

EDUCATION SYSTEM IMPROVEMENT PROGRAM

(AR-0176)

EXECUTIVE SUMMARY

Borrower and guarantor:	The Government of the Argentine Nation	
Executing agency:	The Federal Ministry of Education (MEN) through the Subsecretariat of Basic Education (SSEB)	
Amount and source:	IDB (OC):	US\$600 million
	Local:	US\$600 million
	Total:	US\$1.2 billion
Financial terms and conditions:	Amortization period:	25 years
	Disbursement period:	5 years
	Grace period:	5 years
	Interest rate:	variable
	Inspection and supervision:	1%
	Credit fee:	0.75%
	Currency:	U.S. dollar, Single Currency Facility
Objectives:	<p>The objective is to support the provinces in improving the quality, equity and efficiency of the education system, contributing to a more pertinent supply and a reduction in social inequity through more years of schooling for young people from poor families, which will improve their employability. The program focuses on attaining the objectives of secondary school education reform,¹ which has not yet been fully implemented in most of the provinces, and on targeted support for students at greatest social and educational risk.</p>	

Specifically, the program is designed to: (i) increase the coverage of secondary education; (ii) reduce drop-out rates in grades 7 to 9 (cycle 3), particularly among students from low-income families; (iii) reduce repeater rates and over-age students; (iv) improve academic performance in language, mathematics, and social and natural sciences; and (v) boost the efficiency of spending on education. The indicators for measuring compliance with the objectives during the program are presented in the table listing targets (paragraph 2.2).

¹ See the description of the levels and cycles in the Argentine education system in paragraph 1.8, Graph I-2.

Description: To achieve these objectives, the program will finance actions to consolidate secondary school reform, intended to: (i) improve the quality of the education system (infrastructure, reorganization of teaching staff, school materials, teacher training, and the incorporation of information and communications technologies) (ii) improve equity (support for supply through school materials and projects to keep students in school and support for demand through bursaries to promote student retention); and (iii) boost management efficiency (systems of regulation and control for the Federal Ministry of Education, human resource management in the provinces and monitoring of teachers and students in schools). The subcomponents and lines of action described in the logical framework (Annex II-1) are summarized below.

- 1. Reform and expansion of secondary education (US\$840.3 million),** which includes three subcomponents.
 - a. Improvement in secondary school quality (US\$162.4 million).** This subcomponent will have three lines of action: (i) *Institutional and curricular reorganization of schools (US\$66.6 million)*. The objectives of this line of action are to make teaching time more effective and improve the academic performance of students. Financing will be provided for technical assistance, school support materials and the upgrading of infrastructure, to enable teachers' working hours to be reorganized so they can work for most of their time in the same school, which will allow them to teach fewer classes but for more hours. (ii) *Human resource development (US\$72.2 million)*. School-based training for teachers will be financed to support the new way of working under consolidated timetables, through in-person and distance education. (iii) *Establishment of education adaptation and innovation centers (US\$23.6 million)*. Financing will be provided for materials, equipment and coordinators to establish the centers, which are intended to provide teachers with multimedia teaching resources and information systems to support school-based training.
 - b. Support for equity (US\$402.4 million).** This subcomponent will have three lines of action. (i) *Bursaries (US\$300 million)*. Stage two of the national student bursary program will be financed. This stage takes account of the lessons learned in stage one and adjustments have been made in technical aspects and execution. Every year, 140,000 bursaries of US\$400 each, payable in two equal installments, will be granted to students in grades 7 to 9 (cycle 3) and the first year of the composite

(polymodal) cycle (grade 10) whose families live below the poverty line. The bursaries will be renewed for students who meet performance criteria, without the need for a new selection process. (ii) *School student retention projects (US\$50.5 million)*. Financing will be provided for a fund to which schools with students who receive bursaries can gain access to purchase materials and equipment and to contract services for educational activities that provide additional support to keep under-performing students in school. (iii) *Teaching resources and textbooks (US\$51.9 million)*. Textbooks and literary works will be distributed to schools and students who receive bursaries to reinforce specialized teaching for under-performing students.

- c. **Expansion of coverage and upgrading of school buildings (US\$275.5 million)**. This subcomponent includes the following lines of action: (i) construction of new schools (US\$159 million); (ii) major renovations (US\$47.8 million); (iii) minor renovations (US\$28.7 million); and (iv) school equipment (US\$40 million).

Funds will be provided for the construction and outfitting of new schools to serve the growing demand for secondary education. New works will be built to replace schools in poor condition that cannot be renovated because they are obsolete or suffer from structural defects. Schools that are overcrowded will be enlarged if they are located in areas where the population is growing. Schools that have become run down will be renovated and put back into good operating condition. The criteria for prioritizing these investments by geographic area will be: the socioeconomic level of the population to be served, estimated demand for secondary education and the structural safety of school buildings.

2. Incorporation of information and communications technologies into the education system (US\$256.1 million)

This component consists of the following five subcomponents: (a) basic training for teachers, principals and administrative staff (US\$8.6 million); (b) advanced school-based training (US\$10.3 million); (c) procurement and production of training and teaching materials (US\$2.2 million); (d) connectivity infrastructure (US\$72.6 million); and (e) provision of computer equipment (US\$162.4 million).

The purpose of this component is to adapt education to market demand through the incorporation of information technology into teaching practices. Two main types of activities will be

undertaken to achieve this objective. First, equipment, infrastructure and connectivity will be completed, with the necessary technical support, for all schools offering the different cycles of general basic and composite education and for teacher training institutes. Second, investments will be made in training in the use of management information systems in schools in the form of two pilot projects to provide training and management models, which will be extended under the program to all schools, depending on the results.

3. Strengthening education system management (US\$47 million)

The federal and provincial education ministries will be given tools and mechanisms to boost their efficiency in spending on education, through the installation and upgrading of systems for planning, regulation, evaluation and control of the education system, which will ensure compliance with quality and equity standards in a context of efficient spending. Three subcomponents will be included.

- a. Federal Ministry of Education (MEN) (US\$9.2 million).** Technical assistance and equipment will be financed to upgrade the statistical information system and software will be installed to operate as 'control panels'. Basic information will be included on students, teachers, infrastructure, equipment and costs, indicators for monitoring and measuring impact in terms of school performance, teacher/student ratio, teacher/administrative staff ratio, cost per student, etc., which will permit the MEN to carry out its functions in the fields of planning, regulation and quality control.
- b. Provincial ministries (US\$30.8 million).** Equipment, software and technical assistance for the installation of information systems and technologies to permit the reorganization of the management and control of human, financial and material resources will be financed.
- c. Schools (US\$7 million).** Technical assistance, software and equipment will be financed for the design and installation of a school management information systems for greater efficiency in resource management and accounting.

The Bank's country and sector strategy:

The Bank's strategy for the coming years in Argentina, consistent with the government's program, the Eighth Replenishment and the Forty-first Annual Meeting of the Board of Governors of the Bank, has the following objectives: (i) sustainable growth in the productive sectors and higher productivity; (ii) poverty reduction and a better quality of life; (iii) reform of the State and fiscal balance; and (iv) entrenchment of regional integration.

The proposed program responds directly to items (ii) and (iii) of the strategy. The Bank's support will be used, among other things, to strengthen the management, planning and administrative areas of the federal and provincial ministries of education to enable them to undertake reform and investment programs. The Bank is also supporting reforms in primary, secondary and technical education that respond to the recommended lines of action, through other operations.

Environmental and social review:

Since the works are not complex and the construction period will be short, the program is not expected to have any significant direct environmental impact (paragraph 4.12).

Benefits:

This operation will consolidate institutional capacity and strengthen education system management on the federal, provincial and school levels and improve integration of those levels, which will make for better planning. The investments will improve the quality and relevance of secondary education, student access and performance. The end result will be an increase in student retention rates and learning levels, which will translate into more years of schooling and better future employability and productivity of young people, especially those who are less favored. The incorporation of information and communications technologies into teaching activities will also help to raise the quality of education, by providing teachers with a highly-effective teaching tool and greater relevance of subject matter, bringing education closer to market demand for employees with information and communications skills. These benefits are particularly relevant for students at a social disadvantage who are most affected by the consequences of the digital gap (paragraph 4.15).

Risks:

Weak institutional capacity in some provinces could make it difficult for them to join the program immediately. To ensure their inclusion from the outset, the ministry's International Financing Unit (UFI) will provide technical assistance for those provinces in preparing annual reform and investment plans. A monitoring system will also be developed to detect provinces that require technical assistance during the program. Last, participation in the component to strengthen education system management is compulsory for all provinces, which will help to strengthen and prepare them in this area.

The government wishes to improve efficiency in the use of teacher time by consolidating teacher working hours in the same school. This means that existing contracts for hours/subjects in different schools will have to be changed to contracts focused on a single school. Reformulation of the contracting systems could lead to resistance from teachers' unions if this measure is seen as an attempt to amend the teachers' statutes that guarantee special labor benefits to the unions. To mitigate this risk, the program will support reformulation of teacher contracting systems through direct work with the schools, accompanying the consolidation of teaching hours with additional class-preparation and professional development time, included as part of their working hours. This is a large incentive for teachers, since they currently perform those activities after work.

Special contractual clauses:

Conditions precedent to the first disbursement

1. Making adjustments in the UFI based on criteria agreed upon with the Bank (paragraph 3.3)
2. Placing the Operating Regulations in effect (paragraph 3.16).
3. Signing participation agreements with at least three provinces (paragraph 3.12).
4. Reaching agreements between the MEN and other public agencies for the maintenance of computer equipment (paragraph 3.56).

Other contractual clauses

1. *Disbursements to provinces.* Before disbursements will be made to provinces they will be required to (i) sign a participation agreement; (ii) open specific bank accounts for the program; and (iii) set up a provincial executing unit based on the criteria established in the Operating Regulations. Once these requisites have been complied with, the UFI can disburse funds to enable the provinces to begin executing the management component, which does not require presentation of specific plans by the provinces (paragraph 3.14).
2. *Disbursements for components.* Disbursements for program activities in each province will be contingent upon: (i) approval of the national provincial annual operating plan by the SEB; and (ii) approval by the MEN's technical units of the specific plans for each component. The first disbursement for the information and communications technology component will be conditional on establishing a consultative council and the first disbursement for bursaries will be subject to approval by the Bank of the

methodology and terms of reference for evaluating the impact of this line of action (paragraph 3.15).

3. *Evaluation and monitoring.* Within 60 days after the end of each semiannual period, the UFI will present reports to the Bank on physical, financial and technical progress. The reports submitted 24 months after the initial report and six months after project completion will also include mid-term and final internal and external evaluations, based on the terms of reference annexed to the Operating Regulations (paragraph 3.63).
4. *Cost recognition.* As requested by the MEN, spending of up to US\$50 million on goods and services after 31 March 2000 will be recognized from the local counterpart, provided that procedures substantially similar to those established in the loan contract have been followed. This sum represents spending on works and equipment and furniture for new and/or expanded schools (paragraph 3.65).

Poverty-targeting and social sector classification:

This operation qualifies as a social equity enhancing project (paragraph 4.10), as described in the indicative targets mandated by the Bank's Eighth Replenishment (document AB-1704).

The operation as a whole does not qualify as a poverty-targeted investment (PTI) since the number of beneficiaries living below the Bank's poverty line is not 50 percent of total beneficiaries (paragraph 4.11).

Exceptions to Bank policy:

None.

Procurement:

Bank procedures will be applied. For consulting services, the procedures established in document GN-1679-3 will be followed, which authorize consulting services to be contracted using price as an evaluation criterion and fixed-price contracts for consultants. International competitive bidding will be required for service contracts over US\$200,000, goods costing US\$350,000 and over and works costing US\$3 million and over (paragraph 3.44). It has been agreed with the Bank that postqualification can be used for contracts for simple works (the majority of the works proposed) (paragraph 3.48). Except for the first bid, the documentation for procurements of goods and contracts for works below the above-mentioned thresholds will be subject to ex post verification. Given the considerable number of consulting services required for the program and to streamline execution and facilitate Bank supervision, it is recommended that the Bank's prior nonobjection only be required for contracts with consulting firms or individual consultants worth more than US\$100,000 and US\$50,000, respectively (paragraph 3.45).

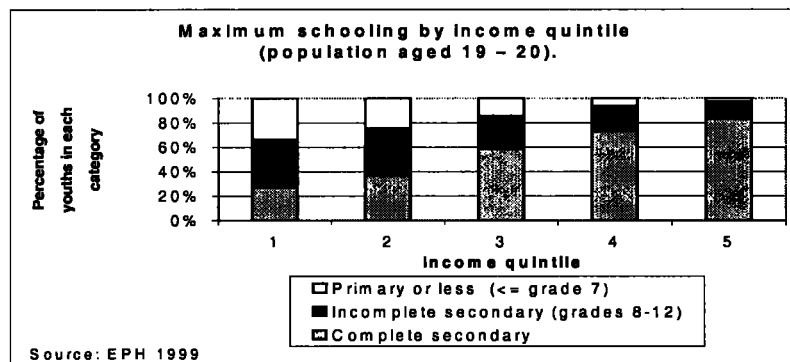
I. FRAME OF REFERENCE

A. Economic development and education

- 1.1 Argentina experienced significant economic growth over the last decade, for an increase of 57 percent in GDP between 1990 and 1999. The economic was also able to recover fairly quickly from external crises during the decade. However, in 1999 the country entered a recession from which it has not yet recovered. Growth in the last decade has not been equitably distributed, since it did not benefit the poor as much as could be wished. The gap between rich and poor widened by 57 percent over the decade. While the income of the wealthiest 20 percent rose from 50 percent to 54 percent of GDP between 1990 and 1999, the poorest 10 percent fell from 2.1 percent of total income in 1990 to 1.5 percent in 1999. In the latter year, about 20 percent of Argentines lived below the poverty line used by the Bank. Poverty is strongly linked to scant education and work skills, which makes access to the labor market difficult and stands in the way of improving income.
- 1.2 Economic development is demanding a more highly skilled workforce, as demonstrated by the widening of income differentials between different occupations. Data from household surveys show that between 1990 and 1998, income from professional occupations grew by 52.5 percent, while unskilled workers saw a reduction of 2.7 percent.¹ In 1998, the rate of return for workers who had completed primary school was 2.5 percent, while the figure for high school graduates was 10 percent and for university graduates it was 18 percent.
- 1.3 The education system is not in a position to respond to this challenge. Although almost all of the population between the ages of 6 and 13 goes to primary school, the system is unable to halt attrition and drop-outs during the education process. Of 100 children who enter primary school, 75 complete the final three years of general basic education (grades 7 to 9) and just 50 continue on to the last year of secondary school (grade 12). According to the 1999 ongoing household survey, the students who do not graduate are the very poor. As can be seen from the following graph, just 27 percent of the poorest quintile between the ages of 19 and 20 completed secondary school (12 years of schooling), compared to 83 percent in the wealthiest quintile. Fewer than half the young people in the poorest quintile complete the nine years of basic schooling, compared to 93 percent in the richest quintile.

¹ *Poor People in a Rich Country: A poverty report for Argentina*, The World Bank, December 1999.

Graph I-1
Maximum schooling by income quintile
(population aged 19-20)



B. The education sector

1. Description of the education system

1.4 The 1990s saw sweeping changes in the Argentine education sector. In 1992, the Education Transfer Act was passed, which completed the transfer to the provinces of responsibility for the administration and financing of high schools, technical schools and normal schools, which until that time had been managed by the Federal Ministry of Education. The ministry retained control over the financing of federal universities and regulation and control of consistency, quality standards and equity in the school system.

Table I-1
Decentralization of the sector
Distribution of functions

	Federal	Provinces
Universities	x	
Non-university post-secondary		x
School system		
Normal schools		x
Teacher development	x	x
Teacher contracting		x
Teacher salaries		x
Curriculum	x	x
Supervision		x
Evaluation	x	
Infrastructure	x	x
Texts and materials	x	
Bursaries	x	

1.5 According to data for 2000, the education system operated by the provinces has 10 million students between the ages of 5 and 19, distributed among 40,000 schools taught by 600,000 teachers. The schools range from kindergarten (children aged five) to the third year of composite high school (grade 12) attended by 17 and 18 year olds. About 75 percent of the system is public and 25 percent is private. The provincial ministries pay teachers salaries in 66 percent of private schools.

1.6 The economic capacity of the provinces differs widely and the differences are also reflected in education indicators (Table I-2). The provinces with the highest relative development have smaller percentages of households with unmet basic needs and are able to keep 70 percent of teenagers between the ages of 13 and 18 in the

system. In contrast, up to 30 percent of households in the provinces in northwestern (NW) and northeastern (NE) Argentina have unmet basic needs and 40 percent to 50 percent of teens in that same age group have left school. Educational results are directly linked to economic capacity, and the provinces with the highest incomes obtain results that are more than 10 percentage points higher than the others.

Table I-2
Differences between Provinces

PROV.	Economic/Social			Educational				Performance grade 5	
	Provincial resources/ % total	Per capita GDP (\$)	UBN households (%)	Personal spending/ total spending	Spending/ student (secondary) (\$)	Secondary coverage (net rate)	Repeater rate in grade 8 (%)	Language	Math
Most highly developed provinces ^{1/}	48.7	10,964	12.8	0.94	1,568	72.4	11.5	68.9	71.9
NW region ^{2/}	13.5	5,308	26.7	0.93	1,499	62.1	8.1	55.3	58.3
NE region ^{3/}	14.6	4,472	28.3	0.92	1,364	55.4	12.3	56.8	58.4
Patagonia ^{4/}	18.3	11,591	19.3	0.89	2,238	66.9	14.4	60.2	63.9

^{1/} Buenos Aires, GCBA, Córdoba, Santa Fe and Mendoza.

^{2/} San Luis, Catamarca, Salta, Jujuy, Tucumán, Santiago del Estero, La Rioja and San Juan.

^{3/} Corrientes, Misiones, Chaco, Formosa and Entre Ríos.

^{4/} Chubut, Neuquén, Río Negro, Tierra del Fuego and La Pampa.

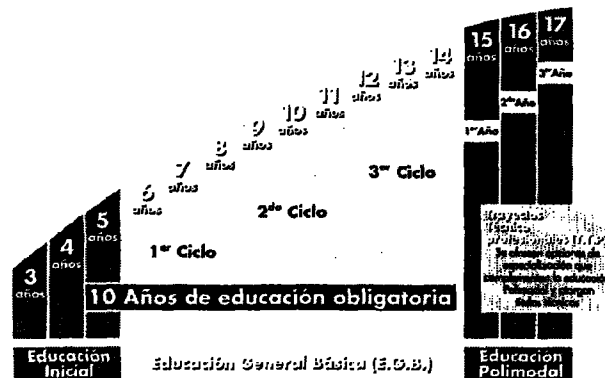
- 1.7 Spending on education as a percentage of GDP grew from 3 percent to 4.4 percent between 1991 and 1999 and education's share of total public spending rose from 10.5 percent to 12.9 percent over the same period. This growth is partly due to higher spending by the provinces on basic education to finance growth in enrolment, and partly to higher federal spending on compensatory and quality improvement programs. In 2000, the budget for basic education (from kindergarten to grade 9) was US\$11.5 billion, with US\$1.2 billion spent by the federal government and US\$10.3 billion by the provinces. On average, the provinces allocate over 92 percent of their budgets for salaries and the remaining 8 percent goes for operating costs – goods and nonpersonal services – and investments (see Annex I-1). This situation makes the provinces, particularly the poorer ones, dependant on federal financing for investments in the education system.

2. Reform of the education system

- 1.8 The Federal Education Act was passed in 1993. It transformed the structure of school grades and levels, curricula and mechanisms for regulating and supervising the system. Compulsory schooling was extended from seven to 10 years and included kindergarten for five-year-olds. Three compulsory three-year cycles were created, called general basic education. The old secondary school was changed into an optional three-year cycle, known as the composite (polymodal) cycle. With the change, secondary education is now composed of the last three years of general

basic education and three years of composite schooling. The provinces agreed with the Federal Education Council to implement these changes gradually and progressively, annexing the third cycle to primary school or to the composite cycle. The changes are to be fully implemented by 2003.

Graph I-2



- 1.9 To complete the changes in the structure of the system, the act introduces changes in the pedagogical area intended to unify the provincial systems under a common legal framework. It introduced a common curriculum that can be tailored by the provinces to suit their local characteristics and needs, created a continuing education system for teachers, and established a national system for education quality evaluation which tests performance in core subjects at various levels of the system.
- 1.10 The curriculum for the composite level approved by the Federal Education Council is organized into five areas: natural sciences, economics and organizational management, humanities and social sciences, production of goods and services, and communications, arts and designs. These areas are not specializations but rather organize course contents around fields of knowledge to ensure a comprehensive, modern education. They include a platform of general skills, learned through core education courses which build on the skills acquired during general basic education and provide directed education that contextualizes and enhances the basic contents in different fields of knowledge and social and productive activities. In parallel to composite education, the schools can offer a technical/vocational stream that trains students for specific activities in shifts with the composite courses. It can last for up to four years, in which event students can obtain a diploma as a technician in the services sector (health care, environment, tourism or administration) or in agriculture, industry or construction.
- 1.11 The reform introduced a system to regulate the quality of teacher education through the Federal Continuing Education System for Teachers (RFFDC) that was established under the Federal Education Act as the institutional structure

responsible for planning and managing professional development for provincial teachers. The evaluation committees established in each provincial office evaluate training supply based on federal criteria and include approved courses in the Federal Register of Projects, Evaluation and Certification (REFEPEC), which also certifies teachers who have passed the courses. Suppliers are universities, teacher-training institutes, NGOs, professional associations and the Federal Ministry of Education. The teacher-training institutes and the ministry covered 83 percent of the courses offered between 1995 and 2000.

- 1.12 Last, the reform introduced management by results to support decentralization, which requires more detailed instruments for information and monitoring than a centralized system. Today, the Education Quality Development Institute (IDECE), a deconcentrated agency that reports to the Subsecretariat of Basic Education, is responsible for ongoing evaluation of the education system on all levels, maintaining an education information system to provide reliable and timely information, and promoting its use by schools and the community.
- 1.13 The Federal Education Council (CFE) is the policy and technical link between the federal ministry and the provinces. It is composed of the ministers of education of the 24 jurisdictions and a representative of the Interuniversity Council and is chaired by the federal minister. The secretary general is elected for a two-year term from among eligible Argentines who do not participate in the CFE by virtue of their office. The council is responsible for coordination and concertation of national education policies and overseeing their implementation in the provinces.

C. Status of secondary education

- 1.14 Although the government made substantial efforts in the sector, it focused its financing mainly on the primary level and did not address many of the problems that affect secondary education.

1. The quality of education is insufficient

- 1.15 The change in the structure had a strong impact on secondary education, since each province has installed the third cycle in function of the availability of physical space in schools. Sometimes grades 7 to 9 are annexed to primary schools, sometimes to high schools, and sometimes they are divided between the two. This has led to a drop in the quality of teaching on this level. The greatest impact has been on the division of work among teachers, since 25 percent of teachers in grades 7 to 9 are teaching on levels for which they were not trained. This has led to poorly-prepared high school graduates. Data from the national quality evaluation system for 1999 indicate that 50 percent of students who graduate from high school have only average understanding of texts and 20 percent are incapable of understanding the general meaning of a text.

- 1.16 The programs carried out in the second half of the 1990s led to an improvement in student retention rates in primary school which, in turn, created higher demand for secondary school. Enrolment in grades 7 to 9 (third cycle) grew by 2.6 percent a year and in grades 10 to 12 (composite cycle) by 4.5 percent. In provinces that made an early start on implementing the third cycle, such as the province of Buenos Aires, secondary school enrolment grew by 20 percent between 1995 and 2000. Taking all provinces together, gross growth in secondary school enrolment over the decade was 1.5 million students.
- 1.17 Secondary education is not in a position to meet growing demand and as a result, the education system is not able to keep students. The drop-out rates in grades 8 and 9 is currently 19.5 percent and 15.1 percent respectively. Just 65 percent of students who reach grade 8 enroll in grade 10 and 83 percent of them go on to complete secondary school. Drop-out rates on the secondary level are 42 percent, which is significantly higher than the 12 percent figure for primary school.
- 1.18 The above is compounded by the system of contracting teachers by hours in effect today, which means they must become 'taxi teachers' if they are to work full time, either teaching many different groups of students in a single school (70 percent of teachers) or in several different schools (30 percent). Atomized contracting has a dual impact. The quality of teaching is not good because teachers are unable to deal individually with the large number of students they have to teach and it is very difficult for administrators to know if a teacher is late or has simply stayed away from work.
- 1.19 The reforms to the secondary school curriculum introduced under the Federal Education Act updated course contents but did not cover the function that information technologies can play in education and in the economic development of countries. Studies indicate that the impact of globalization and the information and communications revolution make high-level cognitive skills an indispensable requisite for increased productivity and economic competitiveness. World-wide trends point to particularly high growth in jobs in branches of the economy that are information intensive—finance, insurance, communications—and to increasing use of technology in jobs available in industry and traditional services.

2. Lack of equipment

- 1.20 Household surveys show that the vast majority of new students entering high school, and of repeaters and drop-outs, are the poorest in each cohort and come from homes whose parents did not complete school and have little tradition of reading. Schools do not have the resources or teachers with the training to provide these students with the attention and specialized teaching they need. When they reach high school, the opportunity cost of going out to work is more interesting for many families, who believe that schooling is no guarantee of finding a good job.

3. Inefficient management

- 1.21 Management-related aspects have been neglected on all levels, particularly in provincial administrations and schools. Inadequate information systems make it difficult to detect and correct inefficiencies, such as sustained drop-out and repeater rates. Systems for the administration of teaching and nonteaching staff are unable to handle the high volumes of data processed today, which makes it impossible to predict spending on supply teachers and replacements. In schools, personnel systems are manual and slow, making it difficult to monitor teacher performance, compliance with hours of work and attendance.
- 1.22 The above-mentioned problems are largely because investments in infrastructure, training, materials, management tools and other inputs have not been sufficient to improve quality and keep students in the system. Although public spending on primary and secondary education grew from 0.69 percent to 1.88 percent of GDP from 1990 to 1999, 92 percent of the budget goes for current expenditures, 82 percent of which are salaries. The remaining 8 percent is spent on investments, which is low compared to 9 percent in European countries.
- 1.23 The provinces, which are responsible for all investments in the education sector, have had difficulty in shouldering the costs of implementing the changes introduced by the reform. In real terms, federal spending on education grew by 28 percent between 1993 and 1997, while provincial spending only increased by 12 percent. Although this represents progress compared to the 1980s, the provinces must improve their spending distribution and many of them need to invest more in secondary education.

D. Program justification

- 1.24 The data presented justify the need to invest in secondary education, which is a bottleneck that significantly constricts better coverage and equity in the Argentine education system. The provinces are responsible for financing the entire nonuniversity system and by 2000 they had shouldered the costs of the primary level but not the full costs of secondary school.
- 1.25 Table I-3 summarizes the problems that the program seeks to solve, describing the framework and the solutions it would introduce.

Table I-3
Program rationale

Framework	Problems detected	Proposed solutions
New curriculum for secondary education	Inefficient performance by the 'taxi teachers' who are unable to give students individual attention owing to their large numbers.	Consolidation of working hours and stress on team work. Training in the workplace.
Extension of compulsory schooling to 10 years.	The vast majority of new students and repeaters in secondary schools are the poorest in each cohort and run a high risk of dropping out.	Bursaries for poor students with good performance, supplementary pedagogical support and distribution of books to schools and students with bursaries.
New structure by levels (three three-year levels and a composite level)	The provinces do not have sufficient infrastructure to cope with growth in enrolment and installation of the third cycle.	Construction and repair of schools to house students working in overcrowded and run-down classrooms and schools.
Information technologies for jobs	The curriculum does not include systematic training in information and communications technologies.	Implementation of a strategy that includes training, production of materials, management, and computer equipment in schools.
Decentralization of schools and teacher-training institutes to the provinces	Inefficient management of personnel and transferred resources.	Optimization of resource administration in provinces and schools and modernization of the management information system.

- 1.26 The implementation strategy will include incentives to: (i) strengthen installed technical capacity in the provinces, stressing training in lines of action where it is needed; (ii) facilitate a sense of ownership of goals and actions through commitments under each of the program's components; (iii) ensure that resources are available to sustain actions and investments, through more efficient management that will lead to savings; and (iv) promote management by results by monitoring commitments and informing interested parties about indicators.

E. Lessons learned

- 1.27 This operation takes account of the MEN's experience in programs to support the provinces in implementing the reforms introduced in the Federal Education Act. Those programs, many of which were the responsibility of the same technical team that will form part of the executing unit, have been evaluated in order to incorporate the lessons learned.²
- 1.28 To support the changes in *primary education* in the provinces and help to partly compensate for the inequalities in their technical and financial capacity, the Argentine government developed an education reform and investment program (PRISE) with the Bank for US\$600 million (845/OC-AR). The program consists of a series of projects designed and executed by the provinces with technical assistance from the MEN. In *secondary education*, a project to decentralize and improve education on that level (PRODYMES II) supported by the World Bank was completed in June 2002. It assisted 630 secondary schools in the 24 provinces, by providing funds for science laboratories and computer equipment and for building up the schools' institutional capacity.

² The evaluations are available in the technical files of RE1/SO1.

- 1.29 Both PRISE and PRODYMES financed the installation of some computer equipment in schools. By the end of 2000, 14 percent of schools had equipment that met the national standard of at least one computer for every 30 students and 11 percent had some equipment but did not meet that standard. In most cases, the equipment is used for both teaching and administrative purposes.
- 1.30 In order to surmount the inequities in education between schools and provinces, the federal level implemented two *targeted programs* to selectively benefit the poorest schools and students – the social education plan (PSE) and the national student bursary program (PNBE) – the latter financed by the Bank. A program for compensatory actions in education (PACE) is currently being implemented, which incorporates the lessons learned from the PSE. The evaluations indicate that the geographic focus was suitable, since the program reached the poorest schools in each province. There was a significant increase in assistance in those schools linked to the PSE's actions.
- 1.31 The bursaries included in the present program are stage two of the PNBE, which began in 1997 (1031/OC-AR). The lessons learned in stage one, which were established in an independent evaluation, were taken into account of this new stage and technical aspects of its design and execution were adjusted. In the second stage, the PNBE will no longer be exclusively compensatory in nature. It will be strongly oriented to school performance and the selection process has been simplified so that new candidates will be interviewed once a year. The bursaries will be renewed for students who comply with the performance criteria, without the need for a new selection process. The results also show that the educational impact of the bursaries is strongly conditioned by the learning reinforcement activities that complement the financial support.
- 1.32 The lessons learned from the earlier programs that have been included in the design of the proposed operation are listed in Table I-4.

Table I-4
Lessons learned

PRISE	<ul style="list-style-type: none"> - The introduction of computer equipment in schools needs to be accompanied by training for teachers and principals and technical assistance for managing use of the equipment in teaching practices. - The need to ensure flexible conditions for executing the program in the provinces, including simple eligibility and compliance criteria that are easily to control through the clear identification of targets.
PNBE	<ul style="list-style-type: none"> - The educational impact of the bursaries is strongly conditioned by learning reinforcement actions for students receiving them. - The incentive is higher when bursaries are maintained from grades 8 to 10 instead of giving them to one beneficiary for a year and to a different one in the following year.
PSE	Distribution of materials to support teachers, texts by subject area and classroom libraries improves school attendance.
PRODYMES	Team work by teachers and the use of information on educational results improve student performance.

F. Bank sector strategy

- 1.33 The Bank's strategy for the coming years in Argentina, consistent with the government's program, the Eighth Replenishment and the Forty-first Annual Meeting of the Board of Governors of the Bank, has the following objectives: (i) **sustainable growth in the productive sectors and higher productivity** through financing for actions that help maintain a favorable investment climate, boost competitiveness and enhance the government's capacity to promote productive projects and infrastructure; (ii) **poverty reduction and a better quality of life** through support for projects to expand employment opportunities and improve the access, coverage and quality of basic education, health care, sanitation and environmental services; (iii) **reform of the State and fiscal balance** to consolidate the actions begun and fortify mechanisms for decentralization, transparency in the public administration and institution building; and (iv) **entrenchment of regional integration**.
- 1.34 The proposed program responds directly to items (ii) and (iii) of the strategy. The Bank's support will be used, among other things, to strengthen the management, planning and administrative areas of the federal and provincial ministries of education to enable them to undertake reform and investment programs.
- 1.35 The investments and reforms that the Bank is supporting in primary, secondary and technical education respond to the recommended lines of action. (i) *Primary*: the education reform and investment program (PRISE) (845/OC-AR) and the education system management and coverage component of the program to support modernization of government in the province of Cordoba (1287/OC-AR). (ii) *Secondary*: the program to support youth productivity and employability (1031/OC-AR), which includes the national student bursary program (PNBE), with US\$370 million in bursaries for poor high-school students at risk of dropping out of the system. (iii) *Technical*: the program to reform nonuniversity higher technical education (1060/OC-AR) is a US\$82.5 million loan to establish a national fund for technology institutes (FONIT) that will help to gear technical training more closely to market requirements.
- 1.36 Although the loan portfolio has been affected by the economic situation in the country, the proposed program is highly important for making headway in education reform. The education sector has performed well in its portfolio with the Bank and the Federal Ministry of Education has proven to be highly efficient in executing the investments for which it is responsible. It is expected PRISE will be fully disbursed in December 2001, six years after it was approved, and that disbursements under PNBE will be completed in August 2001, four years after it was approved.

II. THE PROGRAM

A. Objectives

- 2.1 The program's objective is to support the provinces in improving the quality, equity and efficiency of the education system, with a more pertinent supply and a reduction in social inequity through increased schooling for young people from poor sectors, which will make them more employable. The program centers on compliance with the objectives of secondary school education reform which has not yet been completely implemented in most of the provinces, and on focused support for students at greatest social and educational risk. Improvements in quality and equity will be based on intensive use of information and communications technologies to update teaching practices in schools and deliver education that responds better to labor market demand.
- 2.2 The general objectives are intended to achieve targets for the coverage of secondary education, percentage of students that complete that level by income quintile, repeater rates, drop-out rates, performance on standardize tests and spending efficiency in the provinces. The proxy for the last target will be the percentage of nonsalary spending out of provincial education budgets.

TABLE II-1

Indicators	Baseline 1999		Targets 2006	
	National ave. (%)	20% poorest	National ave. (%)	20% poorest
Net coverage of secondary education	70		75	
Percentage of people aged 20-25 who complete secondary school				
Grades 7 to 9	71	44	90	60
Grades 10 to 12	54	24	66	30
Average years of schooling for people aged 20-25	10.9	8.9	11.5	9.5
Annual promotion rates				
Grades 7 to 9	80		84	
Grades 10 to 12	79		83	
Repeater rate				
Grades 7 to 9	8.3		6.5	
Grades 10 to 12	5.3		4.5	
Academic performance				
Grade 6				
Language:	57		60	
Mathematics:	63		66	
Grade 9				
Language:	60		64	
Mathematics:	58		62	
Grade 12				
Language:	65		68	
Mathematics:	69		71	
Efficiency of provincial spending on education (national average)	8		10	

B. Program description

- 2.3 To achieve the objectives, program investments and activities will be organized around three components: (1) reform and expansion of secondary education; (2) incorporation of information and communications technologies in schools; and (3) strengthening the management of secondary education. A logical framework and a monitoring and evaluation matrix have been agreed upon with the government, which include the main indicators and targets to be attained during the project (Annex II-1).
- 2.4 With these activities and investments, the program will benefit some 6 million students in primary and secondary school (with infrastructure, computer equipment and better management). Direct teaching interventions will benefit 3 million secondary education students (institutional reorganization of schools, teacher training and innovation centers), about 600,000 students in poor schools (projects for student retention and teaching resources) and over 140,000 students whose families live below the poverty line, who will receive bursaries. Total enrolment in primary school is 4.2 million and there are 3 million students in secondary school (third cycle and composite levels).

1. Reform and expansion of secondary education (US\$840.3 million)

- 2.5 This component will support the provinces in implementing institutional and pedagogical reforms in secondary schools and expanding supply, with better quality and efficiency levels than at present. It includes three subcomponents.

a. Improving the quality of secondary education (US\$162.4 million)

- 2.6 This subcomponent has three lines of action: (i) institutional reorganization of schools; (ii) human resource development; and (iii) establishment of education adaptation and innovation centers.
- 2.7 **(i) Institutional and curricular reorganization of schools (US\$66.6 million).** The objectives of this line of action are to provide more effective teaching time and improve the academic performance of students. It will finance technical assistance to *reorganize the time distribution of teachers*, so that each teacher will work for most of their contracted hours in the same school. Consolidation of time distribution will permit teachers to work in teams in core areas (language, mathematics, social and natural sciences) and teach fewer courses, each for more hours. To promote better teacher-student relations, teachers will remain with their groups for three years in a row. Consolidation of time distribution will also reduce teacher absenteeism, since it will make it easier to monitor attendance and compliance with teaching timetables.
- 2.8 Although the increase in teaching time will not entail incremental costs, since it will be obtained through better use of the hours for which teachers are contracted, the

provinces will be required to finance *class preparation time* for teachers working in teams to plan and monitor the work of students. On average, 2.5 percent additional hours will be required for teachers and 1 percent additional hours for team coordinators, costing 0.7 percent of annual spending on salaries by the provinces (US\$71.5 million). This cost will initially be financed by the local counterpart and will gradually be absorbed by the provinces, as savings are produced from better administrative management, which will be an estimated 5.6 percent of spending on salaries (US\$547 million).

- 2.9 Given the importance of institutional reorganization in schools for achieving the educational targets, the provinces must make a commitment to implement this line of action as a requisite for receiving other investments in areas such as infrastructure expansion and computer equipment. This requisite will be established in the provincial participation agreements.
- 2.10 Under the institutional reorganization, materials and equipment will be financed, such as supporting materials for teachers and videotape libraries, taped music, educational software and 250-book libraries for student use. The schools must include and justify the use of these materials in the institutional projects they submit annually to the provincial executing unit for approval. The package to be assigned to the schools will be determined on the basis of an inventory of the materials already available in each school, to be performed by the provincial executing unit, which will be supplemented with the materials needed to complete a basic basket covering the minimum that a secondary school must have to achieve its objectives.
- 2.11 Funds will be provided to establish youth activity centers to carry out cultural, artistic, sports and community social actions in schools in areas where the community does not offer creative alternatives for young people in their spare time. The centers will be developed in modules outside class timetables and will stress integration of the school and the community. The approximately 1,000 schools that are undertaking institutional reorganization but do not participate in the national student bursary program may accede to the fund by presenting projects that include justification of how the centers' activities will help to keep students in school and improve their performance. Projects will be selected by the provincial education quality improvement commissions, based on the criteria and procedures established in the manual on the institutional reorganization of schools that forms part of the program's Operating Regulations.
- 2.12 (ii) ***Human resource development (US\$72.2 million)***. School-based training will be financed to improve the work of teaching teams in the areas of course contents and teaching methods, through classroom and distance education, based on the institutional and operating structure of the Federal Register of Projects, Evaluation and Certification.

- 2.13 The teacher training strategy includes two stages: training for provincial trainers and training for teaching teams in the schools. In stage one, training will be provided for about 1,600 provincial trainers through four national seminars and distance activities, for a minimum total duration of 220 hours. In stage two, the provincial trainers will train the teaching teams in the schools at a rate of 80 teachers in 10 schools, who will receive 40 hours of training every three months. The course contents will strengthen the teaching of language, mathematics, social sciences, natural sciences, technology, ethics and civic education, physical and artistic education and the specific courses will be defined in function of the results of the national evaluation operation and demands by schools, which will be included in the provincial training plans.
- 2.14 Materials for teachers will be financed in the following areas to support training: modules to update each subject, modules to update teaching practices, modules on social prevention (violence, health, discrimination, drugs, early pregnancy, etc.) and modules containing proposals for classroom work. The production and procurement of these materials will be the responsibility of the respective technical team in the international financing unit (UFI). The provinces can select materials that are best suited to their needs, based on a menu of options to be prepared in conjunction with the provincial teams.
- 2.15 **(iii) *Establishment of education adaptation and innovation centers (CAIEs) (US\$23.6 million)***. Materials, equipment and coordinators will be financed to establish the centers. Their specific objective is to provide teachers with multimedia teaching resources and information technology to support school-based training and regular teaching practices. The centers will have libraries with about 500 titles and a virtual network through a web page on the Federal Ministry of Education's web site, for communications and exchanges of experiences among teachers.
- 2.16 The CAIEs form part of the Federal Continuing Education System for Teachers (RFFDC) and will contribute to the strategic planning and management of training in the provinces and to the certification of training activities in their area of influence or educational zone. Together with the provincial headquarters of the RFFDC, the CAIE coordinators will prepare a zonal training plan based on the demands and needs of schools in their zones. The center coordinators will also be responsible for coordinating the activities of supervisors, principals, teachers and trainers with respect to school-based training.

b. Support for equity (US\$402.4 million)

- 2.17 This subcomponent has three lines of action: (i) bursaries for poor students with good performance; (ii) financing for school student retention projects; and (iii) focussed distribution of teaching resources, textbooks and consultation materials for teachers.

- 2.18 **(i) *Bursaries (US\$300 million)***. Each year, 140,000 bursaries of US\$400, divided into two equal installments, will be financed for students from families living below the poverty line, who are studying in the third cycle or the first year of the composite cycle. The bursaries will initially be awarded to students in grade 8 and will be renewed automatically the following year for students for who meet attendance requirements and have been promoted to the next grade. Students in the composite cycle will also be required not to fail any course. The bursaries will be renewable for three years, or until grade 10, and up to two children in the same family may receive them.
- 2.19 The bursaries will be targeted using the following procedure: (i) a provincial quota will be defined based on poverty and educational risk indicators; (ii) inside each province the quotas will be distributed among about 10 schools grouped by geographic area and selected on the basis of an index of school risk, based on the socioeconomic level of the students, the educational level of the parents and the equipment available in the school; and (iii) individual students will be selected using a fiche that establishes the poverty level of the candidate. All interested students who comply with entry level requirements, as published at the start of each school year in each school, may apply. Monitoring of the beneficiary selection process and allocation of the bursaries is the responsibility of the main school in each circuit and monitoring of the academic performance of the students who receive bursaries is the responsibility of the school principals.
- 2.20 **(ii) *School student retention projects (US\$50.5 million)***. Funds will be provided for schools with bursary students to procure materials and equipment and to contract services for educational activities that provide additional support for students whose performance is poor, in order to keep them in school. Schools will receive between US\$3,000 and US\$6,000 a year, depending on the number of students, and extra assistance will be provided for groups of up to 10 of the lowest performing students on each level. A guide for the preparation of school student retention projects will be distributed, with instructions on project preparation and execution and a menu of options for activities, based on an analysis of the activities with the greatest impact on retention indicators in stage one of the national student bursary program. Training will also be financed for teachers who work with these groups in specific methods for teaching students who are academically weak owing to cultural disadvantages.
- 2.21 Participation by schools in the bursary program will be tied to targets for the improvement of student retention and academic performance indicators in the beneficiary schools. Funds will be given to the schools in two installments and compliance with the targets will be the requisite for obtaining the second one.
- 2.22 **(iii) *Teaching resources and textbooks (US\$51.9 million)***. Textbooks and works of literature will be distributed to schools and students receiving bursaries, to assist with the specialized teaching support to be given to students who perform poorly.

The following will be financed: (i) three textbooks for each pupil in all schools with bursary students; (ii) two readers for the personal use of each student with a bursary; and (iii) a library with 250 books for each school with bursary students.

**c. Expansion of coverage and renovation of school buildings
(US\$275.5 million)**

- 2.23 This subcomponent includes the following lines of action: (i) construction of new works (US\$159 million); (ii) major renovations (US\$47.8 million); (iii) minor renovations (US\$28.7 million); and (iv) school equipment (US\$40 million).
- 2.24 Funds will be provided for the construction and outfitting of new schools to serve the growing demand for secondary education. New works will be built to replace schools in poor condition which cannot be renovated because they are obsolete or suffer from structural defects. Schools that are overcrowded will be expanded if they are located in areas of population growth. Schools that have become run down will be renovated and put back into good operating condition. The criteria for prioritizing these investments by geographic area will be: the socioeconomic level of the population to be served, estimated potential secondary school demand and the structural safety of school buildings.
- 2.25 A study conducted by the Federal Ministry of Education's National School Infrastructure and Technology Program (PNIET) in a sample of six provinces was used to scale the investments in infrastructure. The purpose of the study was to determine the requirements and investment costs of infrastructure, equipment and furniture to install the third cycle and the composite cycle. It included a survey of existing infrastructure and equipment, optimization of its use and a calculation of requirements. Using data from the study and projected enrolment over the next five years, infrastructure and equipment requirements were calculated in terms of square meters for new works, major rehabilitation of existing buildings (between 30 percent and 70 percent of the built area requires renovation) and minor repairs (less than 30 percent of the building), and classroom requirements for different types of equipment and furniture.
- 2.26 Based on the calculations in question, the construction of 3,900 new classrooms, major renovations to 1,600 classrooms, minor renovations to 1,700 classrooms and furniture for 25,000 classrooms will be financed. Assuming classroom use in two shifts – each shift with 30 students – approximately 430,000 students will benefit from these investments in infrastructure. The figure would rise to 1.5 million if all the beneficiaries of school furniture are included, or 50 percent of total projected enrolment in secondary school in 2005. About 30 percent of the new classrooms will be taught by teachers already under contract, whose hours of work will be redistributed, and the remaining 70 percent will require additional staff. The consolidated cost to the provinces of the new teacher contracts will be US\$56 million a year and US\$29 million to maintain the works, which can be

covered by the savings of an estimated US\$547 million generated by the management component.

- 2.27 Requests for specific investments by the provinces will be made following a microplanning methodology based on the school map, whose implementation is being financed through technical assistance from PNIEP for the provinces.

2. Incorporation of information and communications technologies into the school system (US\$256.1 million)

- 2.28 This component is intended to adapt education to market demand by incorporating information and communications technology (ICT) into teaching practices. It is composed of the following five subcomponents: (a) basic training for teachers, principals and administrative staff; (b) school-based training; (c) procurement and production of training and teaching materials; (d) connectivity infrastructure; and (e) provision of computer equipment.

a. Basic training for teachers, principals and administrative staff (US\$8.6 million)

- 2.29 The objective of this subcomponent is to train players in the education system in basic skills for applying information and communications technologies (ICT) to teaching practices and school management. The courses will be contracted out to market suppliers who will be evaluated by the Federal Continuing Education System for Teachers (RFFDC), and inscribed in the Federal Register of Projects, Evaluation and Certification (REFEPEC), which will be updated annually. Each of the courses offered must be certified by the federal system.
- 2.30 The subcomponent will include three lines of action. (i) *Pilot training projects*. Five pilot small-scale pilot projects will be financed in basic computer skills and Internet use in different provinces, which will be evaluated during the first year of execution. At the end of the year, the lessons learned will be identified and included in the training activities financed under this component. (ii) *Hands-on courses for training in basic skills*. Training will be provided for 170,000 teachers, principals and supervisors in basic skills for the use of ICT during the first three years of the program. Basic training will take the form of hands-on courses lasting for 12 hours. (iii) *Reinforcement of basic training through the Internet*. One hundred and fifty-four distance education courses will be given over the Internet, providing contents, tutoring and follow up. The distance courses will foster cooperative learning through mechanisms such as virtual forums and discussion groups.

b. Advanced school-based training (US\$10.3 million)

- 2.31 The objective of this subcomponent is to provide advanced training for teachers in the workplace. The courses will be given using the institutional structure of the Federal Continuing Education System for Teachers. To ensure that the course

contents are consistent with the curriculum on each of the educational levels, the Program for Curriculum Management and Training will be in charge of coordinating and monitoring these activities. This subcomponent will have four lines of action, two of which will be innovative experiences that will require evaluation.

- 2.32 (i) *Promoter schools initiative*. Technical assistance and training will be financed for 300 promoter schools. These schools will have a critical mass of teachers with advanced skills in using ICT, who will act as promoters, advisors and coordinators in the adoption of ICT by nearby schools. (ii) *Pilot project in ICT management in schools*. Training will be provided for 90 principals in managing computer information systems in schools and the project will be monitored and evaluated during the first year of execution. Principals throughout the country will be informed of the lessons learned, which will be incorporated into the other training activities for principals included in this component.
- 2.33 (iii) *School-based training*. Teachers and principals in 50 percent of secondary schools will be trained in advanced skills for incorporating ICT into teaching and management. The classroom training activities will be carried out by 2,000 trainers, whose training will be coordinated by the MEN's technical teams. (iv) *Advanced distance training*. One hundred and five courses will be conducted over the Internet to reinforce the incorporation of ITC into teaching applications and school management, for teachers and principals who have already acquired basic skills.

c. Procurement and production of training and teaching materials (US\$2.2 million)

- 2.34 This subcomponent is intended to procure and produce materials on electronic platforms to train teachers and principals and to teach the curriculum using ICT. Financing will be provided to procure and produce training and teaching materials in printed and digital formats and to obtain licenses for teacher-training software. The materials will cover the different levels and areas of the curriculum.

d. Connectivity infrastructure in schools (US\$72.6 million)

- 2.35 This subcomponent will create lay the groundwork for connectivity in schools, through the following activities and investments. (i) *Construction, expansion and upgrading of infrastructure* at multimedia resources centers and in computer classrooms in 6,300 schools. (ii) *Upgrading of electrical installations* to support the operation of computer equipment and connectivity in 6,020 schools identified in the surveys conducted by the MEN. The financing includes the provision of electric power for schools that do not have it. (iii) *Upgrading of local communications networks* for all the schools included in this component. The installation of link-ups for schools that do not have access to connectivity services will also be financed. The additional cost of maintaining the equipment has been estimated as

US\$23 million, which will be financed from savings under the management component.

e. Provision of computer equipment (US\$162.4 million)

- 2.36 This subcomponent will provide computer equipment for all primary (first and second cycles) and secondary (third and composite cycles) schools and teacher-training institutes. It includes two lines of action.
- 2.37 (i) *Equipment for schools*. Computer equipment will be financed to provide all public schools with at least one computer for every 30 students. Based on this investment criterion and the data from preliminary studies that indicate that 31 percent of public schools already have some equipment, 80,000 sets composed of a personal computer, printer, surge bar, furniture and servers will be financed. The equipment will include basic software, and three-year maintenance and replacement guarantees. (ii) *Maintenance and technical assistance* services will be financed for computer equipment and networks, as a supplement to the services provided by the provinces, other public agencies under agreements with the MEN, and the maintenance services included in the purchase contracts for the equipment.

3. Strengthening education system management (US\$47 million)

- 2.38 Ministries will be given tools and mechanisms for greater efficiency in spending on education, through the installation and upgrading of systems for planning, regulation, evaluation and control of the education system, which will ensure compliance with the standards for educational quality and equity in a context of efficient spending. Three subcomponents will be included: (a) strengthening of the MEN; (b) strengthening of the provincial ministries; and (c) installation of management systems in schools.

a. Federal Ministry of Education (US\$9.2 million)

- 2.39 Technical assistance and equipment will be financed to upgrade the statistical information system and software will be installed to operate as veritable 'control panels' which, apart from basic information, will contain impact indicators, information on monitoring and executive reports to evaluate education reform programs under way. The federal education information system will be strengthened by building a reliable database that will be kept continuously up to date using the information to be obtained from the provinces with the implementation of their computerized management systems for human resources, infrastructure and students. Preparation of a computerized digest will be financed to permit consultation of regulations currently in effect.
- 2.40 Technical assistance will be financed to reengineer the administrative circuits to tighten management control and to improve capacity for planning and monitoring the policies implemented by the MEN.

- 2.41 Last, a social communications campaign will be financed to provide information on national policies and quality standards, which will include the following complementary strategies: (i) a regular space on the government-owned television channel to inform about the activities and objectives of the institutional reorganization of schools, support for equity and the introduction of information and communications technologies; (ii) distribution of brochures and posters containing information on the different subcomponents, which will include CAIE and teacher-training activities; and (iii) distribution of information booklets inside the education system. This last strategy covers all program activities and will provide more specialized information. The television program will not represent additional costs, since the space set aside for information on government policies will be used.

b. Provincial ministries (US\$30.8 million)

- 2.42 Equipment, software and technical assistance for the installation of information systems and administrative technologies to reorganize the management and oversight of human financial and material resources will be financed. The 'control panel' on the provincial level will contain the indicators needed for planning and monitoring sector policies and computerized modules (master teacher file, functional staff, salaries, workplace health, school management and master student file) to improve efficiency in human resource, budget, financial, accounting, and infrastructure management. A computerized digest will be designed and introduced to organize, update and permit consultation of provincial regulations.
- 2.43 The analysis of the expected impact of this component indicates that this new form of provincial management will produce savings of about 6 percent in personnel costs, mainly from more efficient personnel management (correction of errors in pay, reduction of conflicting teaching hours, teaching hours that do not conform to the study plans, reduction in supply teaching, adjustments in transfers to the private sector).
- 2.44 Provincial commitments to reforming the system for reporting and monitoring human resources and to reinvesting the savings in the actions to improve the education system established under the frame of the proposed program will be a requisite for provincial participation in investments in infrastructure and computer equipment, and will be established in the participation agreements. The provincial governors will act as guarantors of this commitment.

c. Schools (US\$7 million)

- 2.45 Technical assistance, software and equipment for the installation of school management information systems will be financed to improve efficiency in resource administration and school accounting. This instrument will permit closer monitoring of performance by students and teachers, alike.

C. Cost and financing

- 2.46 The program will cost an estimated US\$1.2 billion, with the Bank financing US\$600 million from the Ordinary Capital. The financial costs will be covered by the Ministry of Economic Affairs. Program costs are broken down by component and source of financing in the following table.

Table II-2
Costs (US\$ million)

Category	IDB (OC) contri- bution	Local contribution	Total	%
Component 1:				
Reform and expansion of secondary education	420.2	420.1	840.3	70.0
1.1 Improving the quality of secondary school	81.2	81.2	162.4	
1.2 Support for equity	201.2	201.2	402.4	
1.3 Infrastructure and equipment	137.8	137.7	275.5	
Component 2:				
Incorporation of information and communications technologies	128.0	128.1	256.1	21.4
2.1 Training	4.3	4.3	8.6	
2.2 Information management in schools	5.1	5.2	10.3	
2.3 Production of materials	1.1	1.1	2.2	
2.4 Infrastructure	36.3	36.3	72.6	
2.5 Provision of computer equipment	81.2	81.2	162.4	
Component 3:				
Strengthening education system management	23.5	23.5	47.0	3.9
3.1 Federal	4.6	4.6	9.2	
3.2 Provincial	15.4	15.4	30.8	
3.3 Schools	3.5	3.5	7.0	
Administration and supervision	15.7	21.8	37.5	3.1
1. Executing unit	13.1	20.6	33.7	
2. Evaluation	0.4	0.4	0.8	
3. Auditing	1.5		1.5	
4. Dissemination	0.7	0.8	1.5	
Contingencies	6.6	6.5	13.1	1.1
SUBTOTAL	594.0	600.0	1,194.0	99.5
Inspection and supervision	6.0		6.0	0.5
TOTAL	600.0	600.0	1,200.0	100.0

- 2.47 The local contribution of US\$600 million will come from the Ministry of Education's budget. The financial terms and conditions of the loan are shown in the following table.

Table II-3
Financial terms and conditions

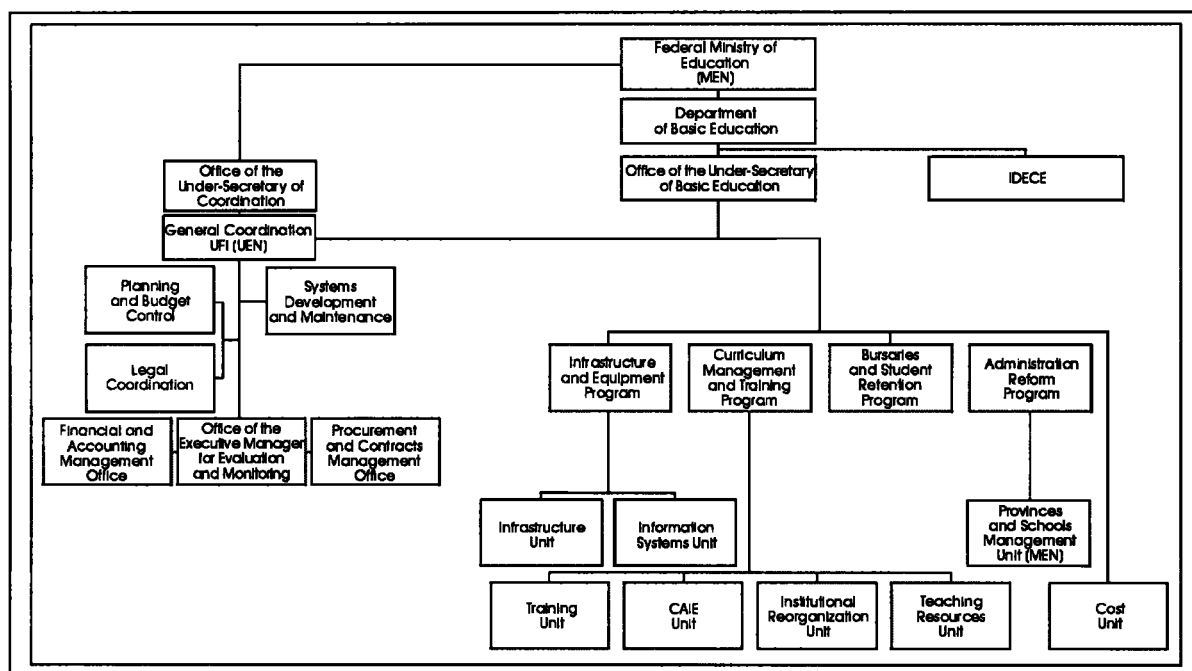
Amortization period:	25 years
Grace period:	5 years
Disbursement period:	5 years
Interest rate:	variable
Inspection and supervision	1%
Credit fee:	0.75%

III. PROGRAM EXECUTION

A. The borrower and the executing agency

- 3.1 The borrower will be the Government of the Argentine Nation, which has designated the Federal Ministry of Education (MEN) as the executing agency, which will act through the Subsecretariat of Basic Education (SSEB) and the International Financing Unit (UFI). While the SEB reports to the Secretary of Basic Education, the UFI reports to the Subsecretariat of Coordination, who reports directly to the Minister of Education. The organizational structure for program execution is presented in Table III-1

Table III-1
Institutional structure



- 3.2 The UFI is currently responsible for the programs with external financing being carried out by the SEB and will be responsible for the financial, administrative and accounting management of the proposed program through the Office of the Executive Manager for Evaluation and Monitoring, the Financial and Accounting Management Office and the Procurement and Contracts Management Office. The coordinators of all programs with external financing, including the coordinator of the proposed operation, report to the Executive Manager for Evaluation and Monitoring.
- 3.3 The UFI acts in cooperation with the Subsecretariat for Basic Education (SEB), through its different programs, which are responsible for the technical aspects of execution. They are: (i) infrastructure and equipment; (ii) curriculum management

and training; (iii) bursaries; and (iv) administration reform. These programs, in turn, have technical units, including the units that will be directly responsible for each of the components and subcomponents of the proposed program. Gearing the UFI to execution requirements, based on criteria agreed upon with the Bank, will be a condition precedent to the first disbursement.

- 3.4 Each province will have a provincial executing unit for this program, which will report to the provincial minister of education or the authority designated by the minister and will regularly coordinate its actions with the UFI. Like the central level, the provincial units must have teams for financial and accounting administration, procurement, monitoring and evaluation. The technical aspects will be executed by the line areas of the provincial ministries or their equivalents that correspond to the technical programs of the MEN, such as infrastructure, curriculum management and training, bursaries and administration reform. Each province will establish a provincial education quality improvement commission for the subcomponent on institutional reorganization of secondary schools.
- 3.5 This structure is based on line teams and institutional systems that have been responsible for programs with external financing and have executed PRISE and PNBE expeditiously, with high technical quality.

B. Program execution and administration

1. Provincial transfers

- 3.6 Program funds (Bank financing and the local counterpart) for the provinces will be nonreimbursable. The federal government will be responsible for repaying the entire counterpart and the government will make the necessary budget allocations for that purpose.
- 3.7 Program funds will be allocated to the participating provinces based on provincial development indicators and the quantification of needs under each component, which will be scaled in the annual operating plans to be presented by the provinces for approval by the UFI. No province may receive more than 20 percent of total program funds.
- 3.8 Distribution will be directly proportionate to the educational needs of the provinces and their poverty levels, inversely proportionate to provincial financial capacity and directly proportional to the efficiency of spending on education. A set of indicators and a weighting system have been defined to ensure that distribution of funds to the provinces is based on objective and transparent indicators. The following indicators will be used. *To measure educational requirements*, the provincial share of total enrolment in basic education, an indicator for the quality of learning in each province and the percentage of rural schools out of all schools in the province will be used. *To measure the poverty level*, the percentage of households with unmet

basic needs will be used. *Provincial financial capacity* will be measured by the weight of own resources out of total current income and *spending efficiency* will be measured by the share represented by nonsalary costs, including transfers to the private sector, out of total provincial spending. The purpose is to provide more funds as incentives for the provinces with lower percentages of spending on personnel. All the funds that the SEB distributes to the provinces for education, except for emergency spending and other specific programs, will be distributed using this mechanism.

Table III-2
Distribution criteria

Province	Rural schools	Students	Households with UBNs	Quality tests	Own receipts/total receipts	Personnel + transfers/total spending	Distribution among provinces
Buenos Aires	1.84	35.56	2.46	2.76	2.29	1.13	13.83
GCBA	0.0	4.33	0.00	0.00	0.00	4.79	1.99
Catamarca	7.31	1.17	5.17	6.03	5.11	2.04	3.86
Chaco	6.24	3.72	7.71	5.26	4.83	3.52	5.14
Chubut	2.20	1.44	3.55	4.59	4.95	3.31	2.83
Córdoba	3.86	7.04	1.72	3.52	3.29	0.00	4.07
Corrientes	6.35	3.57	5.76	3.43	4.56	6.76	4.83
Entre Ríos	4.70	3.22	2.90	3.07	3.93	3.03	3.42
Formosa	6.07	2.02	7.66	5.41	5.32	1.27	4.35
Jujuy	4.92	2.42	6.94	4.92	4.95	2.25	4.19
La Pampa	2.09	0.91	1.33	2.82	4.26	6.55	2.26
La Rioja	6.82	1.06	4.83	6.04	5.19	3.31	3.81
Mendoza	3.33	4.71	2.54	3.09	3.38	11.55	4.46
Misiones	5.75	3.32	6.35	5.71	4.73	3.87	4.73
Neuquen	3.71	1.80	3.57	4.47	3.75	6.13	3.34
Río Negro	3.58	1.92	3.72	3.13	4.13	5.35	3.22
Salta	4.83	3.82	7.34	4.82	4.51	5.56	5.02
San Juan	4.46	1.92	3.03	5.89	4.68	6.48	3.65
San Luis	4.56	1.19	3.45	3.84	4.51	4.37	3.06
Santa Cruz	0.08	0.69	1.80	4.45	4.57	8.31	2.35
Santa Fe	3.29	7.77	2.29	2.22	3.30	2.46	4.47
S. del Estero	7.81	2.58	7.31	5.79	4.95	1.76	4.79
T. del Fuego	0.93	0.36	3.77	3.40	4.36	5.77	2.37
Tucuman	5.25	3.47	4.83	5.31	4.44	0.42	3.98

- 3.9 The funds that have not been committed by the end of the second year, counted from the date of the first disbursement, will be made available to cover demand that was not met during the initial distribution. Provinces that have executed 100 percent of their initial allotments will have access to the secondary fund.

2. Provincial commitments

- 3.10 The program is compatible with the guidelines of the federal commitment to growth and fiscal discipline signed in November 2000 with the provinces, since it falls within the spending targets to achieve fiscal balance by 2005. The incremental costs of the program will not exceed 0.5 percent of the provincial education budgets, which will be financed with the funds saved by implementing the management strengthening component (see paragraphs 2.8, 2.26 and 2.35). The program also contributes to compliance with the fiscal discipline agreements, since it will help to reform the administrative and budget management of the provincial ministries.

- 3.11 Provincial participation will be voluntary. Given the objective of promoting ownership of program activities and mobilizing local resources, provincial commitments and contributions were established as requisites for gaining access to funds, which are set forth in the matrix of provincial commitments that forms part of the provincial participation agreements. Provincial contributions will not be computed as part of the local counterpart.
- 3.12 Transfers to the provinces will be made under the terms of the participation agreements, which will set forth the general commitments and responsibilities of the parties, as established in the Operating Regulations and their technical annexes. The specific commitments for each of the components will be defined in the specific annual plans to be presented by the province to the pertinent technical units and the agreements will be established in complementary instruments to the participation agreements, which will be signed by the provinces once a year. The timetable for complying with these commitments will be established in the annual operating plans that the provinces will present for approval to the Subsecretariat of Basic Education, after a report by the UFI. Technical assistance will be provided for preparing the annual operating plans for provinces that need it, to ensure that the plans are of good quality and are presented on time. The signature of participation agreements with at least three provinces will be a condition precedent to the first disbursement.
- 3.13 The following documents will form part of the participation agreements: the loan contract with the Bank, the Operating Regulations and their technical annexes, and the matrix of provincial commitments. The agreements will include the following special clauses. (i) The provinces undertake to implement the lines of action in the component for strengthening education system management and to comply with the obligations established in the matrix of provincial commitments, the logical framework and the program monitoring matrix. They will also make a commitment to reinvest the savings from implementing the component's actions in the education sector. This commitment will be confirmed by a letter from the provincial governor, to be attached to the agreement. (ii) Except for the management component, disbursements for the remaining components will be subject to approval of the specific plans for each component the pertinent technical unit in the MEN. (iii) The provinces will undertake to implement the institutional and curricular reorganization in a group of secondary schools, under terms and conditions agreed upon with the MEN. (iv) The MEN may suspend financing for components already begun or about to begin if it finds that the provinces have not complied with the commitments made in the complementary instruments.
- 3.14 Provinces that wish to participate in the program must meet the following requirements: (i) sign a participation agreement; (ii) establish a provincial executing unit as established in the Operating Regulations; and (iii) open specific bank accounts for the program. Once these requisites have been complied with, the UFI

will disburse funds to enable the provinces to make a start on the management component.

- 3.15 Eligibility for the first disbursement for the remaining components will be contingent on: (i) approval of the specific plans by the MEN's technical units; and (ii) approval of the annual operating plans by the SEB, after receipt of a report by the UFI. The first disbursements for the information and communications technology component will be conditional on establishing the consultative council and the first disbursement for the bursaries will be subject to Bank approval of the methodology and the terms of reference for evaluating the impact of this line of action.

3. Operating Regulations

- 3.16 Program execution will be governed by the loan contract and the Operating Regulations (OR). The regulations establish the mechanism for transferring funds to the provinces and eligibility criteria for the technical, economic, legal, social and environmental aspects of activities and investments. The following documents will form an integral part of the OR, since they define the technical standards for the program, its components, subcomponents and lines of action: (i) the program's organizational structure; (ii) the manual for the institutional reorganization of secondary schools; (iii) the manual of procedures for school-based training; (iv) the operating manual for the CAIEs; (v) the manual on compensatory activities (bursaries and student retention projects); (vi) the terms of reference for the internal and external program evaluations; (vii) the model participation agreement with the provinces, the matrix of provincial commitments and the complementary instruments; and (viii) the logical framework and the monitoring matrix. Placing the OR in effect will be a condition precedent to the first disbursement.

C. Program execution mechanisms

- 3.17 The program will be executed in a decentralized fashion by the MEN's technical units described above and by their counterparts in the provincial ministries, following the guidelines and criteria established in the OR. Transfers of program funds will be made to bank accounts opened by the provinces for that purpose. The main features of the execution of each component are described below.

1. Reform and expansion of secondary education

a. Improving the quality of secondary education

- 3.18 Execution of this component on the central level will be the responsibility of the Curriculum Management and Training Program, which is organized into specialized technical units to coordinate each of its lines of action, i.e., institutional and curricular reorganization in schools, teacher training, and the education adaptation and innovation centers (CAIEs). In the complementary instrument to be

signed by the MEN and the provinces, the latter will undertake to establish provincial education quality improvement commissions (CPMCs), chaired by the provincial deputy-minister of education, which will answer to the MEN for all aspects of execution.

- 3.19 ***Institutional reorganization of schools.*** The Institutional Reorganization Unit will provide the provinces with technical assistance for general coordination, supervision and evaluation of activities and results. The initial presentation and sensitization will be carried out through workshops and seminars for groups of provinces. The CPMCs will be responsible for coordinating and executing the activities in this line of action. The provincial technical units will be responsible for microplanning studies and for monitoring the reorganization of the work teams. A school youth coordinator will be responsible for managing and monitoring the youth activity centers.
- 3.20 Once a province has expressed interest in participating in this subcomponent, it will select at least 30 secondary schools from among those having more than 15 sections per cycle or level, that can be grouped together owing to their proximity or because they are in the same locality, and will invite them to participate in the program voluntarily. With technical assistance from the MEN, a microplanning study will be conducted in each school relating to consolidation of the curriculum, reorganization of teacher working hours and the establishment of work teams. The provincial teams will have a manual on the institutional reorganization of secondary school which will cover microplanning for each school and guidelines for the preparation of teaching projects and for the teacher team work, and for evaluation and monitoring of activities based on indicators of progress and results agreed upon in advance with the province. This manual will form part of the Operating Regulations.
- 3.21 ***Youth activity centers (CAJs).*** Schools in the process of institutional reorganization (except schools in the national student bursary program, which will implement student retention projects as part of that program) can apply to obtain funding for CAJs, by presenting a project, which must be approved by the CPMC. The commission, which may include participants from the MEN's technical unit, will establish the order of priority for allocating the funds, materials and school equipment requested for the project, based on the criteria included in the manual for the institutional reorganization of secondary schools. The manual establishes that projects must include a justification of how the CAJ activities will promote student retention and better school performance. This line of action will be implemented in about 15 percent of secondary schools and its continuity will be subject to an evaluation of the CAJs that will form part of the external mid-term evaluation.
- 3.22 Projects for CAJs may request up to US\$16,000, to be executed in 30 months. The funds will be allocated in three installments over 2.5 years, depending on progress toward the goals established for the CAJ and will be transferred by the UFI to the

special bank account of the provincial executing unit. Technical monitoring of the CAJs will be the responsibility of the CPMCs and will be based on the targets established in the projects.

- 3.23 Supporting documentation on expenditures for the CAJs will be submitted to the CPMC and the provincial executing unit, using forms designed for the purpose by the UFI, which will form part of the Operating Regulations, together with instructions for their completion and submission. The school principal will fill out the forms and sign them together with a member of the board of the school volunteers association, stating that the costs were incurred for the purposes claimed. The originals of the documents and the forms will be sent to the CPMC for subsequent forwarding to the provincial executing agency. The provincial commissions and executing agencies will verify the forms and check to see that the costs are eligible, and the provincial executing agencies will file and keep the supporting documents for review by the Bank and the UFI.
- 3.24 In the event there is no school volunteers association, the services of a qualified professional (notary or public accountant) can be used, who will advise the school principal on preparing and presenting the form and will sign it together with the principal. If the intervention of such professionals is required, the costs will be covered by program funds. The forms are to be accompanied by evidence that the professionals' professional licenses are current.
- 3.25 ***Human resource development.*** School-based training will use the institutional infrastructure of the Federal Continuing Education System for Teachers (RFFDC), under the coordination and supervision of the national office located in the Training Unit. The provincial offices will take charge of planning and monitoring school-based training activities and selecting provincial trainers. Training for the provincial trainers will be provided by central trainers contracted by the UFI. These activities will be based on the guidelines and criteria established in the OR, the manual of procedures for human resource development and the resolution regulating the operation of the RFFDC.
- 3.26 Training for provincial trainers will be provided by central trainers selected from among the best specialists in each of the training areas, who will be contracted by the pertinent technical team in the UFI, based on terms of reference established in the OR. The contents, teaching methods and basic training requirements will be prepared by the national and provincial offices of the RFFDC and will be revised annually by the executive committee of the Federal Education Council, whose function is to regulate the standards for training offered under the RFFDC.
- 3.27 The provincial trainers will be selected by the regional evaluation commission of the RFFDC, based on projects presented by eligible entities, which are the provincial teacher-training institutes, national and foreign universities and teams of trainers at the provincial offices. To be selected, the provincial trainers must be

accredited by the RFFDC and be included in the master provincial register (REFEPEC), which is renewed annually.

- 3.28 ***Education adaptation and innovation centers (CAIEs).*** There will be approximately seven CAIEs in each of the 24 provinces. The MEN's CAIE Unit will provide technical assistance for the provinces in selecting the institutions where the centers will be installed, based on criteria and guidelines to be established in the CAIE operating manual. Training for center coordinators and provincial referents, who will be responsible for coordinating activities, will be provided by the CAIE Technical Unit, through national and provincial sessions, specific activities designed in function of provincial demands and permanent technical assistance provided by the national level.

b. Support for equity

- 3.29 ***Student retention bursaries.*** This subcomponent will be executed using the same mechanism that was used in stage one of the national student bursary program, which will be responsible for the bursaries and the school student retention program. This mechanism is established in the OR.
- 3.30 The change with respect to stage one of the program is that starting in 2002, only schools whose risk index is above average for participating provincial schools will be eligible participate, in order to target the bursaries and complementary teaching support to the poorest 20 percent of students. In these cases, applications for the program by new schools must be justified using the UBN index for their zones taken from 2001 census data and the socioeconomic index for the school, calculated by the Education Quality Development Institute (IDECE). With the same goal in mind, starting in 2002 new bursaries will not be given to students in grade 8 in schools where the weighted average is less than 20 percent of enrolment, based on 2001 data. In such schools, the bursaries will only be paid to existing bursary holders, provided they continue to comply with the performance and promotion requirements.
- 3.31 The UFI will certify that the payment orders were made out to the adults responsible for the students or, by way of exception, to school principals, strictly applying the Operating Regulations. Participating banks will certify the payments. The provincial executing units will be responsible for verifying, in each case, that the participating banks repay the sums not disbursed for students to the UFI. The supporting documentation will be kept on file by the provincial executing units at the disposal of the Bank and the independent auditors for inspection and verification. This mechanism was used satisfactorily during the stage one of the bursary program.
- 3.32 ***School student-retention projects.*** These projects will be carried out in accordance with the manual on compensatory activities annexed to the Operating Regulations.

The mechanism for transferring resources from the provincial executing units to the schools and verification of supporting documentation will be the same as the one used for the youth activities centers. The amount for each project, which ranges from US\$3,000 to US\$6,000, will be determined in function of the number of students.

- 3.33 ***Teaching resources, texts and guides for teachers.*** These resources will be distributed to the schools with bursary students. Books and materials will be procured under the coordination and supervision of the Teaching Resources Unit based on the procedures described below, which are consistent with Bank policy for the procurement of goods for scientific, technological and conservation projects. The Curriculum Management and Training Program will establish a committee of experts to suggest a list of titles. Based on the preselected titles, the technical units responsible for the different components will select the final list in function of the program's technical requirements. Since each book is published exclusively by a given publishing company, the price will be negotiated with them, with the requisite that it must be at least 35 percent below the retail sales price. This mechanism has been used by the MEN in earlier programs and it has been able to obtain prices averaging 50 percent less than that the retail price.

c. Expansion of coverage and rehabilitation of schools

- 3.34 The works included in this subcomponent will be carried out in a decentralized fashion by the provinces, based on the standards governing works and the basic criteria and standards for school architecture, with technical assistance from and under the supervision of the technical team from the National School Infrastructure and Technology Program (PNIET). The standards and provincial execution structures have both been used in earlier Bank loans (PRISE and PNBE) and have proven to be highly efficient. All decisions on investments in civil works will be based on technical criteria agreed upon with the Bank and an evaluation of provincial requirements and priorities.
- 3.35 The Argentine government has already begun these investments, which made it possible to establish cost parameters and make progress in defining eligibility criteria for the construction of new works, expansions and rehabilitation. These criteria will take account of provincial capacity to absorb the incremental costs of new works that do not involve replacements in their education budgets. They will also consider provincial willingness to undertake the reforms established in the matrix of provincial commitments, particularly with respect to the management component. The provinces will require funds equivalent to 10 percent of the investments in infrastructure to maintain the works, whose consolidated figure is US\$29 million, which will be financed with the savings generated by the management component.

- 3.36 Inspection and supervision of the works, including environmental aspects, will be a provincial responsibility and will be performed by consultants or specialized firms. The costs for these items can be recognized as part of the cost of the works.

2. Information technology

- 3.37 This component will be executed by PNIET, which will oversee the integrated and synchronized execution of all the subcomponents.
- 3.38 All the training activities under this component will be duly coordinated with the annual training plan presented by each of the provincial offices of the RFFDC. Activities will be managed and monitored by the provincial offices, which will receive technical assistance and supervision from the national office located in the Training Unit.
- 3.39 To ensure integrated execution of the component as a whole, the specific plan must incorporate information and communications technologies into school practices. The plan will identify investment requirements for computer equipment, connectivity, training for teachers, principals and administrative staff, the strategy for managing information systems in schools and maintenance plans. Each province will also report on its actions to establish a technical team to oversee integrated execution of the component. The guidelines for preparing this plan appear in the Operating Regulations. The MEN will provide technical assistance for provinces that need it for timely preparation of the plans.
- 3.40 A technical committee will be established to advise the executing agency on the selection of materials and future needs for producing own materials. The committee's functions and responsibilities are established in the Operating Regulations.
- 3.41 To maximize the quality of decision making on education and technology, the MEN will appoint a consultative council, composed of senior representatives from the academic world in the fields on computing, communications and education and representatives from public companies with recognized experience in related areas. The main function of the council will be to orient execution of the component by advising the MEN on strategic options, emerging trends in technology and support for the program's educational goals. Establishment of the council, whose features are defined in the Operating Regulations, will be a condition precedent to the first disbursement of component resources.

3. Management

- 3.42 All the activities in this component will receive technical assistance from the Management Unit, which will be responsible for analyzing, planning and monitoring actions to improve management in the provincial ministries and the schools. This technical assistance includes retraining for human resources in the

provincial ministries. The team from the Administration Reform Program will be supported PNIET in procuring and distributing the computer equipment and software to be installed in the provinces and schools.

- 3.43 The component will help to ensure the financial sustainability of program investments, since the incremental recurrent expenditures that might be incurred by the provinces as a result of implementing the program can be financed from the savings made under this component. It will be compulsory for all provinces wishing to participate in the program, which must make commitments to targets for improved managerial and spending efficiency that will generate savings as a result of administrative reform. They must also make a commitment to reinvest the funds saved in the education sector. That commitment must be backed by the provincial governor or the Ministry of Economic Affairs, depending on the institutional structure of each province. These commitments will be included in the participation agreements.

D. Other aspects of program execution

1. Procurement³

- 3.44 Bank procedures will be followed in the procurement of goods and services to be financed from the loan, which will be included as an integral part of the loan contract. The selection and contracting of consulting services financed from loan proceeds will follow the procedures established in document GN-1679-3, which authorize consulting services to be contracted using price as an evaluation criterion, and fixed-price contracts for consultants. In contracts based on quality and price, the relative weight of price as an evaluation criterion may not exceed 20 percent. Therefore, the technical or quality element of the bid must account for at least 80 percent. International competitive bidding will be required for contracts for services over US\$200,000, for procurements of goods costing US\$350,000 and over and for works costing US\$3 million and over.
- 3.45 Except for the first bid, the documentation for procurements of goods and contracts for works below the above-mentioned thresholds will be subject to ex post verification. Given the considerable number of consulting services required for the program and to streamline execution and facilitate Bank supervision, it is recommended that the Bank's prior nonobjection only be required for contracts with consulting firms or individual consultants worth more than US\$100,000 and US\$50,000, respectively.
- 3.46 The teaching materials, equipment, textbooks and libraries included in the lines of action described above will be procured by the UFI and distributed by it to the provinces. The provinces will be responsible for distributing them to the schools.

³ Annex III-1 presents the tentative procurement plan.

Following procedures already tested under earlier programs administered by the MEN, independent distribution firms will be contracted and, in some cases, agreements will be entered into with other public agencies that have distribution capacity in remote areas, such as the armed forces. The materials to support the school-based training activities will be designed and produced by the MEN's Technical Training Unit and distributed to provincial trainers and teachers taking the courses, as part of the training activities. The equipment and furniture included in the subcomponent to expand coverage and rehabilitate buildings and the component to introduce information and communications technologies will be procured and distributed to the provinces in the same way.

- 3.47 The provincial executing units will send the receipts for these items to the UFI. The receipts from the schools must be signed by the school principal. The provincial and school receipts will be kept on file by the provincial executing units, at the disposal of the Bank and the UFI for review.
- 3.48 It has been agreed with the Bank that postqualification can be used for contracts for simple works (the majority of the works proposed). Under the system, the UFI will determine whether the bidder with the lowest-cost proposal complies substantially with the bid requirements and is qualified to satisfactorily perform the activities stipulated in the contract. If that bidder complies with the requisites, it will be awarded the contract. If not, the bid will be rejected and the second-ranked bid will be evaluated, and so forth, until the contract is awarded.
- 3.49 For international bids for computer equipment, annual procurements will be made in lots worth not less than US\$7 million. This procedure will facilitate the administrative processing of the bids and ensure fluid and timely distribution to the provinces and schools, in response to the requests presented in the specific plans. Spending on licenses and upgrades for software currently in use in approximately 95 percent of the schools will be charged to the local counterpart.
- 3.50 For some of the program's components, such as the youth activity centers and the student retention projects, the provinces and schools will make procurements in the event the cost is below the threshold for international bidding. Procurements of this kind can be made without the Bank's nonobjection, although the Bank reserves the right to perform ex post reviews.
- 3.51 In all cases in which procurements are made under ex post review procedures, the executing agency will be responsible for ensuring that they comply with the Bank's policies in general. It will particularly ensure in cases in which local legislation is applied, as established in the loan contract, that the procedures are not contrary to the basic provisions or to Bank policy. In each case, it should be verified that all the eligibility requirements have been complied with and that the necessary authorizations were obtained for procurements.

- 3.52 The MEN will establish a mechanism for internal control to periodically and systematically review program procurements made under the ex post review system in order to verify compliance, make proposals to improve procedures, train the decentralized executing agencies, identify deviations and ensure their correction. Internal control of procurement procedures will be performed by the UFI at the times and following the sampling and reporting procedures to be established in the OR.
- 3.53 The internal controls will cover the procurements made by the UFI, the provincial executing units and all program beneficiaries. The reviews will examine the supporting documentation for each procedure, which must be duly identified and filed as established in the OR. The Bank reserves the right to perform ex post reviews of the controls in all cases.

2. Maintenance of works and equipment

- 3.54 ***Works maintenance plan.*** The provinces will be responsible for of maintaining the works and the inclusion in their specific plans of a maintenance strategy and documentary evidence that funds are available to carry it out will be an eligibility criterion for program investments. Approvals of new works and major renovations will certify that they have a maintenance manual that includes the documentation established in the basic standards for school architecture.
- 3.55 The annual maintenance plans, which are to be presented to PNIET in the fiscal year following completion of the first work and for a period of five years, should include the following aspects: (i) description of the works to be performed; and (ii) quantification of the funds available in the budget for the current year and the sums spent in the previous year, broken down into categories. The UFI will present information to the Bank on school maintenance in the annual operating plans. If the Bank's inspections or the reports it receives indicate that maintenance is not up to the agreed levels, the UFI and the provincial executing units will take steps to correct the problems, in their respective spheres.
- 3.56 ***Maintenance of computer equipment.*** Technical assistance and maintenance of computer equipment and installations will be ensured through a combination of the following strategies: (i) the contracts for computer equipment will include clauses that require the suppliers to give guarantees to replace or repair equipment for three years after it is installed – the MEN has experience with contracts of this kind and has found them to be effective on previous occasions; and (ii) the national police and other public agencies will provide repair services and technical assistance for schools in border areas where access is difficult. The information and communications technologies plans to be presented by the provinces to the MEN for approval so that disbursements for this component can be authorized will include additional maintenance requirements, which will be financed by the

program. Maintenance agreements with at least two public agencies will be a condition precedent to the first disbursement.

3. Execution period and disbursement schedule

- 3.57 The revolving fund for this operation has been established with 5 percent of the loan proceeds. The UFI will present semiannual reports to the Bank on the status of the revolving fund within 60 days after the end of each six-month period. The following disbursement schedule is envisaged:

Table III-3
Disbursement schedule (US\$)

Source	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
IDB	118.30	122.91	152.50	119.57	86.72	600
Local contribution	118.35	122.91	152.50	119.57	86.72	600
Total	236.60	245.82	305.00	239.14	173.44	1.200
Percent	20	20	25	20	15	100

4. Monitoring and evaluation

- 3.58 Monitoring of the technical, physical and financial aspects of the program on the national and provincial levels will be the responsibility of the Office of the Executive Manager for Monitoring and Follow-up, which reports to the UFI, and the technical units that report to the SEB. Tools will be developed to track the indicators established in the monitoring matrix to verify progress in the provinces and detect their technical assistance requirements.
- 3.59 Two complementary strategies will be used for program monitoring and evaluation—an internal evaluation to be performed by the provincial technical teams in charge of program implementation and an external evaluation to be contracted with independent agencies. For the *internal evaluation*, each component will be monitored based on critical indicators for the main activities, using the logical framework and the monitoring matrix as the basis. The indicators will be systematized and analyzed at two stages in program execution in order to evaluate progress toward the objectives and the achievement of the partial and final targets for each component. A member of the work team for each component will be designated to evaluate and monitor the indicators.
- 3.60 For the *external evaluation*, a mid-term evaluation and a final evaluation six months prior to the final disbursement will be contracted, which will be coordinated and supervised by the Education Quality Development Institute (IDECE). A plan has been agreed upon which, apart from the two external evaluation reports, will include five special studies, two of which will coincide with the mid-term evaluation (evaluation of the youth activities centers and the impact of the

CAIEs) and three with the final evaluation (evaluation of the impact of the bursary program, the information systems program and the teacher-training activities).

- 3.61 To facilitate provincial reporting and analysis of the indicators to be used to monitor and evaluate the program and its components, IDECE will provide the schools with timely information on the educational indicators that are relevant for these purposes.
- 3.62 ***Annual operating plans.*** Based on the provincial annual plans (which are requisites for disbursements under each component), the UFI will present annual operating plans to the Bank that synthesize them and establish the national integrated plan for program implementation for each of the five years that the program will last. The first plan will cover the period between the date the contract is signed and 31 December of that year. The plans for the following years will run from 1 January to 31 December. They must be presented to the Bank for nonobjection by 1 December of the previous year.
- 3.63 ***Semiannual reports.*** Within 60 days after the end of each six-month period, the UFI will present physical, financial and technical progress reports to the Bank. The reports submitted 24 months after the initial report and six months after project completion will also include mid-term and final internal and external evaluations, based on the terms of reference annexed to the OR.
- 3.64 ***Progress reviews.*** The Bank will monitor the program regularly. It will review the annual operating plans each year and perform a general mid-term review 15 days after the mid-term report is presented. That report will contain information based on the external and internal program evaluations, allowing decisions to be made on whether to continue the youth activities centers and the education adaptation and innovation centers and on adjustments in school-based training.

5. Cost recognition

- 3.65 As requested by the MEN, spending of up to US\$50 million on goods and services after 31 March 2000 will be recognized from the local counterpart, provided that procedures substantially similar to those established in the loan contract have been followed. This sum represents spending on works and equipment and furniture for new and/or expanded schools.

6. Financial audits

- 3.66 Within 120 days after the close of each fiscal year during the program, the borrower, through the UFI, will present the program's consolidated, audited financial statements to the Bank. The UFI will also present the Bank within 60 days after the end of each semiannual period with a specific auditor's report on the revolving fund and the supporting documentation for loan disbursements. An independent auditing firm acceptable to the Bank will perform the annual program

audits and the semiannual audits of loan and local counterpart disbursements in accordance with terms of reference agreed upon in advance with the Bank.

7. Dissemination and promotion

- 3.67 The UFI will carry out an information campaign on program objectives and targets, and the actions and investments planned to achieve them. The indicators and achievements will be made public through communications campaigns during the program in order to promote community interest in higher quality education and accountability by the system for the results.

IV. FEASIBILITY AND RISKS

A. Institutional feasibility

- 4.1 The program will be executed by a MEN institutional structure with experience in programs with external financing, such as the education reform and investment program (PRISE), the project to decentralize and improve secondary education (PRODYMES), the program to reform administrative management in the education sector (PREGASE) and the national student bursary program (PNBE). These programs have been disbursed very close to schedule and have been considered successful by external evaluators. The program execution conditions will strengthen the International Financing Unit (UFI) with technical and management teams, constituting a high-level critical mass for leading the reform process in secondary education. The program will strengthen provincial structures, establishing installed capacity that will make for progress in provincial autonomy and increasingly efficient decentralization.
- 4.2 The proposed execution plan includes incentives to switch from a system of management by processes that does not respond to current demands for the use of time and resources to a system of management by results, which will promote accountability, transparency and efficiency. The incentives include the consolidation of working hours, hours without classroom responsibilities, and training for teachers, improvements in buildings, teaching resources and money for projects and savings that can be reinvested in the system by the provincial administrations.
- 4.3 The support that the Federal Education Council has given to the secondary education policies that will be strengthened under the program represents significant political backing for the objectives and goals proposed for the provinces.

B. Socioeconomic feasibility

- 4.4 For the socioeconomic evaluation of the program, an estimate of the quantifiable benefits and costs was performed based on the initial investment and recurrent expenditures. The main conclusion is that the program will bring major economic benefits for the public in terms of increased employability and expected wages, which will help narrow the income gap between rich and poor. The savings generated by improvements in human resource management will be more than sufficient to cover the recurrent expenditures stemming from program investments after it has ended, including continuity of federal bursaries and investments in infrastructure.
- 4.5 *Economic benefits for the public.* The benefits from the component for reform and expansion of secondary education are measured in terms of more years of

schooling, which lead to better employability and improvements in expected wages. The program, by raising education levels, particularly for the very poor, will improve employability by between 4 percent and 5 percent, other things being equal, depending on sex and starting level. It will also increase the productivity of labor, measured in wages, by sex and starting educational level, in a range between 18 percent and 38 percent. The program's educational benefits, increased coverage of secondary education, the higher percentage of students who complete the third and the composite cycles, and the increase in years of schooling among the public in general are expressed in the program's targets (Table II-1).⁴ The economic benefits estimated on the basis of the educational targets are summarized in the following table.

Table IV-1
Economic benefits of the program

Economic benefits for end beneficiaries	Initial situation		Expected results	
	Men	Women	Men	Women
Increase in employability (% employment)				
• Completed the third cycle	64%	40%	69%	45%
• Completed the composite cycle	69%	45%	73%	49%
Expected increase in wages (men having completed primary school = 100)				
• Completed the third cycle	100	85	118	102
• Completed the composite cycle	118	102	164	139

Source: RES, Social Information Service using data from the MECOVI program.

- 4.6 The estimated rates of return on education suggest that the largest increases in expected wages and employability occur between completion of high school and completion of university. The rates of return for each additional year of education rise from 10 percent to 18 percent, expected salaries are multiplied between 2.3 and 2.5 times and the probabilities of finding a job grow by 30 percent for men and 60 percent for women. The estimated benefits do not include these aspects, since they are beyond the scope of the program, and therefore the estimates are conservative since they are limited to measuring the benefits from increases in secondary schooling. However, since completing high school places the graduate in a position to study at university, there will be significant additional benefits for students who are able to finish thanks to the program. Completing high school becomes a minimum requisite and policies to support the improvement and expansion of this level are keys to breaking the cycle of intergenerational transmission of poverty and permitting more and more students to gain access to post-secondary education and better-paying jobs.

⁴ The benefits from better quality of education have not been considered since they are difficult to quantify. The savings from reducing drop-out and repeater rates have not been included, since they do not form part of the economic benefits that can be appropriated by individuals. These savings should be added to the benefits for the education system as a whole.

- 4.7 *Benefits for the education sector and the sustainability of investments.* For the component to strengthen management of the education system, the benefits are measured in terms of savings in salary costs from more efficient use of teacher time by adjusting teaching hours to study plans, reducing supply teaching and eliminating duplications in salary payments that arise from the way in which the functional staff of the provincial education systems is organized. A conservative estimate of these benefits suggests that reductions of about 5.6 percent can be obtained in salary costs, equivalent to US\$547 million a year. The progress in human resource management made so far in Tucuman and Catamarca allowed salary costs to be reduced by about 10 percent.
- 4.8 The recurrent expenditures from the program are about US\$150 million a year on the federal level and US\$205 million in incremental costs for the provinces. The federal recurrent expenditures stem from continuing the bursaries and student retention projects after the program has ended (US\$70 million a year), continuing to invest in school infrastructure and equipment (US\$60 million) and continuing to fund school materials and training activities (US\$20 million). The provinces will have to pay the salaries of the additional teachers needed as a result of increased coverage linked to the expanded supply (US\$56 million a year). They will also have to pay for additional teaching hours for institutional and curricular reorganization (US\$97 million) and take charge of school maintenance (US\$29 million) and the replacement of computer and connectivity equipment (US\$23 million).
- 4.9 The preceding estimates indicate that potential savings as a result of the program will be sufficient to self-finance the continuity of the main lines of investment after the program is completed, without increasing total spending by the education system. Net annual savings will be US\$340 million for the provinces or close to US\$200 million in consolidated education costs between the federal and provincial levels. The savings will make it possible to increase investments as a percentage of spending on basic education by close to three percentage points, to 10 percent or 11 percent by 2006. Since most of these savings directly impact provincial finances, they will permit the provinces to shoulder a larger percentage of investment costs, while reducing fiscal imbalances in the provinces between revenues and current expenditures, which are largely due to education sector salaries.

C. Social impact

- 4.10 The program will improve the education levels and employment opportunities of young people, particularly from very poor families. Although programs to improve secondary education traditionally benefit children from middle-income families, a significant part of the resources of the proposed program are targeted to the retention and inclusion of the very poor, who are the ones at risk of dropping out of school to work. Given educational development in Argentina, inequality is largely determined by unequal access to secondary school by youths from different

socioeconomic levels and provinces with different levels of development. By increasing the supply of education on this level, the program will help to correct this inequity and produce individual social benefits for young people by improving their future employability, and for society in general, by providing a better educated workforce, which will boost the competitiveness of the economy.

- 4.11 Despite these clear benefits in terms of social equity, the program as a whole does not qualify as a poverty-targeted investment, since the number of beneficiaries living below the Bank's poverty line is not 50 percent of total beneficiaries. Poverty in Argentina affects about 20 percent of the population, which is the same as saying that the poor are families in the first income quintile. Schooling in this group averages just 8.6 years, which means that the poor do not usually complete the third cycle and therefore most do not go on to the composite level. Since the bulk of program investments are targeted to these two cycles, their beneficiaries will come from the both poorest and the middle quintiles. Calculations on the distributional effect of spending on education show that more than half of the potential beneficiaries of the program will come from the second, third and fourth quintiles, which are above the poverty line.

D. Environmental impact

- 4.12 Since the works are not complex and the construction period will be short, the program is not expected to have any direct significant environmental impact. The MEN will update its 'Criteria and standards for school architecture' (October 1998), which are intended to provide basic technical guidelines for the use of school space and equipment. In particular, the criteria define the parameters for: (i) suitable location of schools; (ii) construction conditions; (iii) conditions for livability, comfort and safety (heating and acoustics, ventilation, natural and artificial lighting, safety requirements); and (iv) sanitary installations which, apart from complying with the standards of the Federal Office of Sanitary Works, must meet specific conditions in schools (water, sewers, storm drains, and materials and fixtures). The criteria for the construction and operation of schools also take account of the different bioenvironmental and seismic zones in the country and factors relating to solar and wind energy. The mechanisms for complying with these standards are established in the OR.

E. Gender considerations

- 4.13 Like the more developed countries of Europe, the Americas and the Caribbean, in Argentina, girls attend all levels of secondary school under the same conditions as boys. The problem lies in the reproduction and transmission of stereotyped roles through textbooks, language and teaching practices that steer girls into traditional activities and areas. The program will carry out the following activities to stem the transmission of stereotypes: (i) care will be taken to ensure that textbooks and the materials and contents of training activities financed by the program do not contain

stereotypes that are limitations on girls; (ii) teacher training in the use of information and communications technologies in schools will include strategies to ensure equal access by girls and boys to computers; (iii) bursaries will be allocated proportionate to the number of girls at risk in each school; (iv) the compilation of educational statistics broken down by gender will be promoted; and (v) the impact of school reorganization on female teachers will be monitored during the program.

F. Multiculturalism

- 4.14 Since 1997, the MEM has been carrying out a bilingual intercultural education program that provides technical and financial assistance for schools, indigenous organizations and NGOs to ensure student retention and the quality of education for indigenous groups. Since 1999, teacher education delivered through the RFFDC includes the diploma of bilingual intercultural teacher for kindergarten and general basic education. Through the quality improvement component, the proposed program will support three of the five lines of action that the MEN is implementing in this area: (i) production of contextualized and bilingual materials for secondary education; (ii) training for the recovery of indigenous languages and knowledge; and (iii) modification of the curriculum in mathematics, social sciences and language to promote interculturalism and enhance the image of indigenous peoples in society.

G. Benefits

- 4.15 This operation will consolidate institutional capacity and strengthen educational management on the national, provincial and school levels and improve integration of those levels, which will make for better planning. The investments will raise the quality and relevance of secondary education and improve student access and performance. The end result will be an increase in school retention rates and learning levels, which will translate into more years of schooling and better future employability and productivity of young people, especially those who are less favored. The incorporation of information and communications technologies into schools will also help to raise the quality of education, by providing teachers with the capacity to teach the new curriculum effectively and modernize their teaching practices. These benefits are particularly relevant for students at a social disadvantage, who are most affected by the consequences of the digital gap.

H. Risks

- 4.16 Weak institutional capacity in some provinces could make it difficult for them to join the program immediately. To ensure their inclusion from the outset, the ministry's International Financing Unit (IFU) will provide technical assistance for those provinces in preparing specific plans for each component and annual operating plans. A monitoring system will also be developed to detect provinces that require technical assistance during the program. Last, participation in the

component to strengthen education system management is compulsory for all provinces, which will help to strengthen and prepare them in this area.

- 4.17 The government wishes to improve efficiency in the use of teacher time by consolidating teacher working hours in the same school. This means that existing contracts for hours/subjects in different schools will have to be changed to contracts focused on a single school. Reformulation of the contracting systems could lead to resistance from teachers' unions if this measure is seen as an attempt to amend the teachers' statutes that guarantee special labor benefits to the unions. To mitigate this risk, the program will support reformulation of teacher contracting systems through direct work with the schools, accompanying the consolidation of teaching hours with additional class-preparation and professional-development time during working hours. This is a large incentive for teachers. Changes in the teachers' statutes will be carried out independently of the program, through the Federal Education Council, whose Teacher Classification Commission has made recommendations that support the strategy to be used in the program.

ARGENTINA

EDUCATION SYSTEM IMPROVEMENT PROGRAM (AR-0176)

JUNE 2001

FINANCING OF BASIC EDUCATION IN ARGENTINA: COMPENSATORY INVESTMENT POLICIES OF THE NATION AND THE ROLE OF IDB EXTERNAL FINANCING

Analysis of National Education Financing Policies¹

The impact on the education system of the provinces' serious fiscal situation in the 1990s meant that most provinces were barely able to cover more than salaries of personnel (in public and subsidized private schools), with little funding left over for operations. Financing for capital outlays, training, other special programs, and compensatory policies for low-income groups simply did not exist.

Since these difficulties were faced by most provinces, the Federal Ministry of Education sought to correct the imbalances between the provinces and the different social groups. In 1993, it began to contribute funds, goods, and technical assistance to improve the quality of education and took compensatory actions to make it possible for children and teenagers from low-income groups to join and remain in the system.

Since 1993, the Federal Ministry of Education has set in motion a compensatory action program for education whose primary objective is to eliminate dilapidated schools in rural areas (*escuelas rancho*). Under the program, the sum of \$104.6 million was transferred to the provinces that year. Of that amount, 88 percent was allocated to infrastructure and the remainder to equipment. This initiative, which ended in 1999, distributed \$682.1 million. In 1997, IDB-funded bursaries began to be distributed under that program to students from low-income families in grades 7 to 9 (cycle 3) and grades 10 to 12 (composite or polymodal cycle) as an incentive to remain in school. These bursaries amounted to \$600 per student per year, a sum that was intended to replace the equivalent income that a student could have earned in the workplace. A total of \$10.5 million was allocated in 1997 and \$124.8 million in the 1997-1999 period. The counterpart contribution took the form of equipment, books, tools, subsidies for teaching materials, and investments in equipment, which amounted to transfers of \$165.2 million to the provinces in 1998 and 1999.

¹ An expanded study including a comparative analysis of economic capacity and the fiscal situation in the provinces and trends in spending on education is available in the RE1/SO1 files.

Thus, under the Compensatory Action Program in Education, a total of \$972.1 million in goods and resources was transferred to the provinces, with approximately 70 percent going to grades 1 to 6 (cycles 1 and 2) and the remainder going to the 3rd and composite cycles. In 1994, the Federal Education Pact was signed between the federal government and the provinces. As part of the agreement, the two levels of government made a commitment to increase spending on education by \$3 billion between 1995 and 1999. The economic problems that began to undermine federal and provincial public finances prevented the pact from being fully complied with.

From 1995 to 1999, the federal government transferred \$546.2 million to the provinces, of which 86.3 percent went for infrastructure and the remainder for equipment and bursaries. In addition, transfers were made for primary and secondary school teacher training, with a sum of \$145.1 million being distributed between 1994 and 1999. The investment programs are summed up in Table 1.

Table 1
The federal ministry's principal basic education investment programs
(In millions of pesos)

Investment programs	1994	1995	1996	1997	1998	1999	2000
Compensatory actions (Social Plan)	162.1	95.9	123.9	132.7	180.8	172.0	88.1 (33.9)**
- Equipment	59.3	51.7	58.8	82.2	84.7	80.4	
- Infrastructure	102.8	44.2	65.0	40.0	40.0	33.4	
- Bursaries				10.5	56.1	58.2	54.2
Federal education pact		82.2	143.9	210.9	150.5	30.7	43.9*
- Equipment		10.1	25.1	21.5	14.8	3.0	
- Infrastructure		72.1	118.7	189.4	135.7	27.7	
Admin. reform program		2.8	6.4	22.5	37.7	37.4	26.3
Teacher training	44.6	37.6	35.0	51.4	46.3	18.7	23.1
Eval. of educ. quality	2.9	3.1	3.1	5.3	4.9	5.9	9.5
Innovations in education							1.2
Educ. project and program management							14.9
TOTAL	209.6	221.6	312.2	422.9	420.3	264.7	207.1

Source: Prepared on the basis of information from the Secretariat of Basic Education.

Note:* Corresponds to the school equipment and infrastructure program.

****** Of the \$88.1 million allocated under the Compensatory Action Program in 2000, only information on bursaries was available at the time of writing, and no breakdown of the remainder was available.

The preceding paragraphs mention only those programs that transferred funds to the provinces, with a direct impact on their budgets. There are other federal programs which, although they do not transfer funds, are extremely important nonetheless. Examples include the technical assistance programs whereby the federal and provincial levels work closely together in different areas such as administrative reform, education spending, training and curriculum reform.

There are also programs to provide information for the federal and provincial ministries that are essential in shaping education policy. They include the Education Evaluation Program and the Federal Information System. The evaluation program has administered tests in different years of primary and secondary school in the public and private systems based on a sampling system since 1993. In 1999, a single examination was introduced for all students in the fifth year of middle school.

The investment programs by level of education addressed are summarized below.

- The Compensatory Action Program in Education earmarked most of the funding for equipment and infrastructure for primary schools, considering that it was intended to eliminate *escuelas rancho*, which are found mainly at this level. Subsequently, the program allocated fund to repair and upgrade classrooms to permit implementation of the Federal Education Act.
- The bursaries program was earmarked for the 3rd and composite cycles, with 80 percent of resources going to cycle 3.
- Funding for equipment and infrastructure under the Federal Education Pact has an equal impact on primary and secondary schools. The purpose of this program centered on construction of new works and, to a lesser extent, on repairing and upgrading existing structures and providing them with equipment.
- The purpose of PRODYMES I and PRODYMES II was to reform the 3rd and composite cycles and part of the proceeds were transferred to the provinces for that purpose. The remainder was allocated to the central level (Federal Ministry of Education) to provide technical assistance for the provinces and train officials in the provincial ministries, etc.
- Prior to 1999, the Teacher Training Program was aimed mainly at primary school teachers and with less emphasis on the secondary school level.
- The Education Quality Evaluation Program is the only one listed in the table that does not have a direct impact on schools or the administrative areas of the ministries. However, it does help to formulate education policy for specific sectors.

These programs have been funded since 1995 from the public treasury and external loans raised by the national and provincial governments. Table 2 shows that between 1995 and 2000 aggregate external borrowing amounted to over \$600 million.

Table 2
External loans for the federal
and provincial ministries of education
1995-2000

Bank	Loan earmarked for		Total
	Federal	Provincial	
IDB (Bursaries and PRISE)	174.0	231.4	405.4
IBRD (PRODYMES I and II)	104.5	94.8	199.3
Total	278.5	326.2	604.7

It should be noted that the loans going to the federal ministry are transferred to the provinces through the different operations mentioned in the preceding paragraphs and are not executed by the ministry itself. The loans to the provinces, funded by the IDB (PRISE) were available to all provinces, whereas the World Bank loans went only to six of them.

The relative importance of the sources of financing for the Federal Ministry of Education's different basic education programs has shifted since 1994, with financing from the national treasury (Source 11) declining from 100 percent in 1994 to 78.7 percent in 2000. At the same time, financing from external sources has increased (Source 22) as shown in Table 3.

Table 3
Internal and external financing broken down by source
Basic education as a percentage

Year	IDB	IBRD	Federal Government	Total in millions of \$
1994	0.0	0.0	100.0	508.7
1995	0.0	0.4	99.6	551.5
1996	0.0	0.8	99.2	703.8
1997	1.4	1.6	97.0	676.4
1998	6.8	3.7	89.5	677.6
1999	16.7	6.8	76.5	446.9
2000	14.6	6.7	78.7	360.1

Source: Prepared on the basis of data supplied by the Department of Basic Education.

Nonetheless, the ministry's budget for basic education has been declining since 1994. In 1996, nearly \$700 million in works were carried out with internal funding. In 2000, the figure had fallen to \$360 million. To offset this drop, financing was raised abroad

commencing in 1995 through World Bank loans for secondary school reform (PRODYMES I and II) and IDB loans for investment in primary education (PRISE and bursaries).

Table 4 shows that for 2001, the ministry has budgeted \$547 million in spending on basic education, with \$81.5 million coming from external loans and \$465.5 million from the Treasury Department and the Infrastructure Trust Fund.

Table 4
Five-year projected flows of funds
In millions of \$

Source of financing	2001	2002	2003	2004	2005	2006	2007
IDB new loan	0.00	125.05	166.49	144.69	87.32	71.64	0.00
National Treasury	465.55	418.49	380.55	402.35	459.72	475.40	547.04
Other sources *	81.49	3.50	0.00	0.00	0.00	0.00	0.00
Total	547.04	547.04	547.04	547.04	547.04	547.04	547.04

Source: Prepared on the basis of data supplied by the Department of Basic Education

* IBRD undisbursed balance

The Argentine government estimates that to press ahead with the programs and targets established under the Federal Education Act and to meet the growing demand for enrollment it will need approximately \$550 million in annual investment starting in 2001. It plans to maintain a mix of federal funding and external borrowing. At present, it is negotiating a loan with the World Bank to permit a more balanced mix between the two sources of financing. If this loan does not materialize by 2003, the federal government will make up the shortfall in order to meet the requirements of the programs and targets to support the provinces.

**LOGICAL FRAMEWORK
EDUCATION SYSTEM IMPROVEMENT PROGRAM
AR-0176**

Component	Objectives	Indicators	Means of Verification	Assumptions
I. Reform and expansion of secondary education				
Improving the quality of secondary education	<ul style="list-style-type: none"> To improve academic performance and lower repeater and drop out rates To consolidate teaching hours for curriculum reorganization To establish teams of teachers for curriculum reorganization To establish youth activities centers 	<ul style="list-style-type: none"> Academic performance Repeater rate Drop out rate No. of schools with teaching teams No. of education improvement projects No. of youth activity centers in schools No. of resources and materials for students and teachers distributed in schools 	<p>IDECE information system</p> <p>School database for students</p> <p>Teaching Resources Unit database</p>	The provinces have the will to make good on commitments
Human and institutional resources	<ul style="list-style-type: none"> To train secondary school teachers through a dual system (workplace and distance) To train secondary school principals and supervisors To facilitate access to teaching and curriculum materials for teachers to renew teaching practices 	<ul style="list-style-type: none"> No. of teachers receiving training in the workplace No. of trainers receiving training No. of teachers receiving distance education No. of principals trained in curriculum management through workplace and distance training No. of supervisors trained in curriculum management No. of training resources and materials for teachers on printed and computerized supports distributed by school 	<ul style="list-style-type: none"> Monitoring database operated by the Information Unit Distance training database Database of the Federal Register of Projects, Evaluation and Certification (REFEPEC) Monitoring database operated by the Teaching Resources Unit 	<ul style="list-style-type: none"> The school database is standardized and valid at the national level The Federal Register of Projects, Evaluation and Certification (REFEPEC) is updated to August Specialized human resources are available for the special content

Component	Objectives	Indicators	Means of Verification	Assumptions
Management of education adaptation and innovation centers (CAIEs)	<ul style="list-style-type: none"> To strengthen continuing teacher education processes in schools To facilitate access to teaching and curricular materials for teachers to renew teaching practices 	<ul style="list-style-type: none"> No. of education adaptation and innovation centers established No. of teaching proposals received by the CAIEs Use rate of CAIE teaching materials and resources Use rate of teaching materials and resources by type 	<ul style="list-style-type: none"> CAIE database Reports on the centers by the zone committees CAIE database Records of consultations of the CAIE database 	
<p>Support for equity</p> <p>Distribution of bursaries</p> <p>Management of student projects</p> <p>Management and distribution of learning resources and materials</p>	<ul style="list-style-type: none"> To provide financial support for low-income students with good performance To develop curricular and extracurricular support programs for young people at risk of dropping out To provide schools with bursary students with learning resources 	<ul style="list-style-type: none"> No. of students with bursaries by circuit Total number of bursaries No. of schools with student retention projects in progress No. of schools that carry out social integration programs for students at risk No. of classroom libraries per school 	<ul style="list-style-type: none"> PNBE database Visits and plans for monitoring student retention projects Inventories 	<ul style="list-style-type: none"> The provinces give priority to student retention as part of education policy
<p>Expansion of coverage and quality of schools</p> <p>Construction of schools</p>	<ul style="list-style-type: none"> To construct new buildings in areas of demographic growth. To replace dilapidated, unsafe or unsuitable structures To expand existing buildings to handle increased enrolment (classrooms, bathrooms, workshops, laboratories, etc.) 	<ul style="list-style-type: none"> No. of new square meters constructed: covered, semicovered, outside, No. of students served No. of new square meters constructed: covered, semicovered, outside, No. of students served 	<ul style="list-style-type: none"> Works inspection certificates 	<ul style="list-style-type: none"> Land is available for school works

Component	Objectives	Indicators	Means of Verification	Assumptions
Repairing and rehabilitation of schools	<ul style="list-style-type: none"> To upgrade existing school buildings to meet new educational requirements (staff rooms, youth activities centers, etc.) 	<ul style="list-style-type: none"> No. of square meters rehabilitated and/or upgraded No. of students served 		
Repairs and minor works	<ul style="list-style-type: none"> To assist provinces with minor repairs to existing buildings 	<ul style="list-style-type: none"> No. of buildings repaired No. of students served 		
Equipment	<ul style="list-style-type: none"> To provide school equipment for classrooms, workshops, and laboratories for new buildings and to replace equipment in poor condition 	<ul style="list-style-type: none"> No. of classrooms equipped No. of laboratories, workshops, gymnasiums, and lunchrooms equipped No. of students served 	<ul style="list-style-type: none"> Inventory of school furniture 	

2. Incorporation of information and communications technologies (ICT) into the education system

Training for teachers, principals, and administrative staff	<ul style="list-style-type: none"> To train teachers, principals, and administrative staff in basic skills for using computer and internet resources for practical school applications 	<ul style="list-style-type: none"> No. of teachers trained for each line of action No. of principals and administrative staff trained No. of pilot projects completed No. of Internet distance courses offered 	<ul style="list-style-type: none"> Federal Register of Projects, Evaluation, and Certification (REFEPEC) Final report on evaluated pilot projects 	<ul style="list-style-type: none"> Requests are made by communities and schools
Distance-based training	<ul style="list-style-type: none"> To train teachers, principals, and administrative staff in incorporating ICT into school management and in creating significant learning experiences 	<ul style="list-style-type: none"> No. of schools involved in training processes No. of Internet distance courses No. of principals trained in ICT management courses No. of administrative staff trained 	<ul style="list-style-type: none"> REFEPEC 	<ul style="list-style-type: none"> Provincial financing available to cover fees of lead teachers
Distribution of training and materials	<ul style="list-style-type: none"> To provide trainers and schools with suitable materials to support ICT use in multimedia formats 	<ul style="list-style-type: none"> No. of materials distributed to schools 	<ul style="list-style-type: none"> Records of delivery of materials to schools 	

Component	Objectives	Indicators	Means of Verification	Assumptions
<p>Activity infrastructure</p> <p>Public schools</p> <p>Construction, expansion, and upgrading of multimedia resource centers and computer classrooms</p> <p>Supplying of electric power infrastructure in schools</p> <p>Upgrading of communications infrastructure in schools</p>	<ul style="list-style-type: none"> To construct multimedia resource centers or computer classrooms To supply to schools lacking this service To repair, complete, and/or install communications facilities in schools to support computer equipment 	<ul style="list-style-type: none"> No. of new and recycled square meters No. of computer classrooms and multimedia resource centers assisted No. of schools with inadequate electrical installations upgraded % of schools not previously connected in which connections have been installed 	<ul style="list-style-type: none"> Inspection of works 	
Computer equipment	<ul style="list-style-type: none"> To supply schools with computer equipment for use in educational activities 	<ul style="list-style-type: none"> % of schools with equipment % of schools with at least one Internet access No. of students per computer per school No of computers per school 	<ul style="list-style-type: none"> Computer equipment inventory 	

3. Improving education system management

<p>Strengthening the Federal Ministry of Education</p> <p>Improving the national management information</p>	<ul style="list-style-type: none"> To make reliable and timely information available on the main aspects of the education system and applicable regulations To provide the Federal Ministry of Education with indicators on 	<ul style="list-style-type: none"> Reliable updated database fed by integrated provincial human and physical resource management systems 'Control panels' installed in different levels of authority with indicators on national 	<ul style="list-style-type: none"> Periodic reports on the management information system Findings of the student/teacher census 	<ul style="list-style-type: none"> All provincial payrolls fed into human resource databases installed in provincial ministry of education
---	---	--	---	---

Component	Objectives	Indicators	Means of Verification	Assumptions
	impact, monitoring, and executive management reports <ul style="list-style-type: none"> To design and implement a computerized digest of regulations 	education system administration <ul style="list-style-type: none"> Computerized digest of regulations with mechanisms for consultation and updating Census conducted by the Education Quality Development Institute (IDECE) 		
Strengthening of provincial management Strengthening education information systems Strengthening of management in the areas of planning and control, human resources, budget and financial accounting, school infrastructure, school administration, and master file	<ul style="list-style-type: none"> To improve the quality and effectiveness of provincial education management by providing: Management information systems Computer skills and tools for planning and management control Savings for reinvestment in education system 	<ul style="list-style-type: none"> 'Control panels' with monitoring and impact indicators, in place and functioning at different levels of authority within system Time and cost savings in processing essential human resource data <ul style="list-style-type: none"> Savings generated by administrative management and control of POF and LUD Decline in absenteeism	<ul style="list-style-type: none"> Periodic reports on management information system Time and cost savings measurements before and after implementation of administrative reengineering Recording of errors noted in personnel files and staffing tables Management control reports, monitoring of budget performance	
Strengthening of school management	<ul style="list-style-type: none"> To reduce administrative time and costs in schools by expediting and simplifying data transmission and input processes 	<ul style="list-style-type: none"> School management software and computer equipment installed and in use in schools 	<ul style="list-style-type: none"> Periodic reports on the management information system 	<ul style="list-style-type: none"> Connectivity is maintained for schools
Information and development management		<ul style="list-style-type: none"> Transmission of school management information to central administrations using software 	<ul style="list-style-type: none"> Measurements before and after implementation of time and cost savings 	

component	Objectives	Indicators	Means of Verification	Assumption
for school principals secretaries			<ul style="list-style-type: none"> • Technical inspection • Inventories • Consolidated school information 	

PROCUREMENT SCHEDULE

Items	YEAR 1			YEAR 2			YEAR 3			YEAR 4			YEAR 5	
	ICB		Local law (LCB, CB, PS, DC)	ICB		Local law (LCB, CB, PS, DC)	ICB		Local law (LCB, CB, PS, DC)	ICB		Local law (LCB, CB, PS, DC)	ICB	
	Quantity	Amount		Quantity	Amount		Quantity	Amount		Quantity	Amount		Quantity	Amount
Low works	-	-	57,300,000	-	-	66,850,000	-	-	19,100,000	-	-	13,370,000	-	-
Grading and conditioning	-	-	19,100,000	-	-	14,325,000	-	-	9,550,000	-	-	4,775,000	-	-
Electricity	-	-	8,117,500	-	-	5,730,000	-	-	1,910,000	-	-	-	-	-
Classrooms and centers	-	-	14,325,000	-	-	9,550,000	-	-	4,775,000	-	-	-	-	-
Furniture and equipment	-	-	14,325,000	-	-	14,325,000	-	-	7,640,000	-	-	1,910,000	-	-
Communications	2	5,400,000	3,672,500	2	5,700,000	3,850,000	2	5,700,000	3,850,000	-	-	-	-	-
Computer equipment	9	63,000,000	6,300,000	8	56,000,000	3,400,000	4	28,000,000	1,700,000	2	14,000,000	3,500,000	-	-
	-	-	15,533,000	-	-	10,683,000	-	-	11,183,000	-	-	13,833,000	-	-
EQUIPMENT	1	1,000,000	700,000	2	3,000,000	900,000	1	1,500,000	500,000	-	-	-	-	-

SCHEDULE FOR HIRING CONSULTING SERVICES*

Consulting services	Year 1	Year 2	Year 3	Year 4	Year 5
Individual consultants	23,091,000	23,423,000	24,666,000	19,751,000	16,374,000

* See the list of consulting services by province in the addendum (page 2 of 2).

BREAKDOWN BY PROVINCE CONSULTING SERVICES						
PROVINCES	TOTAL CONSULTING SERVICES –PERSON/HOURS					
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Buenos Aires	1,109	1,425	1,881	1,343	853	6,611
GCBA	350	427	504	331	299	1,911
Catamarca	497	559	619	464	392	2,532
Chaco	867	965	1,087	817	741	4,477
Chubut	547	590	638	547	503	2,825
Cordoba	672	799	900	607	542	3,520
Corrientes	556	644	767	552	441	2,960
Entre Ríos	539	606	682	548	440	2,815
Formosa	580	647	719	562	502	3,009
Jujuy	536	611	688	521	428	2,784
La Pampa	357	391	422	336	303	1,809
La Rioja	491	549	605	460	401	2,505
Mendoza	680	785	880	624	555	3,524
Misiones	688	760	866	678	616	3,608
Neuquén	489	549	605	473	390	2,506
Rio Negro	499	537	596	495	450	2,576
Salta	676	769	900	677	558	3,581
San Juan	515	571	626	499	446	2,657
San Luis	431	478	530	421	371	2,232
Santa Cruz	350	390	425	321	285	1,770
Santa Fe	798	867	1,053	883	854	4,456
Santiago del Estero	668	748	860	645	552	3,473
Tierra del Fuego	515	551	584	495	460	2,604
Tucumán	458	540	613	410	357	2,378
SUBTOTAL	13,867	15,758	18,050	13,710	11,738	73,123
Executing Unit (federal)	444	444	444	444	444	2220
TOTAL (person/hours)	14,311	16,202	18,494	14,154	12,182	75,343
Consultant/year equivalent	1,193	1,350	1,541	1,180	1,015	6,279
Annual consulting services	23,091,072	23,423,144	24,666,346	19,751,188	16,374,092	107,305,842
Average monthly fees	1,614	1,446	1,334	1,395	1,344	1,424

PROPOSED RESOLUTION

**ARGENTINA. LOAN /OC-AR TO THE NACION ARGENTINA
Education System Improvement 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 Nación Argentina, as Borrower, for the purpose of granting it a financing to cooperate in the execution of an Education System Improvement Program. Such financing will be for the amount of up to six hundred million dollars of the United States of America (US\$600.000.000), which are part of the Single Currency Facility of the Ordinary Capital resources of the Bank, and will be subject to the "Special Contractual Conditions" and the "Financial Terms and Conditions" of the Executive Summary of the Loan Proposal.