Technical Services and Management Information Division (items C.2 and C.3, other donors and local).

Cost Table for the Education Reform Program (US\$ Thousands)

CATEGORIES	IDB	OTHERS	LOCAL	TOTAL	%
A. SYSTEM TRANSFORMATION	26660	9700	14976	51336	25.14%
A.1 Institutional Reorganization		4999	7299	12298	
A.2 Office Upgrading	5483	1960	2814	10257	
A.3 Training for non teaching personnel		1059	164	1222	
A.4 Education Information System	1033	672	1218	2923	
A.5 Administrative System		205	29	234	
A.6 Improving Management Teaching Force		712		712	
A.7 Community Participation Support	144	94	3452	3690	
A.8 Salary Increases	20000			20000	
B. PEDAGOGICAL QUALITY IMPROVEMENT	41492	54185	26185	121862	59.66%
B.1 Curriculum Development	10645	11849	4334	26828	
B.2 School Equipment & Materials	23644	16926	15877	56450	
B.3 Teacher Formation & Training	2574	16807	2532	21913	
B.4 Educational Research & Pilot Programs		3683	756	4439	
B.5 Educational Assessment Program	1955		289	2244	
B.6 Nucleos Computer Learning Programs	2674	4917	2397	9988	
C. PROJECT SUPPORT	1250	10398	3070	14718	7.20%
C.1 Support & Monitoring Unit	1250	4233	1712	7195	
C.2 Information Campaign		6165	1358	7523	
D. TECHNICAL ASSISTANCE	6485	4540	61	11086	5.43%
E. FINANCING COSTS	4113		1149	5262	2.57%
E.1 Interest	3313			3313	
E.2 Commitment Fees			1149	1149	
E.3 Inspection & Supervision	800			800	
F. TOTALS	80000	78823	45440	204264	100.00%
	39.16%	38.59%	22.25%		

III. PROGRAM EXECUTION

A. Implementation Strategy

- 3.1 Program execution will be flexible in that, based on the monitoring activities and annual follow-up meetings (see Annex III-2), the Government of Bolivia and the Bank will each year agree on the plan of action for the following year.
- 3.2 Actions thus agreed upon will be organized into annual operating plans (AOPs). The actions and targets established in those plans should be consistent with the program's global objectives; 6/ and they should also include the experience acquired as the project progresses, and take account of the development of Bolivia's fiscal situation and its potential impact on the availability of local counterpart funds.
- 3.3 The AOP for the first year was already reviewed and agreed on during the analysis mission. Bank approval of the AOPs for the following years will be a prerequisite for IDB financing of their implementation. In this manner, it is assured that the Bank's disbursement process be tied not only to the execution of expenditures, but also to the fulfillment of the qualitative objectives of the Education Reform.
- 3.4 With a view to providing the Country Office with adequate capacity for proper technical program monitoring, and enable it to evaluate, recommend and approve each year's operating plan, it is envisaged that the Bank will hire the services of an international expert consultant to work full-time in Bolivia on monitoring the Program. This consultant will also be responsible for ensuring proper technical coordination in the field, and with the representatives of the World Bank and other external agencies helping to finance Education Reform activities in Bolivia.

B. Program Execution

1. Responsibilities for execution

- 3.5 Responsibility for implementing and executing the reform will lie with the National Secretariat of Education (SNE), through the National Technical Pedagogical Services Unit [Unidad Nacional de Servicios Técnicos Pedagógicos - UNSTP] which will come under the Director General of Education. Also, project execution will be

6/ The three main instruments that will condition Program execution, which have been agreed on by the IDB, the World Bank, other donors and the Government of Bolivia, consist of the Conceptual Framework of the Program and its monitoring indicators (Annex I-1); the Sector Policy Letter (Annex II-1); and the Implementation Schedule (Annex III-3).

supervised by the Monitoring and Support Unit (MSU), which will be answerable to the National Secretary of Education. 7/ The financial resources - including those from the IDB loan - will be allocated on an annual basis through the Law on the General Budget of the Nation. The Government will open and maintain an account in the Central Bank of Bolivia, into which it will deposit the external funds.

- 3.6 A description of the Bolivian education system, including the legal framework and organization of the SNE contained in Annex III-1, makes for better appreciation of the SNE structure and operating capacity.
- 3.7 The UNSTP's functions will be to: (a) plan, organize and execute the program activities; (b) prepare, arrange and execute the budget, in accordance with the Accounts Plan approved by the Bank; (d) arrange for the resources of the external financing to be used for procurement of goods and services in accordance with the loan contract; (e) join in the process of organizing the departmental, district and subdistrict offices and school boards and nuclear-schools [núcleos]; and (f) keep up proper coordination with the government agencies, particularly the National Secretariat of Grassroots Participation [Secretaría Nacional de Participación Popular - SNPP] and the Social Investment Fund (FIS), with the municipalities and with the people's organizations helping to execute the Program. In this regard, a cooperation agreement between the SNE and the SNPP, spelling out their different responsibilities with respect to grassroots participation in the Education Reform process, will be signed as a condition precedent to the first disbursement. 8/
- 3.8 The UNSTP will be headed by a Director and organized into sub-units or work areas as follows: (a) research; (b) planning; (c) evaluation; (d) curriculum development; (e) training, upgrading and pedagogical advisory services; (f) institutional development; and (g) information systems. The UNSTP staff will comprise 74 specialists and seven area coordinators. The Director, coordinators and experts will be hired under normal civil service regulations. During the Program's first two years, UNSTP personnel will be hired with resources of the World Bank financing, and will be financed from the third year (1997) from the SNE's regular budget. As a condition precedent to first disbursement, the Borrower, through the Executing Agency, should present evidence that the UNSTP has been formally created, that its members have been appointed, and that its functional organization has been defined. The UNSTP Manual of Procedure should also be presented to the Bank as a condition precedent to the first disbursement. 9/

7/ See Loan Contract, Introduction, Point 3.

8/ See Loan Contract, Clause 3.02 (a).

9/ See Loan Contract, Clause 3.02 (c).

- 3.9 There are plans to seek the active participation of the SNE departmental and district offices, which will employ specially trained staff to execute the components in each region, district and town. These offices will fully participate in the Program once their organization, information systems, and personnel training have been completed (March 1998), keeping pace with the organization foreseen for creating the new nuclear-schools.

2. Monitoring and Supervision

- 3.10 The Monitoring and Support Unit [Unidad de Apoyo y Seguimiento - UNAS], coming under the National Secretariat of Education, has been set up to monitor and oversee program execution, and will be financed with World Bank and IDB resources. UNAS will keep the National Secretariat of Education informed of the Program's progress, and its main functions will be to: (a) supervise and monitor the education reform process, determining what adjustments and changes are called for during execution; (b) coordinate and conduct program evaluations; and (c) provide technical assistance to the UNSTP for identifying, selecting and hiring international and local consultants. UNAS will also be responsible for administering the external funding resources, disbursement requests, and accounting of expenditures incurred with the loan proceeds, preparation of the quarterly progress reports, and tenders for procurement of goods and services financed with the IDB loan. For this reason, UNAS will be the unit responsible for compliance with the award and bidding rules and procedures as agreed upon with the Bank, and will be responsible for seeing to it that the resources of the external financing are duly and properly used in the procurement of program goods and services, as established in the loan contract. UNAS would coordinate the annual follow-up meetings and the mid-term evaluation of the program, using the mechanism described in Annex III-2, which has been approved by the Bank.
- 3.11 UNAS will be headed by an Executive Director and organized into a technical area responsible for monitoring the educational and institutional aspects of the reform, and an administrative/financial area to take care of the external financing and calls for tenders. The final UNAS payroll will consist of a director, two area coordinators, 17 experts, and six administrative staff. Also, the nonreimbursable technical-cooperation funding that will be provided by the Bank will include resources for hiring short-term international consultants to supervise the design, programming of activities, and execution of the various program components, and to conduct, as far as possible, special studies on the impact of the reform process. The technical-cooperation funding would also include resources for hiring three local consultants for two years, to assist UNAS with the administration, disbursements, and acquisitions to be made with the proceeds of the loan. The UNAS Manual of Procedure should be

presented to the Bank as a condition precedent to first disbursement. 10/

3. Execution Process

- 3.12 Execution will call for a systemic approach in which the various components come together and complement one another at a precise time and in precise places. Grassroots participation and that of local authorities should be sought to maintain a system of monitoring "in real time", that would allow adjustments to be made as the Program proceeds. Lastly, due coordination among the multilateral agencies should be maintained in order to organize and guarantee the financing.
- 3.13 The Reform will begin with the application of the new curriculum in 1995, and will reach 25 percent of first-grade pupils in Bolivia's primary schools. The idea is for geographical coverage to maintain a constant growth rate so that by 1998 the new curriculum would be fully entrenched in all Bolivian primary schools. The schedule for implementing the various program components will be adapted to the pace of geographical coverage and to the staggered and progressive organization of the nuclear-schools, 1,800 of which should be fully structured by 1998.
- 3.14 The sequence of activities will start with preparation of the curriculum for each year and each cycle, and will proceed with preparation, selection, printing and distribution of the appropriate teaching materials. Simultaneously with the setting up and organization of the nuclear-schools and teacher training, the schools will be given libraries, and "teaching resource centers" will be built in the system's nuclear-schools to serve as a teaching-assistance mechanism.
- 3.15 Specialists hired for each of the subject areas have begun to prepare Castilian and bilingual teaching modules. They will be published by private publishing houses, and start to be supplied during the first year of the program, with first-grade modules delivered in the first 300 nuclear-schools organized.
- 3.16 Teacher training and upgrading will be the responsibility of each educational advisor in the system's nuclear-schools, and will require training for an initial group from the corps of "pedagogical advisors", to serve as "facilitators" in the training process. Those training courses will then be repeated until a total of 900 advisors have been trained. The training methodology has been used in an initial training course for pedagogical advisors, and the first 50 facilitators will be trained with KfW resources before the start-up of program execution.

10/ See Loan Contract, Clause 3.02 (c).

- 3.17 A group of SNE specialists has begun to prepare the new teacher-training syllabuses, the contents of which will be progressively developed until the first five years of a teacher's career are covered. Tertiary-level syllabuses for specialists in different subject areas will also be prepared. The current teachers' colleges ("normal" schools) should have also formulated their respective rationalization plans and reorientation proposals, including their needs in new equipment, by the end of the first quarter of 1995.
- 3.18 Installation of the central information systems has begun and the SNE is expected to be fully equipped by the end of 1995. The departmental and district offices will be computerized in 1996 and 1997. Procurement will be by international public bidding, and contracts with suppliers should provide for training the staff that would be operating the equipment.
- 3.19 SIMECAL will have an initial design and preparation stage ending in 1995. A start will be made in 1996 on developing performance tests in schools not covered by the reform, to establish a benchmark for later comparison. The first performance tests will be conducted in schools covered by the reform in the 1997 school year.
- 3.20 As regards Grassroots Participation, there should be school boards in the schools in which the new curriculum is being launched, in order to expedite their adjustment to the target community's basic needs as identified and channeled into the relationship between teachers, principals, and grassroots organizations. At the same time, training activities will be developed for school principals and members of the school and nuclear-school boards. Information for the Basic Educational Map [Mapa Educativo Básico - MEB] is currently being processed on the basis of culture, language and accessibility, so as to arrange and plan the process of promoting and organizing these boards. This process will be supported by the SNPP. The public information and communication campaign will be coordinated and directed by a special SNE unit, whose chief will be directly accountable to the National Secretary of Education.

C. Coordination with the FIS

- 3.21 In many schools - with priority going to those in rural and marginal urban areas - there is a need for investments in overhauling, refurbishing and repairs, which must be made in order to guarantee the use and protection of teaching materials and for instruction to be given, as provided for in the new curriculum, and the SNE will be formulating a National Schools Rehabilitation and Construction Plan to that end. The basic information that would allow these needs to be identified has been collected in the MEB and is now being processed at the SNE. These investments in physical works will be financed through the municipalities and the FIS, and will allow a high percentage of the existing schools infrastructure to be rehabilitated and overhauled. Investments which, for reasons of social equity, are channeled through the FIS,

will require prior approval SNE approval, which will consider the proposal and request from the pertinent board or the municipality, for perusal, ratification and dispatch. Owing to the need to arrange the investments with criteria of social equity, provide adequate monitoring, and coordinate the activity of the different government offices, the SNE and the FIS will sign a cooperation agreement to be presented to the Bank as a condition precedent to first disbursement. 11/

D. Execution Schedule

- 3.22 The SNE will execute the Program in accordance with the plans and timetables agreed upon with the Bank, with a seven-year execution period, and an eight-year term for disbursement. The executing agency has presented, and the Bank approved, an execution schedule which appears in Annex III-3, with dates on which execution of the main benchmark activities of the reform program be completed.
- 3.23 The plan of execution for each component has been prepared by the Government, reviewed by the Bank during analysis of this operation, and contains the critical path that the reform will follow for each of its activities. This plan will be adjusted at annual follow-up meetings to be held with the participation of the Bank, other financing agencies, and donor countries. Responsibility for implementing each component has been assigned to each of the internal areas of the UNSTP and other SNE units collaborating on the program, in accordance with their new internal organization.

E. Monitoring and Supervision Mechanisms

- 3.24 The purpose of the monitoring and supervision provided for the Education Reform Program, and included in Annex III-2, is to generate information on the performance of the program during its execution. The information thus generated will help the executing agency and the Bank to follow the progress and identify any problems that may arise during the implementation process and decide on the advisability of introducing adjustments as the program proceeds, in order to expedite fulfillment of its objectives,
- 3.25 The World Bank and the other donor participants will set up a Monitoring and Supervision Unit at the World Bank's Representative Office in La Paz, to oversee their loans on a permanent basis. To this end, the World Bank will hire three high-level experts to execute all aspects of the loans, in coordination with the SNE and with the monitoring and supervision expert to be hired by the IDB.

11/ See Loan Contract, Clause 3.02 (b).

F. Procurement of Goods and Services

- 3.26 The SNE will be responsible for issuing the calls for bids for purchases under the Program, based on the procedures of the Bank and the Government of Bolivia. The UNSTP will be responsible for programming and preparing the bidding documents, and UNAS for organizing the bidding and coordinating the award and contract processes. Teaching modules, equipment, teaching materials, and furniture for the schools will be procured by means of annual calls for international bidding in the sequence in which the nuclear-schools are structured, and local and international distribution firms will be hired to distribute them, through the process of international bidding. To guarantee supply, distribution centers will be set up in each District, and deliveries will be controlled by Secretariat personnel and by the school and nuclear-school boards.
- 3.27 The bids have been programmed in procurement "packages" which, for financing purposes have been shared out between the Banks in order to avoid overlapping, duplication and the use of different bidding guidelines in a single package or bidding operation. In this regard, agreement has been reached on an exhaustive and detailed list of goods to be procured with IDB financing, and it may be consulted in the Bank's files. The following table summarizes the amounts to be committed annually in bidding operations with IDB financing:

Year	Amounts(US\$ thousands)	Goods to be procured
1995	9408.7	Departmental and district office equipment - Printing of learning modules - Pedagogical resource centers - School equipment - Printing of slides - Equipment teacher-training institutes - SIMECAL
1996	15731.3	Departmental and district office equipment - Printing of learning modules - Library materials - Pedagogical resource centers - School equipment - Printing of slides - Teachers' guides - SIMECAL
1997	11461.4	Equipment district offices - Printing of learning modules - Pedagogical resource centers - Equipment for schools - Printing of slides - Equipment secondary level - SIMECAL
1998	4051.2	Equipment district offices - Printing of learning modules - SIMECAL
1999	2682.4	Printing of learning modules - SIMECAL
2000	3257.2	Printing of learning modules - SIMECAL
TOTAL	46592.3	

- 3.28 The SNE would undertake to ensure adequate maintenance of the equipment included in the Program, in accordance with generally accepted technical standards, and an annual maintenance report would accordingly be presented to the Bank within five years of the

last disbursement, and during the first quarter of each calendar year. 12/

- 3.29 With respect to technical assistance to be provided under the Program, its total amount will reach over US\$12 million and include approximately 150 activities/consultancies covering 18 different areas. The technical assistance will be financed through the Bank's loan and non-reimbursable technical cooperation, as well as by other donors.
- 3.30 Given the extensive volume of consulting services required by the Program, and based on the institutional capacity of UNAS, which will be further reinforced in its procurement capability through the Program with the IDB's and World Bank's technical cooperation resources, the UNAS will be delegated the responsibility for the process of selecting and contracting consulting services for contracts of up to US\$100,000, without prior consultation with the Bank. The Bank will later be responsible for verifying this process on an ex-post, sample basis. In cases of contracting which exceed US\$100,000, the Bank's regular procedures for contracting will apply.

G. Cost and Financing

- 3.31 The total cost of the Education Reform is estimated at up to the equivalent of US\$204.2 million, of which up to the equivalent of US\$80 million would consist of IDB financing, representing over 39 percent of the cost of the Program. Up to the equivalent of US\$40 million would be provided by the World Bank (IDA), and an additional US\$38.8 million equivalent would be provided by the Governments of Germany (KfW)(US\$8.5 million); the Netherlands (US\$7.5 million); Sweden (SIDA)(US\$14 million) and other sources. 13/ The local counterpart would reach US\$45.4 million.
- 3.32 The allocation of these donor contributions to the specific Program Components is summarized in the following table:

Program Components (US\$ Millions)

CATEGORIES	IDB	OTHERS	LOCAL	TOTAL AMOUNT
System Transformation	26.660	9.700	14.976	51.336

12/ See Loan Contract, Clause 4.03.

13/ "Other" indicates potential additional contributions from the bilateral participants indicated or participation of additional donors/lenders.

Pedagogical Quality Improvements	41.492	54.185	26.185	121.862
Technical Assistance	6.485	4.540	61	11.086
Project Support	1.250	10.398	3.070	14.718
Financing Costs	4.113	0	1.149	5.262
TOTAL	80.000	78.823	45.440	204.264

H. Advance of Funds

- 3.34 Once the Education Reform Program has been declared eligible for disbursement, an advance of funds would be established for up to 20 percent of the total amount of the financing. The advance would be replenished once the SNE had justified its utilization. 14/

I. Inspection and Supervision

- 3.36 The SNE would be responsible for the supervision of the Program. The Bank would carry out its inspection and supervision of the Program through its Country Office in Bolivia, with the assistance of a high level Expert in Monitoring and Supervision who would be contracted to assist the Country Office in consultation with the Project Team at Headquarters, to provide the day-to-day, on site technical supervision and monitoring of the Program. In this manner, Bank staff will be directly involved in monitoring the activities of the Consultant.
- 3.37 The Bank would determine the additional inspection requirements it would deem appropriate in order to assure the satisfactory execution of the Program. To that end, the Borrower and Executing Agency would cooperate to the extent necessary to assure that proper and adequate inspection and supervision of the Program take place. Of the total amount of the Bank loan, an amount of US\$800,000 would be earmarked as income to the Bank's account for general inspection and supervision. 15/

J. Auditing and Control

- 3.38 During the execution period of the loan, the Government would present to the Bank the financial statements for the loan. These statements should be submitted annually within 120 days of the close of the fiscal year and should be certified by a firm of

14/ See Loan Contract, Clause 3.03.

15/ See Loan Contract, Clause 2.03.

independent public accountants designated by the MDH/SNE and acceptable to the Bank. 16/

K. Technical Cooperation

- 3.39 In order to provide support in aspects of Program monitoring, supervision and execution, US\$1.38 million in non-reimbursable technical cooperation is included parallel to the IDB loan as a complement to donor grants.

L. Ex-Post Evaluation

- 3.40 Given the intensive, day-to-day monitoring and supervision that is being incorporated into the Program, the intensive reviews to be carried out annually by the Bolivian Government, the Bank and other donors, the mid-term evaluation, and in general, exhaustive requirements for supervision and evaluation that are proposed in the Program, the Government of Bolivia has indicated that it would prefer not to undertake a formal ex-post evaluation, the information and data for the Program will be collected over time in the event that, once having completed disbursements, an ex-post evaluation could be done if deemed appropriate at that time.

M. Environmental Classification

- 3.41 The Environmental Management Committee, at its meeting of January 11, 1993, classified this as a Category II operation.

N. Recognition of Costs

- 3.42 Under the Bank's policy for recognition of costs (GP 95-5 and 95-6), the Government of Bolivia requested during loan negotiation, the recognition of costs going back to one year prior to the approval of the operation by the Bank's Board of Directors, of up to US\$500,000 of consultancy services. This possibility had arisen during the Analysis Mission, at which time it was agreed in the Aide Memoire that such recognition of costs should be carried out according to procedures similar to the Bank's, a requirement which has been fulfilled. While during the process of loan approval in the Bank the Bolivian Government had not raised the need for recognition of costs, it was subsequently considered to be necessary, for which the request arose during negotiation.

16/ See Loan Contract, Clause 5.02.

IV. VIABILITY AND RISK

A. The Lessons Learned Prior to the Preparation of the Reform

- 4.1 The GOB systematically reviewed four major types of experience in preparing the alternative project formulations described. It studied problems and unintended outcomes, both beneficial and deleterious, and incorporated measures to harness the former while anticipating the latter. The process included formal evaluative studies, recruitment of international advisors, open seminars with international participation and wide ranging public discussion of proposals. In addition the GOB sought the active participation of international financing agencies in the consideration of the technical merits of the Program. The four sources of experience are Bolivia's own fertile history of reform, regional and international comparisons, the experiences of the non-state education sector in Bolivia most notably private NGO and church sector, and pilot programs mounted within the state sector of Bolivia. A detailed discussion of the lessons learned prior to the preparation of the Reform appears in Annex IV-1.

B. Technical Viability

- 4.2 By undertaking detailed analyses of the social and psychological mechanisms of educational disadvantage and school failure the GOB has been able to propose tried and tested solutions to many of its educational problems. Thus, despite the magnitude of the changes the Program is innovative rather than inventive. Its technical feasibility is increased by the adoption of educational measures which have proved effective either in Bolivia or elsewhere. Additionally, Bolivia has demonstrated its capacity to bring about far reaching education reform in the past and more recently profound economic reform. Popular dissatisfaction with the current state of public education and public discussion of the reform process has created considerable public support for what has been proposed. The passage of the Education Reform Law has created a fertile field in which to introduce pedagogical reform. Opposition is now confined to certain segments of the higher education sector and the leadership of the teaching unions, both of whom are increasingly isolated from the mainstream of educational thinking. In contrast a number of higher education institutions will be actively supporting the Reform as service providers.
- 4.3 The design and execution of the Reform further enhances its technical feasibility. Because the objectives and the initial work Program are well defined, monitoring and early evaluation will enable the project to adapt quickly to the lessons gained from experience. The Program objectives are hierarchical with the more general objectives such as improved equity and efficiency being achieved in the longer term and the mediating objectives such as increased participation and improved cognitive performance emerging

more quickly. Many of these intermediate objectives are objectively verifiable and verifying them will increase the predictability and thus the manageability of the more abstract longer term objectives. Furthermore, while most of the components support each other and the benefit from the execution of the entire range of interventions is greater than the sum of benefits from the individual parts, benefits will be felt from the outset as a result of the individual interventions to be financed. The Program's reliance on critical elements is thereby considerably reduced.

C. Socioeconomic Viability

- 4.4 The proposed Program is the first decisive step on the way to Education Reform in Bolivia. It is urgently needed because of the crisis situation of the existing pedagogical model, incapable as it is of resolving the serious problems of equity, quality and efficiency currently besetting it. There is also a broad consensus on the fact that the low level of schooling of vast sectors of the population is one of the main constraints on the country's socioeconomic development.
- 4.5 The Education Reform model proposed is the outcome of a prolonged effort at design and negotiation in which local and foreign experts participated, as did the main political forces in the country. In this connection, an attempt was made to ensure that both the educational and administrative alternatives selected should be the least costly.
- 4.6 The Reform model adopted is ambitious in its objectives, but it is flexible in the procedures proposed for its execution. As explained in Annex I-1, page 7, a fairly concrete and detailed schedule of annual targets and monitoring mechanisms has been prepared. Also, there are plans to hold annual monitoring meetings between the country and the funding agencies. In the context of these meetings, performance will be evaluated as the Program progresses and its targets and operating mechanisms adjusted if necessary. Such adjustments may be required since all the circumstances the Reform might encounter during its execution could not be foreseen at the design stage, and also because the information used to determine the targets was exceedingly fragmentary and prone to error.
- 4.7 Implementation of this reform constitutes an enormous effort for Bolivia. Whereas the enhanced internal efficiency it is expected to bring in its wake would cut the cost per graduate ^{17/}, the goals of improved quality and coverage will call for a considerable increase in education spending. Thus, the figures for primary and

^{17/} According to estimates based on graduation rates for the basic level (fifth grade), in 1994-1998 alone the cost per graduate would fall from US\$302 to US\$281, a 7.2 percent reduction.

secondary education suggest that during the 1994-1998 period the budget should soar from US\$183 million to US\$320 million, up 75 per cent. The political will and financial capacity to attain and maintain these levels of spending will be crucial to the success of the Reform.

D. Institutional Viability

- 4.8 The Program has a well-defined legal status. Both the Education Reform and Popular Participation Laws provide an unequivocal legal framework to carry out the responsibilities and obligations in the education sector and to support the Reform process.
- 4.9 The definition of new sectoral priorities and strategies for the entire education sector are established and included in the Draft Sector Policy Letter. Political consensus has been reached with the political parties, and the institutional and social sectors who had been involved in the operation of the educational system when the Reform Law was reviewed and approved by the Congress. Teachers have had and will continue to have a new and definite participation in the institutional framework and organizations to be created during the Reform process.
- 4.10 New institutional roles in the educational system will be implemented as part of the Reform process. This new institutional framework will change the trends of bureaucratic and centralized management which governed the system for the last 40 years. The administrative reforms, support at the community level and accountability of schools to Grass Root Organizations will be the key elements to obtain the Program objectives and its sustainability. During Program execution, several and different activities for institutional strengthening and promotion of community organizations will be financed in order to restructure the whole institutional system and to promote popular participation in schools management and administration. However, the interaction between different activities and components financed by the Program, the expansion of geographic coverage and the adequacy of coordination with community organizations and beneficiaries will be key elements to sustain political consensus and endorsement at the community level. Technical assistance to strengthen the decentralization process will be an essential component in order to sustain the strength and stability of support from local authorities and organizations at the community level.
- 4.11 Organization and operational aspects were satisfactory reviewed during the Bank appraisal: (a) definition of principal operating agencies; (b) execution responsibilities; (c) internal organization and definition of areas for adequate management in the SNE; (d) technical responsibilities and capacity in the operating units; (f) adequacy and stability of staff and job descriptions; (g) reporting lines of authority; (h) definition of internal functions in the executive and monitoring units; (i) adequacy in the definition of essential functions and coordination between functions,

responsibilities and job descriptions; and (j) adequacy of interagency coordination.

- 4.12 Support for decision making and management process, including operational planning and work programs, will be provided by the Program, including information systems, project monitoring and evaluation systems and provisions for consultants. An exhaustive procurement list to allocate the proceeding of various loans has been prepared in order to facilitate the execution of the Reform Program. Loan modalities and fund allocation will closely be coordinated with the World Bank and other donors to expedite the lending process and loan disbursements. Technical assistance will be financed by the Bank to support loan administration and management of procurement. However, the complexity of the execution will require a close coordination among the GOB and the different lenders, and the annual reviews will be an essential element for the follow-up of the different activities included in the Program.

E. Financial Viability

- 4.13 The Education Reform Program will require a substantial effort from the Bolivian Government to increase the resources devoted to the sector and to change the allocation of funds within the educational system. According to projections made by the GOB, incremental appropriations to the sector will be US\$969 million over the next seven years, representing a 31.8% increase in the whole education sector budget. The cost of qualitative improvements in basic and secondary education will reach US\$166.4 million, largely financed by international lenders and donors. Recurrent costs will be increased by US\$781 million over the same period as a consequence of salary adjustments and improvements in school conservation and infrastructure reconditioning. The Bolivian Government foresees a substantial growth of average teachers' salaries from the current US\$125/month, while infrastructure rehabilitation and maintenance will increase recurrent costs by almost US\$100 million over this period.
- 4.14 Projections for budget allocations were made by the Ministry of Human Development and confirmed by the Subsecretariat for the Budget of the Ministry of Finance and Economic Development. Commitments for budget appropriations to primary and secondary education over the next five years were included in the Sector Policy Letter and will be reviewed each year by the Government, the Bank and other donors. To justify the financing of incremental resources needed to sustain the increase in operational expenses, the Borrower's projections were made on the basis of an overall economic growth rate which is close to 7.5% per annum over the entire period. However, based on sensitivity analysis, it was confirmed that a growth rate of 5.0% per annum would be sufficient to sustain the increase.

- 4.15 Local governments will participate in the financing of recurrent costs and their contributions were estimated in approximately US\$13 million annually, representing the equivalent of 7% of public resources to be raised from internal sources. An additional 8% will be generated by the savings originated in the elimination of "ghost teachers".
- 4.16 The Bolivian Government foresees a freeze in tertiary education budget allocations, which are projected to remain at US\$77 million annually. Eventual increases in automatic transfers to the universities, due to the growth in tax revenues, will be compensated by a decrease in voluntary subsidies to maintain the overall level of transfers. The universities will improve their internal efficiency and accountability through the formulation of a specific program (Plan de Desarrollo Universitario) to be monitored by CONAMED. As a consequence of projected gains and improvements in the management of the tertiary education sector, the universities' share in the global sector budget will decrease from an actual 28% to 15% by the year 2000.
- 4.17 Bolivia is currently negotiating growth targets and financing of current account deficits for the next triennium with the IMF. The agreements reached in these negotiations will establish the global framework for the availability of financial resources for executing the education reform and, more particularly, for financing its recurrent expenses. The provisional assumptions used in the analysis would indicate that the program's financial impact could be absorbed through the generation of internal resources and reallocations in the education budget. These assumptions werereviewed during loan negotiation and should continue to be reviewed at each of the annual follow-up meetings. The AOPs prepared for each year should be consistent with the available counterpart resources.

F. The Impact of the Program on Women and Girls

1. Participation

- 4.18 The sector analysis showed that girls fare worse than boys in education. In rural grades 1-5, female enrollment is 89% that of males. In rural grades 6-8 it falls to 69%, and in secondary rural grades 9-12 it is 64%. On average girls complete only 60% of the numbers of years schooling that boys attain. By focussing on the problems of the quality of rural education the project will raise participation rates. It aims to equate participation rates for girls and boys. In addition to investments quality attention will focus on the status and needs of girls. In an analogous situation ^{18/} the economic attraction of educating daughters falls as their

^{2/} The Willingness to Pay for Education of Daughters in Contrast to Sons: Evidence from Rural Peru. Gertler. P. and Glewwe. P. World Bank Economic Review. Vol 6. No 1. January 1992.

age increases and the opportunity cost of female labor rises. Furthermore, the incremental earnings of girls with more education do not rise as much as those for boys. The balance of extra years of schooling is thus in favor of boys education. The project will try to reduce the cost side of the cost - benefit equation of girls' education for poor households.

- 4.19 To reduce indirect costs the main opportunity lies in ensuring that girls enrol on time and complete their education with the minimum of repetition. In this way, they will attain a higher educational standard before their contributions to the family income rise sufficiently to keep them from school. The project will test and evaluate the impact of targeted interventions such as small scholarships, child minding for younger siblings in the care of school age girls and feeding for rural girls, all of which attempt to tip the scale of benefits in favor of more schooling for girls. UNICEF is expected to participate. The benefits of educating all children will form part of a Public education program. By allowing communities to modify the school timetable, households will be better able to send their children to school without necessarily incurring the opportunity cost of labor foregone. Additionally, the SIMECAL will include sex as a variable in the measurement of pupil performance.
- 4.20 In revising the curriculum, the project will eliminate portrayals of females which subordinate them to males or denigrate them in other ways. It will remove from the curriculum sex role stereotypes. Achievements of and opportunities for women will be given emphasis. But it will have to balance the need to break down stereotypes with inculcation of respect for traditional females who fall into sex role stereotypes.

2. Working conditions for Women Teachers

- 4.21 The urban teaching force is 66% female and 78% of urban education administrative staff are women. Overall 57% of teachers are female. The project will result in an upgrading of their skills, a more objective system to evaluate their performance and a potential increase in their earnings.

G. Impact on Low Income Groups

- 4.22 Bolivian public schools cater to a mostly low-income population. The improved educational quality that results from the Program actions may well help to make public education more attractive to the middle-income sectors. The Program has been designed, however, with the following in mind among the principal beneficiaries: indigenous groups, marginal urban dwellers, and rural women, i.e. those at the bottom of the socioeconomic scale, who are also those with least schooling. It is a Program, therefore, directed at a predominantly low-income population.

Conceptual Framework of the Program - Actions and Expected Results

DIAGNOSIS	THE PROJECT	ACTIONS AND EXPECTED RESULTS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>THE PROBLEM: Failure of the current public education model. The poor quality of all levels of education, and the low level of school attendance among large sectors of the population constitute one of the main constraints on Bolivia's socioeconomic development.</p>	<p>AIM: (i) to ensure that the education system ceases to be a factor that limits development, and becomes an engine of long-term economic growth in the country;</p> <p>(ii) to promote Bolivia's sociopolitical stability, with respect for the cultural values of the different ethnic, community and population groups that comprise the country, and promoting more democratic intercultural relations.</p>	<p>* Acceleration of the rate of long-term economic growth (a minimum of 10 years). No specific assumptions have been made regarding the size of the impact.</p> <p>* Participation of civil society in management and administration of public education policy.</p>	<p>* National accounts.</p> <p>* No. of organized district and nuclear-school [núcleos escolares] boards participating in educational administration, verifying teacher attendance, and evaluating them at the end of each school year (information available at UNAS).</p>	<p>* It is possible to distinguish between the impact of education and that of other variables that also affect socioeconomic growth.</p> <p>* The country will continue to pursue a strategy of economic development that is compatible with the use of better prepared human resources.</p> <p>* Education can make for social change in Bolivia.</p>

DIAGNOSIS	THE PROJECT	ACTIONS AND EXPECTED RESULTS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>ITS MANIFESTATION: Marked dualism at all levels of social activity. Of the adult population, 20% have received no schooling, 55% is functionally illiterate, and the average school-attendance rate is 4 years. Only 9% of the rural population reaches the ninth grade. Of children between 6 and 14 years of age, the gross school coverage is 87% in the towns, and 60% in the countryside (42% of the Bolivian population are rural inhabitants). Enrollment among girls, especially in the rural areas, is much lower than for boys. On average, girls complete only 40% of the school years completed by boys. In primary education, the repetition rate is between 23% and 31%, and 57% drop out before the sixth grade in urban areas, and 89% in rural areas. The average university graduation rate is 4.4%.</p>	<p>PURPOSE - To establish a <u>new</u> education system which places emphasis on primary education⁽²⁾ and helps to:</p> <p>(i) increase the <u>external efficiency</u> of education in Bolivia;</p> <p>(ii) improve the <u>internal efficiency</u> of education in Bolivia;</p>	<p>(a) Adoption of a curriculum <u>consonant with the interests and needs</u> of students, and which <u>satisfies community and national needs</u>.</p> <p>(b) Enhanced economic performance (jobs, income, migration, etc.) and civic performance of graduates.</p> <p>(c) Adaptation of school calendars to the local situation (farm cycle, etc.).</p> <p>(a) Higher percentage of children in primary education with reading, and writing and arithmetic skills equal to, or higher than, those established for their age groups.</p> <p>(b) Reduction of school drop-out.</p> <p>(c) Reduction in the number of years spent completing a single grade.</p> <p>(d) Teacher rationalization.</p> <p>(e) Use of SIMECAL to identify failures and their causes among pupil performance broken down by sex, place of residence, type of school, mother-tongue, socioeconomic level.</p>	<p>* Formal curriculum evaluation, based on views of former pupils, parents, employers, community leaders, etc.⁽³⁾.</p> <p>* Evaluation to be conducted by UDAPSO (Social Policy Analysis Unit).</p> <p>* Routine observation of pedagogic advisors, and opinion of the school and nuclear-school boards⁽⁴⁾.</p> <p>* Tests to be performed by SIMECAL⁽¹⁾.</p> <p>* School statistics processed by the SIE (Education Evaluation System) and attendance records⁽¹⁾.</p> <p>* School statistics processed by the SIE⁽¹⁾.</p> <p>* Improved student-teacher ratio in urban areas⁽¹⁾.</p> <p>* SIMECAL measurements based on national samples (system in operation from 12/97).</p>	<p>* Education can lead to social change in Bolivia.</p> <p>* UDAPSO agrees and has the means to do this.</p> <p>* Education can lead to social change in Bolivia.</p> <p>* "Ghost" teachers eliminated through registration.</p> <p>* SIMECAL is applied to school with and <u>without</u> a new curriculum.</p>

DIAGNOSIS	THE PROJECT	ACTIONS AND EXPECTED RESULTS	MEANS OF VERIFICATION	ASSUMPTIONS
	(iii) contribute to the <u>equity</u> of the education system, facilitating access to, and continuation in, the system, at least up to the end of primary education, for those social groups with especially low enrollment rates: rural inhabitants, women, and indigenous communities.	<p>(a) Adoption of a core curriculum for the entire country and different branches that match the characteristics of the various kinds of pupil.</p> <p>(b) An intercultural and bilingual approach.</p> <p>(c) Expansion of coverage so as to reach all school age children (6 to 14 years). Collaboration with FIS will allow for reaching needs of the poorest communities.</p> <p>(d) Multigrade schools will provide better service to communities with a small school-age population</p> <p>(e) Adoption of measures to promote registration and attendance of unenrolled groups (mother-tongue teaching, care of younger siblings, scholarships, housing, etc.).</p>	<p>* Curriculum adopted, materials development and distributed, and teachers trained according to scheduled envisaged.⁽¹⁾</p> <p>* New curriculum implemented and diversified materials distributed.⁽¹⁾</p> <p>* Census information and statistics on registration and school attendance.⁽¹⁾</p> <p>* SIMECAL</p> <p>* Increase in coverage in rural areas⁽¹⁾.</p> <p>* Measurement of the impact of measures taken to promote school enrollment of specific groups through case studies financed under the Program⁽⁵⁾.</p>	<p>* In the long term, the GOB will develop an education program of positive and compensatory discrimination.</p> <p>* The FIS will adopt an investment strategy compatible with the Reform's objectives and needs.</p> <p>* 1992 census verified and corrected</p>

DIAGNOSIS	THE PROJECT	ACTIONS AND EXPECTED RESULTS	MEANS OF VERIFICATION	ASSUMPTIONS
GENERAL CAUSES: (i) inadequate public resources for education (2.7% of GDP between 1986 and 1991), and unequitable use of available resources (universities consume 28% of all educational resources); (ii) inefficient and centralized administration with little transparency; excessive union control over educational administration; and (iii) various teaching and curriculum problems (the teaching/learning process is not adapted to the country's cultural and linguistic reality).	COMPONENTS: The Bolivian Government is using the Program to launch an ambitious process of reform and the recapitularization of the education system. This process envisages: (i) Administrative Reform accompanied by a gradual increase in the educational budget, mainly through grass roots participation, and prioritization of spending towards primary education. (ii) Education Reform, promoting equity, includes extended coverage, and seeks to enhance quality throughout the education system.	* Implementation of Administrative Reform according to Annual Plan * Implementation of Education Reform according to Annual Plan	* Consolidated National Accounts. * Statistics processed by the SIE. * Annual Reports.	* Consolidated public spending on education will increase from 2.7% of GDP at present to 6% by the year 2000. * The proportion of spending earmarked for primary and secondary education will increase from the current 59% to 67% by the year 2000.
SPECIFIC CAUSES: I AREA Education: (i) Inadequacy of the curriculum (monolingualism, content inappropriate and inadequate to pupils' needs and available resources). (ii) Lack of teaching resources (books, educational materials, libraries, etc.)	(I) AREA Education: (a) Technical assistance for evaluating innovative experiences (bilingual, multigrade, etc. education); financing of pilot programs for educational research and identification of learning needs. (b) Development of a new intercultural curriculum and variations in regional curricula according to specific needs. (a) Provision of library space and books and educational material for use by pupils and by the community. (b) Creation of Educational Resource Centers for use by teachers.	* Analysis of teaching experiments conducted and assessment of the extent to which it can be replicated, as well as identification of teaching needs. * Community participation in curriculum design and administration and in school administration. * Education that responds to each student's initial knowledge and local experience within a core of properly identified common objectives. * Libraries, books and materials distributed and in use. * Greater diversity of available educational materials.	* Studies by experts hired through the Program ⁽⁶⁾ . * No. of School Boards created and operating ⁽¹⁾ . * Routine observation by education advisors and opinions of the Boards. ⁽⁴⁾ * No. of schools with libraries, books and education materials. ⁽¹⁾ * No. of established teaching resource centers. ⁽¹⁾ * Routine observation of educational advisors trained under the Program. ⁽¹⁾	

DIAGNOSIS	THE PROJECT	ACTIONS AND EXPECTED RESULTS	MEANS OF VERIFICATION	ASSUMPTIONS
(iii) Poorly trained and prepared teachers, directors and educational supervisors.	(c) Computer modules for final-grade pupils and primary schools.	* Holding of computer courses.	* Statistics processed by the SIE.	
	(a) Training of teachers, directors (district advisors) and supervisors.	* Improved pupil learning. * Trained teachers, directors and supervisors. * Improved teaching methods. * Improved school/ community "dialogue".	* Measurement by SIMECAL. * No. of trained teachers, directors and supervisors. ⁽¹⁾ * Routine observation of teaching supervisors, and opinions of directors y of members of school councils. ⁽⁴⁾	
	(b) Transformation of the Normal Schools.	* Improved teaching methods. * Improved teaching aid capacity.	* Routine observation of supervisors and directors. ⁽⁴⁾	
	(c) Production of educational guides and teaching aids.	* Greater support for teachers.		
(iv) There exists no system for measuring quality.	(d) Updated teaching materials for teachers, and provision of reference materials.	* Improvement in teaching capacity of teachers. * Broadening education horizon for students.	* Routine observation of supervisors, directors on availability and use of materials; and opinions of the community and of the teachers. ⁽⁴⁾	
	(*) Establishment of an Education Quality Measurement System (SIMECAL).	* Availability of information on quality of education.	* System in operation as of 1/97.	
(v) School infrastructure is insufficient and in poor condition.	(*) Needs assessment based on the census and the Education Map (MEB).	* Schools maintained, refurbished and built by Municipalities.	* School statistics processed by the SIE.	* 1992 census verified and updated. * FIS/SNE coordination. * Municipalities are capable of rehabilitation/ construction of schools.

DIAGNOSIS	THE PROJECT	ACTIONS AND EXPECTED RESULTS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>II - AREA Administrative:</p> <p>(i) Lack of reliable information on existing personnel; proliferation of "ghost" teachers; lack of motivation and absenteeism among teachers, many of whom carry out administrative tasks. Excessive administrative personnel at the Central level; low technical level of administrative staff.</p> <p>(ii) Administrative division between rural and urban education.</p> <p>(iii) Centralized and inadequate management of human, physical and financial resources.</p>	<p>II - AREA Administrative:</p> <p>(a) Registration and rationalization of administrative and teaching personnel.</p> <p>(b) Redefinition of the role of the "supervisor" which becomes "teaching advisor".</p> <p>(c) Institutional transformation of Normal Schools which now become known as teachers colleges [Institutos Normales Superiores, INS].</p> <p>(d) Development of a new system of incentives, hiring and management of teaching personnel.</p> <p>(*) Administrative unification of rural and urban subsystems.</p> <p>(a) Technical assistance for the hiring and training of administrative personnel.</p>	<p>* Registration of teachers and administrative personnel updated, and data integrated into the SIE.</p> <p>* Allocation of personnel according to new organization and needs of the system.</p> <p>* Enhancing its technical profile.</p> <p>* Hiring of staff by District Administrations according to vacancies, and entry through examination.</p> <p>* Better guidance and advice for teachers.</p> <p>* Rationalization of the Normal Schools and the possible attachment to the universities.</p> <p>* Better criteria for admission of would-be teachers.</p> <p>* Specialization between training and upgrading.</p> <p>* Salary increases.</p> <p>* Entry into effect of a new teaching career which incentives for good performance and sanctions for bad.</p> <p>* Participation of School Boards in teacher evaluations.</p> <p>* Equalization between rural and urban teachers; greater geographical mobility of teachers.</p> <p>* Incentives to teachers to remain in rural or remote areas.</p> <p>* Change in profile of qualifications for SNE technical and administrative personnel, of the decentralized units, to match Civil Service procedures.</p>	<p>* SIE statistics.</p> <p>* By 12/96 teachers ratified and hired.</p> <p>* Reduction in Central and Departmental administrative staff according to agreed levels and schedule.⁽⁷⁾</p> <p>* Reports from supervisors indicating numbers of visits carried out.</p> <p>* Survey of teachers on the performance of supervisors.⁽⁸⁾</p> <p>* No. of INSs in operation.⁽⁹⁾</p> <p>* Entrance to INS by examination.⁽⁹⁾</p> <p>* Educational statistics processed by the SIE.</p> <p>* Statistics of the SIE.</p> <p>* New "teaching career" approved by 12/31/94.</p> <p>* Reports of the Boards.</p> <p>* SIE statistics.</p> <p>* New "teaching career"</p> <p>* No. of personnel at Central, Departamental, and District levels hired and trained according to new criteria.⁽¹⁾</p>	<p>* Decree reorganizing the SNE approved by 12/94.</p> <p>* The Boards draft Reports.</p> <p>* Decree reorganizing the SNE approved by 12/94.</p>

DIAGNOSIS	THE PROJECT	ACTIONS AND EXPECTED RESULTS	MEANS OF VERIFICATION	ASSUMPTIONS
	(b) Design and launching of a decentralized educational administration system, organized around "Nucleus" and Districts.	* Operational and technical/teaching decisions, including regarding hiring of teachers, taken at the local level. * Improvement in administrative efficiency.	* No. of organized Nucleus and Districts. ⁽¹⁾ * No. of prepared school budgets. ⁽¹⁾	* The Government will implement the Popular Participation Law according to a schedule compatible with the needs of the Education Reform.
	(c) Transfer of school buildings to the Municipalities.	* Improvement in the status of infrastructure and maintenance of school buildings. * National Plan for refurbishing and constructing schools, including timetable for investments. * Normalization of building standards for schools.	* Transfers completed by 3/96. * Plan ready by 12/95. * Normalization ready by 12/95.	* Transfer of funds to the Municipalities. * Plan prepared by the SNE. * Standards established by the SNE.
(iv) Lack of information for education planning.	(*) Establishment of an educational information system [Sistema de Información Educativo-SIE].	* System in place and operating.	* Installed and tested by 12/95.	
(v) Lack of community participation/control (i.e., "accountability") in the education system.	(*) Promotion and training of community organizations and consolidation of schools.	* Intervention of the community in decisions regarding education and control of the use of resources. * School nucleus established.	* No. of School Councils, Nucleus and Districts organized. ⁽¹⁾	
(vi) Poorly located and equipped offices for a decentralized administration.	(*) Refurbishing and equipping of offices.	* Refurbishing of offices at the Central, Departmental and District levels.	* Refurbishing and equipping of offices according to agreed schedule.	

NOTES:

(1) See table with monitoring indicators and specific goals.

(2) The GOB has undertaken to implement a plan for strengthening and expanding secondary education by June 30, 1997. Also, the recently approved Law of Education Reform establishes that "sufficient and compulsory" subsidies to the University will be determined on the bases of academic accreditation and the National University Development Plan.

(3) UNAS will conduct periodic sounding from a statistically representative sample of ex pupils, parents, employees and community leaders, to determine the new curriculum, appropriateness to student's interests and needs and whether it meets community and national needs.

(4) UNAS will conduct periodic sounding (at least once a year) from a statistically representative sample of advisors, directors, members of School and Nuclear-School Boards, etc., to gather information on the matter. Information that is obtained shall be included in the Annual Reports.

(5) The terms of reference for these studies shall be agreed upon during the mid-term assessment.

(6) Partially completed studies, financed with the PPF resources.

(7) Central administrative staff cut to 150 by December 31, 1994; Departmental Administrative Staff cut to 550 by December 31, 1995.

(8) UNAS will conduct periodic sounding (at least once a year) from a statistically representative sample of teachers to determine the view on the results of the reform, the support they receive from educational advisors, directors, and Community Boards. Information that is obtained must be included in the Annual Reports.

(9) SNE internal information.

MONITORING OF THE PROGRAM: INDICATORS AND GOALS ↓

	1994	1995	1996	1997	1998	1999	2000	2001
Participation:								
- No. of School Boards operating [♦]	0	900	2.000	4.000	6.000	8.000	10.800	10.800
- Idem nuclear-schools [♦]	0	150	450	800	1.300	1.800	1.800	1.800
- Idem district [♦]	0	50	135	220	300	300	300	300
Quality:								
- Percentage of rural children with a reading and writing level appropriate to their age	*	*	*	*	*	*	*	*
- Idem rural girls	*	*	*	*	*	*	*	*
- Idem urban boys	*	*	*	*	*	*	*	*
- Idem urban girls	*	*	*	*	*	*	*	*
- Percentage of rural children with numeric level appropriate for their age	*	*	*	*	*	*	*	*
- Idem rural girls	*	*	*	*	*	*	*	*
- Idem urban boys	*	*	*	*	*	*	*	*
- Idem urban girls	*	*	*	*	*	*	*	*
- No. of schools with "Bolivian readers"	--	--	--	1.800	4.800	7.800	10.800	10.800
Internal Efficiency:								
- Percentage of a cohort of rural boys completing fifth grade ^{**}	28%	--	--	--	50%	--	--	--
- Idem for cohort of rural girls ^{**}	28%	--	--	--	50%	--	--	--
- Idem for cohort of urban boys ^{**}	72%	--	--	--	87%	--	--	--
- Idem for cohort of urban girls ^{**}	72%	--	--	--	87%	--	--	--
- Percentage of a rural cohort completing eighth grade ^{**}	17%	--	--	--	--	--	--	--
- Percentage of an urban cohort completing the eighth grade ^{**}	63%	--	--	--	--	--	--	--
- Average number of years required for a pupil for the basic cycle ^{**}	7	--	--	--	--	--	--	5
- Number of pupils per teacher in urban areas	18	19	20	21	22	23	23	24
- Cost (gross) approved for rural pupil completing fifth grade ^{***}	\$414	--	--	--	\$343	--	--	--
- Idem urban pupil ^{***}	\$161	--	--	--	\$197	--	--	--
Coverage:								
- Percentage rural children (from 6 to 14 years) enrolled in schools ^{**}	63%	64%	65%	68%	70%	72%	74%	76%
- Idem rural girls ^{**}	63%	64%	65%	68%	70%	72%	74%	76%
- Idem urban boys ^{**}	86%	87%	87%	88%	89%	90%	91%	92%
- Idem urban girls ^{**}	86%	87%	87%	88%	89%	90%	91%	92%
Curriculum Reform:								
- Percentage rural schools with new curriculum	--	16,6%	44,3%	72%	100%	100%	100%	100%
- Idem for urban schools	--	16,6%	44,3%	72%	100%	100%	100%	100%
- Percentage of rural schools with new educational materials distributed	--	16,6%	44,3%	72%	100%	100%	100%	100%
- Idem for urban schools	--	16,6%	44,3%	72%	100%	100%	100%	100%
- Percentage of rural schools with new educational materials distributed	--	16,6%	44,3%	72%	100%	100%	100%	100%
- Idem urban	--	16,6%	44,3%	72%	100%	100%	100%	100%
- No. of educational resource centers established [♦]	--	300	800	1.300	1.800	1.800	1.800	1.800
- No. of trained Advisors [♦]	150	400	650	900	900	900	900	900
- No. of trained school principals [♦]	--	1.800	3.800	7.800	10.800	10.800	10.800	10.800

	1994	1995	1996	1997	1998	1999	2000	2001
- No. of trained teachers [♦]	--	14.985	40.735	64.480	95.248	97.098	98.983	100.905
- No. of curricula prepared [♦]	--	900	2.000	4.000	6.000	8.000	10.800	10.800
Administrative Reform:								
- No. of trained administrators at the central level	150	--	--	--	--	--	--	--
- Idem for Departmental level	--	272	148	--	--	--	--	--
- Idem for district level	--	350	595	595	595	--	--	--
- No. of nuclear-schools organized [♦]	--	300	800	1.300	1.800	1.800	1.800	1.800
- No. of organized districts in operation [♦]	--	50	135	220	300	300	300	300
- No. of draft budgets prepared [♦]	--	900	2.000	4.000	6.000	8.000	10.800	10.800
Local Counterpart Budget (10⁶US\$):								
- Education Secretariat	--	305	330	358	392	430	458	483
- Transfers to Municipalities	--	140	140	144	150	150	150	170
- Maintenance	--	1.40	1.40	1.44	1.50	1.50	1.50	1.70

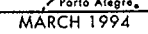
♦ The targets listed below are nearly provisional. In the Annual Reviews, as progress with the program provides fuller education statistics, the annual reform targets should be reviewed.

♦ Accumulated figures

* Can not be determined apriori, as there is no information with which to establish a baseline.

** No reliable figures are available on the current situation. The targets, broken down by gender should be established/reviewed once this information is available. In any event, the targets determined should be consistent with the request for equal opportunity for boys and girls

***Very approximate values, calculated on an average estimated cost for pupil for rural and urban areas, without differentiating between the basic, intermediate, and middle level. The figures given here should be calculated again after more detail and realistic figures for cost per pupil are available.



SECTOR POLICY LETTER

The Government of Bolivia requests a loan from the Inter-American Development Bank to execute a Program of Educational Reform, for which purpose this paper describes the actions that the Government of Bolivia will take to execute the Program. This letter, together with the agreements contained in the loan contract to be signed by the Government and the Bank, sets out the conditions for approval of the loan.

The legal framework for the Educational Reform is established by Law No. 1565 on Educational Reform, published on July 7, 1994. The specific provisions for its execution will be determined by statutory decree, a draft of which is enclosed with this letter. The National Government will enforce this Education Reform Law and its regulations, including the following specific actions:

1. Revamping of the education system, including decentralization of decision-making and redefinition of nuclear-schools [núcleos escolares] and districts; and ensuring that the education authorities, at the school, nuclear-school, and district levels, respect and encourage the respective community participation boards in the exercise of the rights and obligations conferred on them by the Law, in regard to participation, supervision and decision-making.
2. Establishment of a new framework for teacher administration that will provide, inter alia, for payment only to serving teachers registered with the National Secretariat of Education (SNE); criteria for compensation and promotion to recognize and encourage continuing training and good performance, as well as experience; separation of teachers' salaries from those of the administrative and support staff; guarantee of the right, but not obligation, to join or make financial contributions to trade unions; and establishment of criteria for awarding certificates to teachers who graduate from universities or higher-education institutions other than the teacher-training colleges [Normal Schools]. These measures will take effect on December 31, 1994.

The National Government will carry out a plan for rationalizing staff throughout the education system, including relocating officials currently occupying posts for which they are unqualified, and hiring new staff on the basis of technical selection criteria, and using objective and transparent procedures. To this end, arrangements will be made to hire SNE personnel under the Civil Service Program (PSC) and to supervise the application of its procedures at the decentralized levels of the education system. Up to December 31, 1996, the government will incorporate permanent full-time staff into the SNE under the PSC. Departmental, local and district staff will be hired in accordance with the scheduled included in the rationalization plan, taking account of available national resources.

The National Government will execute a plan to rationalize the financial administration of the education sector, including measures to increase the allocation of resources to pre-primary, primary and secondary education, under the budget allocated to the sector. In particular, the government will take such

steps as may be necessary to reach the targets set in the annex to this letter. Execution of the financial rationalization plan and attainment of the goals of education reform call for the total education budget to be in the region of 5.5 percent of GDP in the first three years, and reach 6 percent thereafter.

By June 30, 1997, the govern will design a plan for strengthening secondary education and expanding its coverage, and will implement it once the plan for improving the quality, efficiency and coverage of primary education has been completed.

By December 31, 1994, the government will design a program for establishing benchmarks for measuring the quality of the performance of the private and public universities, pursuant to Article 21 of the Law on Education Reform, and, will put that plan into action by December 31, 1995.

To ensure the conditions necessary for implementation of the education reform, the government will design and maintain in the posts of the National Secretary of Education; Undersecretary of National Pre-primary, Primary and Secondary Education; Director General of Education; and Director of Technical Services, persons with management background and experience, whose performance displays the strength of their managerial capacity and professional leadership.

The original of this letter was signed by the Minister of Finance and Economic Development, Fernando Cossío, and the Minister of Human Development, Enrique Ipiña Melgar, on October 7, 1994 and presented to the Bank during Loan Negotiation.

BOLIVIA

**EDUCATION REFORM PROGRAM
(HO-0133)**

ACTION PLAN FOR FINANCIAL RATIONALIZATION

I. Actions to be taken by the Government

1. Total earmarked for Education/PGN Central Government with Internal Resources

(a) To cover the normal requirements of the first years of the Reform:

1994	20.8%
1995	21.5%
1996	22.0%

(b) To sustain the Reform during the first phase:

1997	22.5%
1998	23.2%

March 31 of each year

2. To allocate funds from its internal resources (excluding the resources allocated to the Social Investment Fund), earmarked for primary and secondary education:

(a) No less than the following amounts, expressed in the equivalent of 1994 constant US\$. ¹

1994	US\$175 million
1995	US\$191 million
1996	US\$213 million
1997	US\$236 million
1998	US\$264 million

March 31 of each year

(b) As a proportion of the total Central Government Budget (with internal resources), no less than the following amounts:

1994	12.5%
1995	13.1%
1996	13.6%
1997	13.9%
1998	14.4%

March 31 of each year

(c) With regard to the Central Government Budget with internal resources earmarked for education, no less than the following amounts:

1994	60%
1995	61%
1996	62%
1997	62%
1998	62%

March 31 of each year

Source: Data prepared on the basis of the monetary program agreed upon by the Government of Bolivia and the International Monetary Fund and the National Secretariat of Finance.

¹ This includes amounts earmarked for education from transfers to municipalities by the Community Participation Law.

II. Actions to be taken by the National Secretariat of Education

1. To reduce the number of public employees in education to no more than the following:
 - (a) 150 at central level December 31, 1994
 - (b) 500 at departmental level December 31, 1995
2. (a) To complete the preliminary analysis of the recorded data on education, administration, support and personnel (technical/professional) in the education system.
December 31, 1994
(b) To complete the final analysis of recorded data.
June 30, 1994
3. To determine the number of administrative and teaching staff needed in schools, nuclear-schools and districts, excluding staff to be hired by the municipalities.
June 30, 1995
4. To define efficiency measures for the universities and design programs to link the budget process to the success of those measures.
July 31, 1995

NOTE:

Descriptions:

- PGN Central Government with Internal Resources: budget resources earmarked for Central Administration coming exclusively from resources from the National Treasury.
- Total earmarked for Education: PGN resources earmarked for education expenses financed with resources of the National Treasury.
- Resources earmarked for Primary and Secondary Education: that part of the resources earmarked for the education sector from TGN, designed to cover primary and secondary education expenses.

LOAN RELATED TECHNICAL COOPERATION
PLAN OF OPERATIONS
TECHNICAL ASSISTANCE SUPPORT FOR THE EDUCATION REFORM PROGRAM
BOLIVIA
(94-06-42-3)

I. THE PROGRAM

A. Introduction

- 1.1 As indicated in the Project Report for the proposed Education Reform Program, the nature of the Reform and the concerns regarding the execution of the financing of the respective donors, have led to the adoption of a mechanism which emphasizes extensive monitoring and supervision during the execution stage. To that end, the proposed non-reimbursable technical cooperation is intended to complement additional technical cooperation to be provided to the Reform by the respective donors, in order to assure that appropriate technical support and inter-agency/agency-government coordination be present during the execution of the Program.

B. Objective

- 1.2 In order to provide necessary support to the IDB loan and to enhance coordination among co-participants, parallel non-reimbursable technical cooperation is recommended to finance: (a) the contracting during the seven-year execution period of the loan, of a senior, high-level international specialist in education, with direct experience in national education reform, to assist the Government of Bolivia, Project Team and the Country Office in Bolivia in the day-to-day monitoring and supervision of the IDB loan as it relates to the execution of the overall Reform; (b) various short-term, high-level consultants in different fields related to education, to carry-out brief consultancies or prepare various special studies related to the annual reviews of the Reform to be conducted by the IDB, World Bank and donors; and (c) three specialists in procurement and administration, in order to provide assistance to the Monitoring and Support Unit (Unidad de Apoyo y Seguimiento, UNAS) in processing IDB disbursements, procurement and administrative matters related to the execution of the Bank's loan.

C. Description

1. Senior Education Expert for Monitoring and Supervision

- 1.3 In order to assure adequate monitoring and supervision of the Reform and its financing, an implementation program has been developed by

the Government of Bolivia, IDB, World Bank and other donors, which includes monitorable targets (these appear in Annex I-1). The program has been designed as a process, to permit both development and implementation of several components during the execution period. Intensive supervision would be required, in light of the number and scope of consultations anticipated, among other areas. To meet these requirements economically and in a timely fashion, a supervision unit would be established within the La Paz Resident Mission of the World Bank, and which would receive funding from the Netherlands, Sweden and Switzerland, as well as IDA, which would report to IDA's managing division at headquarters; thus, IDA would continue to coordinate with all donors during supervision.

- 1.4 The IDB has been asked by the donor community to participate in this process and independently, considers it essential to be involved to assure the successful execution of the Bank's own financing. It is also essential that these activities be coordinated with the Reform activities to be carried out by UNAS. For that reason, it is proposed that a Senior Education Expert be contracted through the proposed technical cooperation to carry out the supervision and monitoring of the loan, in part as a counterpart of the IDA/donor supervision unit.
- 1.5 Detailed Terms of Reference for the Expert appear at the end of this Plan of Operations which reflect the World Bank's supervision arrangements. In addition, there are special characteristics to the proposed contracting which are summarized as follows: (a) resources are provided in the budget of this operation to contract an Expert for the entire seven year execution of the loan, although it is proposed that initially, a two-to-three year contract be signed with an option for renewal; (b) the Expert would be based in the offices of UNAS but would coordinate extremely closely with the Bank's Country Office in Bolivia and the Project Team, thus assuring close involvement by Bank staff in its own supervision activities; (c) the Country Office in Bolivia would be responsible for hiring the Expert.
- 1.6 Given the special nature of the proposed consultancy, extremely specialized skills and experience would be required. In the past, the Government of Bolivia had under contract as an advisor to the preparation of the Reform, a highly-specialized international consultant. As the Reform was implemented and former consultants to the ETARE began to be absorbed as permanent staff of the UST and UNAS, the consultant opted not to remain as a political appointee to the SNE and began to consider alternative employment options.
- 1.7 The Bank's need to contract a specialist of high caliber, preferably one who has acquired direct knowledge and experience with the Bolivian Education Reform, would be greatly rewarded by the possibility of being able to contract this particular consultant. For that reason, it is recommended that this individual be contracted directly by the Bank.

- 1.8 As mentioned earlier, coordination by the proposed Expert would involve various participants. It would take place with the Country Office and would also involve constant contact with the Project Team at headquarters. The Expert would continuously coordinate with the SNE, through the UNSTP and UNAS, as well as with his counterpart supervision unit in the World Bank's Resident Mission (which is coincidentally located in the same building as the IDB, thus facilitating coordination as one single supervision team). Budgetary resources for this component would include salary, international and local travel, and per diem for internal travel.

2. Short-Term Consultants for Annual Reviews

- 1.9 Resources are included in the budget to contract up to 42 expert/months of short-term consultants to assist in specialized requirements pertaining to the annual reviews. Over the seven year execution period of the loan, this would specifically provide six months of short-term consultancies for each annual review, which could be allocated as needed by the Project Team and the Expert on Monitoring and Supervision. These consultancies would provide advisory services or be utilized to prepare studies in specialized areas. Budgetary resources for this component would include salaries, international travel and per diem. It is also recommended that these consultants be selected and contracted directly by the Bank.

3. Procurement and Administration Specialists for UNAS

- 1.10 Resources are being included in the budget to contract three local procurement and administration specialists for up to two years each, to assist the UNAS in matters directly related to the administration, procurement and disbursements pertaining to the Bank's loan, if it is deemed necessary at the initiation of loan execution. Their counterpart would be the Sector Specialist in the Country Office. After up to four years of assistance, this functions would be permanently undertaken by UNAS. Up to US\$144,000 of the budget's resources would be assigned to this component.

D. Organization and Execution

- 1.11 The proposed technical cooperation would have a seven year execution period and an eight year disbursement period, respectively, to coincide with the loan periods. A revolving fund would be established for technical cooperation disbursements which would amount to 10 percent of the total cost of the operation.
- 1.12 As mentioned earlier, the Bank, through its Country Office in Bolivia would be responsible to carry out the direct contracting of the Expert in Monitoring and Supervision. Similarly, it would be responsible for carrying out the contracting of the short-term consultants, in consultation with the Expert in Monitoring and Supervision and with the Project Team, under Bank procedures.

- 1.13 In the performance of the Bank's day-to-day monitoring and supervision, due regard would be given to avoid duplication of the Government's own responsibility for project management and monitoring.

E. Budget

- 1.14 Up to the equivalent of US\$1.38 million of resources deriving from the net income of the Fund for Special Operations would be approved for the proposed non-reimbursable technical cooperation, as detailed in the following budget.

	<u>Amount (in US\$)</u>
1.1.1 <u>International Consultants</u>	
(a) Expert for Monitoring and Supervision	<u>882,000</u>
(84 mos. x US\$8,000/mo.)	672,000
(b) Short-Term Consultants	
(42 mos. x US\$5,000/mo.)	210,000
1.1.2 <u>National Consultants</u>	
(3 x 24 mos./ea. x US\$2,000/mo.)	<u>144,000</u>
1.9 <u>Travel and Per Diem</u>	
Travel	<u>37,000</u>
(20 Int'l. tickets x US\$1,500/ea.)	30,000
(20 Local tickets x US\$350/ea.)	7,000
Per Diem	<u>182,280</u>
(a) Expert for Monitoring and Supervision	
(30 days/yr. x 7 yrs. x US\$124/day)	26,040
(b) Short-Term Consultants	
(42 mos. x 30 days x US\$124/day)	156,240
Sub-total	1,245,280
98. Contingencies (approx. 10%)	<u>134,720</u>
TOTAL	<u><u>1,380,000</u></u>

II. RISKS

- 2.1 With the approval and execution of the proposed technical cooperation, resources to the Education Reform Program would be made available which would assure the adequate execution of the Bank's loan, as well as provide regular and high quality monitoring and supervision of the loan in coordination with the donor community, Bank headquarters and the SNE. In that regard, the technical cooperation would minimize the risk involved in the loan execution.

Similarly, the provision of assistance to the UNAS would assure adequate execution in those aspects related to the administration, procurement and disbursement of Bank resources.

TERMS OF REFERENCE AND PROPOSED SCHEDULE

EXPERT IN MONITORING AND SUPERVISION

- A. Responsibilities: the responsibilities of the Expert with respect to the Education Reform Program would be as follows:
1. Review monitoring reports furnished quarterly and periodically by the SNE and prepare periodic supervision reports for the Bank;
 2. Review all contents of procurement documentation and recommend approval or corrective action to the Country Office as required;
 3. Review proposals for project activities as they become available, and provide recommendation of approval for financing or other action, as required;
 4. Review annual audit reports furnished by the Administration Unit;
 5. Carry out, jointly with the Government and the Bank, by September 30 each year, reviews of progress made with respect to carrying out implementation plans and achieving monitoring indicators, and recommend adjustments as needed;
 6. Monitor compliance with respect to agreed policy actions;
 7. Carry out, jointly with the Government and the Bank, a mid-implementation review in 1997;
 8. Liaise with IDA, donors, NGOs and other interested parties in the field to promote effective communication, help resolve differences of view, and help coordinate dialogue with Government, in coordination with Bank staff both in the Country Office and at Headquarters.
- C. Reports: The Expert would prepare quarterly reports on progress in Program implementation, emphasizing issues of special concern, and actions taken during the quarter. The report following the annual implementation review would also summarize important modifications made to the implementation plan and budget for the following year and highlight progress with respect to the plan for financial rationalization.

DESCRIPTION AND ORGANIZATION OF THE EDUCATION SYSTEM

Legal Framework

The Education Reform shall be executed by the Ministry of Human Resources, through the National Secretariat of Education, which heads up the formal and nonformal education system. The SNE also sponsors the institutions of higher education, respecting the universities' autonomy and promoting scientific and technological research. The SNE is the institution responsible for regulating and defining national educational policy, and regulating and arranging technical-pedagogical services in the country, with due regard to the participation structures recently set in place through the Law of Grassroots Participation.

The bases for the SNE's internal organization and functioning, its structure and functions are set forth in the text of the Law of Education Reform, taking four structures into account: (a) Grassroots Participation; (b) curriculum organization; (c) curriculum and technical-pedagogical administration; and (d) resource management. The new curricular administration structure is organized on six levels; central, departmental, district, subdistrict, nuclear-school [núcleos escolares], and school, and each level will benefit from the appropriate support of the structure of technical-pedagogical services and resource management. The SNE will receive advisory services from the National Education Board for all matters concerning national education policy.

The SNE currently has nine departmental offices with educational support departments and departmental administration offices and 38 school districts, whose structure is somewhat at variance with demographic, sociocultural and educational criteria, and is a holdover from previous attempts at reform which were never completed. The rural areas are consolidated, but administrative service has not yet reached that level, nor have the schools that form part of the nuclear-schools ["núcleos"]. There are 9,500 schools dependent on the SNE, as well as an array of nonformal programs for adults, 27 teacher-training colleges, the National Technical Education Department (SENET), with 13 institutes throughout the country, and four decentralized institutions: the Bolivian Institute of Culture (IBC); the National Literacy and Popular Education Service (SENALEP); and the Educational Publishing House of the National Academy of Sciences. The SNE also sponsors some 500 private establishments located almost exclusively in rural areas, and some 800 establishments belonging to, or administered by, the Catholic church and a group of NGOs.

Organization of the SNE

In the new organization, the SNE will have three undersecretariats: (a) Higher Education, Science and Technology; (b) Pre-primary, Primary and Secondary Education; and (c) Alternative Education. The Directorate General of Pre-primary, Primary and Secondary Education will be the regulating and operating organ responsible for execution of education policies in all levels, cycles and mechanisms of the system.

The SNE will be structured by levels, functions and jurisdictions. The offices responsible for regulating and framing national policy, defining the organization

of the core curriculum, designing and monitoring operation of the information systems, and arranging the management of budgetary resources and monitoring their proper allocation, including the offices responsible for administering the resources used to pay teachers and administrative staff throughout the system, will be located at the central level. The areas and staff that will organize and administer the regional curriculum and those supervising the technical-pedagogical services will be located at the departmental and district levels. The nuclear-school director will be responsible for personnel administration in the nuclear-school, school materials and the condition of the infrastructure. The community will participate in the preparation of each school's plans and budgets and monitor its execution.

Given the gradual nature of the process of transfer of responsibilities, provision has been made for a new study to be conducted during program execution, for the final adjustment of the administrative and functional organization of the SNE, based on the new division of responsibilities. The final organization will ensue, once the spheres of competence have been finally decentralized from the system to the local governments, which is expected by 1997.

Decentralization

The recent reforms in decision-making, organization and operation of the education system has changed the trend to one of excessive operational and administrative centralization of the system. The purpose of the Reform is more than to attain better organization and more effective and efficient operation of the Secretariat for professionalization of administrative personnel. Another aim is to change the philosophy that informed educational administration, replacing a centralized, top-heavy system with one that opens the way to community participation and educational initiatives that originate in the schools.

The new organization distinguishes between responsibilities at the central level, and those at the localized deconcentrated levels in the regions, districts, nuclear-schools, and educational establishments. These new bases of educational organization are geared to: (a) strengthening the central level's regulatory and directing role, which will be charged with designing the core curriculum, planning, and evaluating the quality of the education process; (b) articulating an area of active responsibility in the schools and the nuclear-schools through the transfer of responsibilities connected with management of their own human, physical and financial resources, granting them new spheres of competence in the provision of educational services; (c) making the district an administrative body for support and information liaison between the school and the nuclear-school and with the technical services to be developed at the departmental and national levels; and (d) transferring to the departments responsibilities for planning, monitoring and evaluation of educational management at the regional, district and nuclear-school levels, and authorization for the functioning of private establishments. These changes, combined with a change in mentality and operation, will call for a new structure in which the administrative delegations in various areas would be endowed with the powers and resources to rapidly and effectively meet the demands of the schools and nuclear-schools.

Personnel

The organization of educational administration has been the product of a

"geological accretion" of measures and was increasingly influenced by the trade associations and unions over the last four decades. For these and other reasons, anachronisms have persisted, such as separation of rural and urban education, which was conceived in the beginning to benefit the former and ended up damaging the latter. The Reform will include the formulation of a new seniority listing of teachers and the separation of the teaching and administrative professions. Administrative staff in the system will be incorporated into a civil-service system approved for public administration and the posts will be open to competition in accordance with the regulations of that system.

The education reform process will establish a new administrative profession to enhance the technical competence of the SNE agents; a new organization to enable them to function more effectively and efficiently, and a new decentralized design that caters to the needs of and initiatives from the very foundations of the education system. The SNE now currently has 1,700 officials, of whom some 550 work at the central level, 850 in the departments, and approximately 350 in the regions and districts. Reorganization of the SNE will alter the picture of geographical assignments of staff, so long as only 150 officials remain at the central level, most of whom will perform professional and technical tasks.

Adult Education, Nonformal Education and Special Education

Adult education and nonformal education comprise the following programs in the towns: Accelerated Basic Learning (CEMA), the Bolivian Learning Institute (IBA) and the Integrated Centers; and in rural areas: Literacy and Accelerated Learning, Integrated Adult Education Centers, and Integrated Community Education Centers. Within this scheme, there is extensive participation on the part of NGOs which, for some years now, have been working in adult literacy and training, conducting programs especially geared to women. The impact of these activities is very low in comparison with the number of institutions, the budget involved, and the time that these programs have been in operation.

There is also special education designed to provide individualized, differentiated education for children and young people with learning difficulties or handicaps through special centers, school barns["granjas-escuelas"], vocational institutes, and family centers, all administratively dependent on ONAMFA.

Accreditation and Measurement of Educational Quality

Bolivia's new educational system will have a National Board for Accreditation and Measurement of Educational Quality (CONAMED) which will serve as an independent department under the Ministry of Human Development. CONAMED shall be responsible for measuring and accrediting the quality of the education on offer at all levels of the education system. CONAMED shall establish the regulations of accreditation in consultation with the SNE, the universities and the teacher-training colleges, based on evaluation that guarantees minimum standards of quality and efficiency in educational management. The accreditation process for all public and private learning establishments shall be completed within three years at the most of the date of promulgation of the Law of Education Reform. CONAMED will also certify the progress, quality and efficiency of fulfillment of the National University Development Plan.

Grassroots Participation

The structures for grassroots participation have had legal force in Bolivia since the approval of Law 1151, of April 1994, which recognizes the rural and urban GTOs as persons before the law, promotes and consolidates the grassroots participation process, establishes links among the indigenous, rural and urban communities in the country's juridical, political and economic life, and connects these organizations with public agencies, entrusting them with powers on initiative and oversight of services provided by the State.

Grassroots participation in the education sector will materialize through: (a) the School and Nuclear-School Boards which will be appointed and organized by the GTOs, taking account of community members and parents; (b) the Subdistrict and District Boards and the Supervision Committees of the Municipalities; (c) the Departmental Education Councils; (d) the Education Council of Native Communities, which shall be national and initially organized into four: Aymara, Quechua, Guaraní, and multiethnic Amazonian; (e) the National Education Council; and (f) the National Congress on Education, which will be convened at least every five years and will bring together all sectors of society to examine progress of the Reform, and the educational advances in the country.

There are as many Boards as educational establishments in the country, and they will help formulate the annual school plan and the curriculum, and their views will be taken into account when hiring teachers or school principals or keeping them on in their posts. The Subdistrict and District Boards will determine the form of organization, in keeping with the situation with each district, and will be composed of outstanding members of the community, representing each of the Boards organized in the schools.

The School and Nuclear-School Boards may propose change or ratification of educational authorities within their sphere of competence or territorial jurisdiction. The Supervision Committees set up in each municipality, will designate the members of the District Education Boards and their main responsibilities will focus on school upkeep and preservation and replacement needs in infrastructure, equipment and school personnel. The Departmental Councils, the National Council and the National Congress on Education shall have consultative status.

Participation of the Municipalities

The municipal governments in Bolivia will receive free of charge the property of all schools located in the appropriate section of the province, and must perform maintenance and repair. The Law of Education Reform extends municipal educational competence to the following areas: (a) to administer and monitor the equipment of the schools; (b) to provide the equipment, furniture and teaching material; (c) supervise the performance of the educational authorities, principals and teachers, and propose their confirmation or dismissal to the departmental educational authority; and (d) to cater to the supplementary-meal

programs, including school breakfasts. 1/

The municipalities' financial responsibilities in pre-primary, primary and secondary education will therefore cover: (a) construction, replacement and maintenance of school infrastructure, equipment, furniture and teaching materials for the schools; (b) salaries of school administrative staff and janitors; (c) the wages and salaries of local and district staff for infrastructure and goods.

The SNE will approve the construction of new schools, in the light of a National School Rehabilitation and Construction Plan, to be prepared with the participation of the grassroots territorial organizations, the District Boards, and the municipal Supervision Councils. The plans will be formulated in accordance with standards to be set by the SNE and should include needs in infrastructure maintenance and medium- and long-term expansion and replacement. In special circumstances, the most backward municipalities may, through the FIS, seek financial assistance from the government for implementing those plans

IDB Support

It should be pointed out that the National Secretariat for Grassroots Participation [Secretaría Nacional de Participación Popular - SNPP], originally created a unit within the Ministry of Human Development, was transferred to the Ministry of Sustainable Development and Environment (MDSMA) as a new Department of the Ministry on May 31, 1994, with the approval of Supreme Decree No. 23792. In order to endow the SNPP with appropriate institutional capacity, resources have been earmarked under the Program for Institutional Strengthening of the MDSMA (BO-0028), currently in the course of preparation in the Bank for an amount of US\$20 million, for presentation to the Board of Executive Directors during the last quarter of this year. Specifically, these resources would finance the hiring of two high-level experts for 36 months to provide advisory services on the municipalities and GTOs, and training in these matters for other MDSMA consultants and staff; other funds would be earmarked for social participation for the consultation program; and, lastly, cofinancing resources from the same loan would be used to finance the mapping of the administrative units and a geographical data system, which would determine the districts in which the smaller municipalities and the GTOs would be placed. Financial support for grassroots participation is essential for ensuring satisfactory implementation as an integral part of the Education Reform.

1/ The municipalities must use the resources from grassroots participation on building, maintenance and provision of educational and health services, sports facilities and feeder roads and micro-irrigation equipment. The Supervision Committees - organs created under the Law of Grassroots Participation - will see to it that no more than 10 percent of municipal resources are earmarked for the municipality's overheads.

MONITORING AND SUPERVISION OF THE PROGRAM

A. Monitoring and Supervision Mechanisms

In this annex the monitoring and supervision actions to be conducted under the Education Reform Program are discussed. The purpose of these actions is to generate information on the performance of the Program during its execution. Information thus generated will help the executing agency and the Bank discover what progress has been made, and the problems that may arise during the implementation process and, eventually, agree on the advisability of making adjustments as the program goes along, in order to expedite fulfillment of its objectives.

As part of the monitoring and follow-up actions, the executing agency shall, through its support and monitoring unit, generate annual reports to be submitted to the Bank before September 30 of each year. These reports will be analyzed at annual follow-up meetings between the executing agency and the Bank's Country Office. ^{1/} These meetings will be held during the fourth quarter of each year, and will serve to decide on adjustments to the program's operating mechanisms, and to agree on the plan of actions to be implemented during the following year.

The dates for presentation of the annual reports, or those of the follow-up meetings, may be changed if necessary to ensure proper coordination with the other donors.

After 24 months from the loan approval date, the Bank may make a mid-term evaluation of the Program. Based on the results of this evaluation, the Bank may recommend any adjustments to the program identified as necessary for facilitating attainment of the objectives of the education reform to be supported under the program.

It will be incumbent upon the executing agency to implement the recommendation emanating both from the annual follow-up meetings, and from the mid-term evaluation; nonfulfillment of them may constitute grounds for the Bank to discontinue its financing.

The annual reports will examine the status of execution of the Program and, as this is ascertained, its impact. Accordingly, these reports will include measurement variables that allow comparison of the results achieved as the program progresses with those expected at its inception. Annex I-1, "Conceptual Framework for the Program", contains a checklist of Program actions and expected results, annual goals, monitoring indicators, and the means to be used to verify fulfillment of targets and objectives.

The resources needed to defray the cost of the monitoring and control actions to be carried out will come from the ordinary budget of the Support and Monitoring

^{1/} The Bank will hire a person to perform technical follow-up of the program from the Country Office.

Unit. Also, the intention is for the Bank to provide nonreimbursable technical-cooperation funding of approximately US\$1 million, to be used to hire consulting services, and specialized monitoring and follow-up services for the program.

B. Annual Follow-Up Reports

The annual follow-up reports should address, although not exclusively, the following topics.

1. Overall status of Program execution

Execution of each of its components will be discussed, identifying differences between specific items. The reasons for any significant differences be noted between expected and actual progress will be explained.

2. Executing units

a. Technical services unit (Executing unit)

Study of the organization adopted (in the event that it is different to that originally planned), personnel, flow chart, procedures. Coordination with the Monitoring and Support Unit. Coordination with the FIS, municipalities, boards, grassroots participation. Evaluation of the main problems encountered. Recommendations of changes if necessary.

b. Monitoring and support unit (Support unit)

Study of the organization adopted (in the event that it is different to that originally planned), personnel, flow chart, procedures, internal monitoring and control of the program. Coordination with the Technical Services Unit. Coordination with the various funding bodies. Evaluation of the main problems encountered. Recommendations of changes if necessary.

C. Program instruments

1. Annual plans

Evaluation of the problems encountered in their preparation and implementation. Recommendations.

2. Agreements with the FIS and grassroots participation

Evaluation of the problems encountered in their application. Special attention will be paid to ascertain the municipalities' performance of school maintenance.

3. Monitoring and follow-up mechanisms: SIMECAL, SIE, polls, etc.

Problems encountered with their implementation. They will be evaluated as to the quality of the information obtained. Recommendations.

D. Financial administration of program resources

1. Budget formulation process

The degree of application of the original estimates contained in the project report will be evaluated. Particular attention will be paid to ensuring that the appropriate budget allocations proper execution of the Annual Operating Plans are made.

2. Accounting and audits

The results of the external audit will be included.

E. Program costs

1. Administration costs

Actual expenditure will be compared with the estimated on the project report.

2. Investment schedule

Original schedule and executed schedule. Evaluation of the use of resources by component. Projections on unutilized resources. Main factors that would affect unutilized resources. Recommendations.

F. Technical-educational aspects of the reform

Program performance will be evaluated on the basis of the "Actions and Expected Results" and "Means of Verification" contained in Annex I-1, "Conceptual Framework for the Program".

G. Administrative aspects of the reform

Program performance will be evaluated on the basis of the "Actions and Expected Results" and "Means of Verification" contained in Annex I-1, "Conceptual Framework for the Program".

**EDUCATION REFORM
IMPLEMENTATION SCHEDULE**

IDB	ACTIVITY	DATE	
39	Legal framework	31/12/95	2 Laws and 2 State Decrees
85	Registration of teachers and administrative personnel	31/3/95	
	To determine the number of teachers and administrative staff at district, nuclear-school and school level	31/8/95	
145	Reorganization of the SNE (central level)	30/12/95	Adaptation of rooms, equipment, staff
217	Plan for integration into the Civil Service; Central and Departmental levels	31/12/94	
242	Organization at Departmental level	31/12/95	
423	Initiation of application of the Reform	31/3/95	300 nuclear-schools incorporated
430	Establish District Education Boards	31/12/94	To be reviewed on the date plan in accordance with the schedule for organization of Grassroots Participation structures
	National information system	30/6/96	
481	Curriculum change	31/12/00	
536	Construction of core curriculum	30/11/94	First grade
	Construction of core curriculum	30/11/95	Second grade
	Construction of core curriculum	30/11/96	Third grade
	Construction of core curriculum	30/11/97	Fourth grade
	Construction of core curriculum	30/11/98	Fifth grade
	Construction of core curriculum	30/11/99	Sixth grade
	Construction of core curriculum	30/11/00	Seventh grade
	Construction of core curriculum	30/11/01	Eighth grade
	Distribution of modules, for first grade for 300 nuclear-schools	31/7/95	
	Dist.Mod.for first grade 800 nuclear-schools and Sec.grade 300 nuclear-schools	31/7/96	
	Third grade modules in 300 nuclear-schools	31/7/97	
	Second grade modules in 800 nuclear-schools	31/7/97	
	First grade modules in 1300 nuclear-schools	31/7/97	
	Fourth grade modules in 300 nuclear-schools	31/7/98	

	Third grade modules in 800 nuclear-schools	31/7/98	
	Second grade modules in 1300 nuclear-schools	31/7/98	
	First grade modules in 1800 nuclear-schools	31/7/98	
	Fifth grade modules in 300 nuclear-schools	31/7/99	
	Fourth grade modules in 800 nuclear-schools	31/7/99	
	Third grade modules in 1300 nuclear-schools	31/7/99	
	Second grade modules in 1800 nuclear-schools	31/7/99	
	First grade modules in replacement	31/7/99	By the Municipality
	Sixth grade modules in 300 nuclear-schools	31/7/00	
	Fifth grade modules in 800 nuclear-schools	31/7/00	
	Fourth grade modules in 1300 nuclear-schools	31/7/00	
	Third grade modules in 1800 nuclear-schools	31/7/00	
	Second grade modules in replacement	31/7/00	By the Municipality
	First grade modules in replacement	31/7/00	By the Municipality
663	School equipment and educational material for 300 nuclear-schools	31/7/95	Includes teaching material, consumable and audiovisual material
	School equipment and educational material for 500 nuclear-schools	31/7/96	Includes teaching material, consumable and audiovisual material
	School material and educational material for 500 nuclear-schools	31/7/97	Includes teaching material, consumable and audiovisual material
	School material and educational material for 500 nuclear-schools	31/7/98	Includes teaching material consumable and audiovisual material
716	Second component libraries for 300 nuclear-schools	30/4/97	For 300 nuclear-schools
	Second component libraries for 500 nuclear-schools	30/4/98	For 500 nuclear-schools
	Second component libraries for 500 nuclear-schools	30/4/99	For 500 nuclear-schools
	Second component libraries for 500 nuclear-schools	30/4/00	For 500 nuclear-schools
775	Materials equipment and consumable supplies	31/7/95	For 300 nuclear-schools
821	Equipping of rural secondary schools	31/8/98	
918	Training, Upgrading and Counseling		
	Institutional transformation of "normal schools"	30/6/95	
	Curriculum transformation (analytical program over two semesters per year up to ten semesters)		
996	Training of ISP trainers	30/11/98	The first teachers graduate in April/96
	Certification of teachers		They will be certificated at an approximate rate of 1,000 teachers as of 1997
1130	Teacher training	30/11/99	

	Organization of the educational counseling subsystem	31/6/95	
	First course 200 educational counselors, beginning Jan/95 to June/95	30/6/95	
	Second course for 300 educational counselors	31/12/95	
	Third course for 300 educational counselors	31/12/96	
	Fourth course for 300 educational counselors	31/12/97	
	Performance evaluation system (SIMECAL)		
	Completion of preparation stage	30/9/95	
	Test development, baseline	31/1/96	
	Test development, new curriculum	31/8/96	
	Application first stage	31/1/97	
	Annual tests will be made as of 1998		

PROPOSED RESOLUTION

BOLIVIA. EDUCATION REFORM PROGRAM

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts, as may be necessary with the Republic of Bolivia, as Borrower, for the purpose of granting the former a financing to cooperate in the execution of a project of educational reform. Such financing will be for an amount of up to US\$80.000.000, or its equivalent in other currencies except the currency of Bolivia, which are part of the Fund for Special Operations of the Bank, and it will be subject to the "Special Contractual Conditions" and the "Terms and Financial Conditions" of the Executive Summary of the Loan Proposal.

PROPOSED RESOLUTION

BOLIVIA. NON-REIMBURSABLE TECHNICAL COOPERATION IN SUPPORT OF THE EDUCATION
REFORM PROGRAM

The Board of Executive Directors

RESOLVES:

1. That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such agreements as may be necessary and to adopt such other measures as may be pertinent for the execution of the plan of operations referred to in Document AT- _____, with respect to a technical cooperation with the Republic of Bolivia, in support of the Education Reform Program.
2. That up to the equivalent of US\$1.380.000 is authorized for the purpose of this resolution, chargeable to the net income of the Fund for Special Operations.
3. That the above mentioned sum is to be provided on a non-reimbursable basis.