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MEMORANDUM FOR THE LA BUREAU DEVELOPMENT ASSISTANCE EXECUTIVE COMMITTEE

5110450

FROM : USAID/Bolivia

SUBJECT: BOLIVIA IRR - EDUCATIONAL MANAGEMENT AND INSTRUCTIONAL DEVELOPMENT

1. BORROWER: The Republic of Bolivia

Executing Agency: Ministry of Education

2. AMOUNT AND TERMS: The amount of the proposed Loan is \$5.3 million out of a total project cost of \$8.3 million. There will be a forty-year repayment period, including a ten-year grace period, with interest at 2% per annum during the grace period and 3% per annum thereafter.
3. GOAL AND PURPOSE: The goal of the Loan is to help create a more efficient and equitable public education system in Bolivia. The specific purpose of this Project is to support the implementation of an administrative reform in the Ministry of Education concentrating on (1) strengthening its organization for administration and instructional development, its financial base, and its performance in the areas of information management, budgeting, program and policy planning; and (2) providing a basic, decentralized organizational structure required to move key management functions and instructional support services closer to the people served by the education system. Administrative reform of the entire system as well as increasingly decentralized services have been identified as necessary pre-conditions to the carrying-out of effective programs for improved rural education.^{1/}

^{1/} AID Loan Programming in Education contemplates a phasing of two management loans and three loans in rural education. Rural Education I will follow through in those geographical areas addressed in this Loan proposal. The second management loan will complete the administrative reform in the remaining areas of the country and carry out the conclusions of studies to be financed under the first loan. Rural education projects will follow up on Rural Education I and extend the program into those new reform areas during FY'76 and FY'77. Loan phasing is planned as follows:

AID LOAN PROGRAMMING - EDUCATION

FY'74	FY'75	FY'76	FY'77
Management I \$ 5.3 million	Rural Education I \$7.0 million	Management II \$3.0 million	Rural Education III \$7.0 million
		Rural Educ. II \$7.0 million	

The goal and purpose of the proposed AID Loan are fully consistent with the Ministry of Education's own concepts of administrative reform, which it describes as follows:

Decentralization - Reallocation of key administrative and instructional functions to district (department capital) and local levels of the system and development of personnel capability to carry-out these responsibilities.

Integration - Unification of the previously separate administrative, instructional, and support services for rural and urban education.

Rationalization - (to apply modern methods of efficiency) - Development and implementation of improved techniques and procedures for the mobilization and efficient utilization of financial, human, and physical resources in Bolivian public education.

4. RATIONALE FOR THE PROGRAM

A. Education Sector Strategy

During the past two years the Ministry of Education has been conducting a sector "Diagnosis" (Diagnóstico) of all non-university level education. This document has defined for the Ministry three areas of priority attention: educational finance; rural education; and technical education. In addition to these priority areas the Diagnostico pin-pointed the administrative structure as a major weakness in achieving technical-pedagogical goals. Most notably, this document has described the administrative system as: lacking a defined structure; undergoing too many changes in authority to maintain continuity; needing quantitative knowledge of school enrollments and tendencies; and requiring up-grading of and on-going training for school directors and field supervisors.

The USAID/B DAP supports the findings and conclusions of the Diagnostico by programming loans first for management and then for rural education. We agree with the Ministry that there is an urgent need to use the educational system as a means to bring the three million rural people into the economy, with learning opportunities being offered to both adults and school-age children.

The need for priority attention to rural education is obvious given the basic facts of the Sector. Public education is characterized by an emphasis on primary education of a formal, classical nature, with less attention or resources given to technical, vocational, or non-formal education. In spite of this emphasis on primary education, enrollment in primary schools in 1971 was only 66% of primary school age children, ages 6-12.^{2/} In the rural areas, however, only 42% were enrolled. The

^{2/} See Annexes A-1 thru A-6 for education statistics on sector expenditures, school enrollments, cost per student, and wastage rates.

average annual expenditure per pupil for primary school students in 1971 was \$33 in the rural areas and \$50 in the urban areas. Wastage rates have been high. Fifty-seven percent of those who begin, complete primary school in the urban areas, while only 8% do so in rural schools. At the secondary level, only 21% of the appropriate age group is enrolled. However, with the exception of those in rural teacher training programs, and the few in rural secondary school, they all attend urban schools. Finally, the illiteracy rate of those 14 years of age or older is approximately 60% nationally, 15% in the urban areas, and about 85% in the rural areas.

The disparities between rural and urban education are further illustrated by the administrative aspects of the system. Rural education traditionally has had a secondary status within the national education structure. Its administrative and teaching staff is not at the same professional level as urban education staffs since job requirements for hiring are lower. Rural administrative facilities are consistently less adequate. Whereas instructional and communication support services for all supervisors have been limited, the problem has been more complex for rural supervisors who are confronted with very specialized learning needs, cultural differences in the population being served, and transportation difficulties.

Reaching a majority of the rural populace with relevant programs therefore, requires an effective administrative structure of a type which presently does not exist. For this reason, programming emphasis has been placed first on educational management and decentralization: little can be done to improve the quality of the system until a more functional structure, as now designed, has been implemented. Key management operations must be more integrated and streamlined, and be decentralized so as to be closer to the target areas of actual educational programming. Critical problems in planning, budgeting control, and program evaluation have to be addressed by the Ministry so as to learn how to reach more people within its available resources. Administrative and supervisory personnel, at all levels, need to be trained in the skills necessary to meet the demands of the system and the responsibilities of their new job descriptions. Management for the design, publication, distribution and utilization of textbooks and other curriculum materials has to be systematized, diversified, and strengthened in order to give teachers and children effective tools for the learning process.

There are basically two target groups who will be affected and whose status will be improved by this Loan. The most direct target is at the level of school administration and teaching, most particularly for rural education. Project activities will deal directly with the inequality between rural and urban education by providing equal administrative services on the district level, sorely needed instructional and

transportation facilities for rural supervision, and specialized professional development programs for the upgrading of skills required to work effectively with the instructional-learning needs of rural teachers and children. The other target group to be affected by this project as well as future loans is rural children. As described above they have the highest illiteracy and wastage rates and receive lower financial allocations per student.

B. Background and Definition of the Problem

Until April 1970 there were two separate ministerial public school systems. Urban education was the responsibility of the Ministry of Education and Culture while rural education fell under the auspices of the Ministry of Campesino Affairs. Though these systems were finally brought together by Presidential decree under the authority of the Ministry of Education, they have persisted with separate administrative units even within the one Ministry. This duplication of organization and labor has remained in the field as well, where different district and sub-district offices within the same department have attempted to serve their respective rural and urban supervisors, school directors, and teachers. ^{3/} This dispersion of resources has not only created inequalities between rural and urban administration, it has also prevented the buildup of an improved capability required for school supervision.

In terms of educational finance, since 1960 the budget for the Ministry of Education has risen from 19.4% to 25.4% of the Central Government budget, after reaching 30% in 1970. The Ministry's 1974 budget is the equivalent of \$67 million. ^{4/} However, the focus of these expenditures has been on expanding a minimal educational opportunity for increasing numbers of children on the primary school age level with little emphasis on improving the quality of education. Even in terms of this limited objective, available resources used in traditional programs have proven inadequate because of major increases in the school-age population. As teacher employment has sought to keep pace with expanding enrollments, 95% of the Ministry's budget has been earmarked for salaries and almost 4% for transfers to private schools and universities, leaving about 1% for teaching equipment, books, supplies, maintenance, in-service training, and other items essential to improving the quality and effectiveness of the system.

^{3/} See Annex B for a breakdown of the number of existing rural and urban administrative units in the field.

^{4/} This amount does not include public educational expenditures for other Ministries, decentralized agencies, and Universities. See Annex C-1 and C-2 illustrating the Ministry of Education budget as a part of Central Government budget and educational expenditures as a part of Gross Domestic Product.

In 1968/69 The Ohio State University conducted a Human Resource Study for Bolivia. It specifically described the inefficient administrative structure as a major bottleneck in educational development. Though recommendations were made for training and a decentralization of functions, little occurred until the change of Government in August 1971. Finally, with this change, a renewed emphasis of general administrative reform and decentralization of all government activities was begun, as reflected in the Decree Law 10460 of September 1972 and the National Plan of Administrative Reform 1973-1977. Within the education sector itself, the Ministry contracted, in February 1972, a group of Bolivian administrative technicians (The Consejo de Racionalización Administrativa - CRA) to design, and help implement an administrative reform of the Ministry. At the same time A.I.D. grant financed a contract between San Jose State University and the GOB for a group of experts to work with CRA on the design of a new administrative system.^{5/}

As a result of the work of CRA and San Jose State, the Ministry now has an established program of administrative reform, which was approved in February 1973 by Ministerial Resolution. During this past year the Ministry has adjusted some budgetary priorities to take initial steps for implementation of the reform in selected regions of the country and on the National Ministry level. However, if the job is to be completed within a reasonable period of time and if present momentum is not to be lost, outside resources are required.

The major administrative bottlenecks in delivering an efficient and useful education to Bolivians, and to which the Reform Program is addressed, are defined below in relationship to project activities.

Decentralized Administrative and Instructional Services

- Geographical isolation and poor communications make highly centralized management from the national level impossible, and cultural differences make a single formal education curriculum largely ineffective.
- District and local levels have a minimal voice in educational planning or in decisions relevant to their needs.
- There is a lack of physical facilities on all levels conducive to effective management and routine operations.

^{5/} See Section 7 of this paper for a more detailed description of the work executed under the San Jose State University Contract.

- Patterns of communication, both horizontal and vertical, inhibit effective dissemination and feedback of ideas and change.
- Organization for the design, construction, and maintenance of schools and other physical facilities is loosely controlled and financed.

Professional Development

- Duplication and over-lapping of functions exist throughout sector administration.
- Poor utilization of administrative personnel clogs the system on the national level with employees largely selected for political rather than technical considerations.
- There is not a systematic program for training administrators, nor are there certification standards for them.

Publications

- Supplies of textbooks, specialized resource materials, and reference guides for teachers and students are insufficient and not responsive to differentiated needs.
- Insistence on uni-lingual instruction and instructional material in a multi-lingual society has impeded effective teaching/learning experiences.

Research and System Development

- No systematic research has been done to develop innovative practices or technological applications that might reduce costs, improve efficiencies, or draw on additional sources of educational revenue.
- Financial budgeting has been ineffective, with the national level possessing little information regarding actual school finance needs.
- Data collection, processing, storage and retrieval are primitive and ineffective; in essence, the sector has faulty memory and little planning capability.
- Non-formal programs in education have largely been neglected by the Ministry's planners and programmers.

5. PROJECT DESCRIPTION: The Project will implement the major administrative reform measures presently designed and planned for at the national, district, and local levels of the public education system. As described below, it will: establish five District Educational Development Centers; support Professional Development Programs for all personnel levels in educational administration; finance Publications of administrative manuals, textbooks and guides, bilingual and other curriculum resource materials; and cover the costs of Research and Development activities in selective areas of the management system.

This Loan is the first of two AID Loans in Educational Management. Project implementation on the district level will be fully effected in those departments designated by the Ministry to receive priority assistance in rural education from USAID and other Agencies. These departments are Chuquisaca, Cochabamba, Santa Cruz, Oruro, and Potosi. [Extension of the reform program to the departments of Beni, La Paz, Pando, and Tarija and follow-up to research activities under this Project are expected in the second USAID Education Management Loan scheduled for FY 1976.]

Activities to be executed over a three-year disbursement period are as follows:

District Educational Development Centers - These centers are designed to combine into one system the administrative functions of rural and urban education and provide on the district level joint instructional resources required for local educational programming, proper school supervision, teacher training and evaluation. They will house an Integrated District Administration Service (S.I.D.A.); Instructional Support Services for both rural and urban supervisors and teachers; the District Directors for urban and rural education, and their "Consejo Técnico" (Technical Council). An organizational chart for the education centers is contained in Annex D.

As contemplated these centers will, for the first time, enable the proper servicing of all public schools in any one department. Through the unification and decentralization of administrative functions the district level will process all actions relating to teacher/student services such as inservice promotions, health leave and salary problems, social security, scholarships, and grade certifications. District administration will also make specific recommendations to the national Ministry for school budgetary requirements and the hiring of teachers. These functions have, heretofore, been conducted only on the national level. In the technical-pedagogical area, educational support services (as reflected in Annex D) will provide a convenient mechanism to effect the teaching/learning process on the local level. At present field supervisors have neither the facilities

for in-service teacher training programs nor the position to influence curriculum programming. It is also expected that these centers will be a community resource, utilized for non-formal educational activities conducted by other governmental agencies and private business.

Project monies will finance the construction and equipping of five District Centers containing: offices and other basic services; teacher training facilities; a production and reproduction center for instructional materials; conference rooms and book/film libraries; audio visual equipment and their space requirements; school maintenance facilities; and a warehouse for distribution and/or rotation of resource materials to schools. A functional schematic drawing of this center is shown in Annex E. Other activities include the purchasing of 25 carry-all, jeep, and truck-type vehicles for center operations and the establishment of a revolving loan fund for the purchase of motorcycles by field supervisors.

Professional Development Programs - This aspect of the Project will provide development programs for educational administrators, emphasizing personnel administration, fiscal planning and management, research and evaluation, systematic textbook publication, supervision and general public school administration. Specialized training programs will be oriented to each level of the system, including local school directors, who are considered the weakest link in the chain delivering instructional leadership to teachers and children. Through the mechanisms of seminars, formal course offerings, informal on-the-job instruction, special field projects, and some foreign training, it is estimated that more than 2,200 technical and administrative people will be trained in their newly defined job responsibilities.^{6/}

Project activities will include building renovation and equipment for two Training Institutes for Administrators and short-term foreign technical assistance for the development of their curricula. These institutes will be created at the presently existing Normal School in Chuquisaca and Superior Institute for Rural Education in Tarija. The Project also will finance long-term foreign assistance and short-term foreign and domestic technical assistance for the design and implementation of the specialized in-service training programs, and other training costs such as scholarships, travel, and participant per diem. A more detailed explanation of technical assistance requirements is contained in Section 6, Financial Plan.

^{6/} Training programs will be oriented to approximately 762 school directors, 400 district personnel and field supervisors, and 1118 Central Ministry personnel who work at both national and district levels.

Publications - This project component covers the publication costs of administration manuals for training, information communications, textbook and teacher's guides, bilingual language-arts materials, and other low-cost curriculum materials. Project funds will finance the purchasing of printing materials; renovation of basic printing equipment for small publications such as newsletters, pamphlets and manuals; labor and other printing costs; and some research and design work.

The administration manuals, which already have been prepared by CRA and the San José State Team, are to be used in the training of administrators in their new job functions and are required for the successful implementation of the reform program. It is estimated that some 23,000 manuals will be produced for these purposes. In this same area the project will include initial activities in designing and printing an in-service newsletter and other materials of this type. These communications are intended to facilitate the dissemination of management news and training information to all levels of the system.

The publication of textbooks, teacher's guides, bilingual materials, and low-cost curriculum materials is contemplated in order to strengthen the Ministry's systematic utilization and diversification of curriculum materials used in the schools. At present the Ministry has no special financial resources for the continuous publication of textbooks nor has it experimented with low-cost curriculum materials such as newspapers, pamphlets, and textbook inserts.

It is estimated that 760,000 textbooks for the first and second primary grades and 40,000 teacher's guides will be published. These books and guides are ready for publication, having been designed under an AID grant-financed project. They will provide an important new and immediate resource for school children. This project component also includes the publication of 10,000 curriculum guides and the establishment of a subsidized purchasing system for textbook distribution, which will generate funds for future curriculum publications.

Initiation of the use of low-cost curriculum materials will involve research, design, and reproduction work. This activity will be complemented by special research as well as training included in the professional development programs. The bilingual language-arts materials to be produced by the project will be utilized in a pilot project in bilingual (Aymara/Spanish) education.

Research and Development - This project addresses the problems of more efficient resource utilization by (1) improving the broad-based

systems of educational finance and information management and (?) conducting specialized studies related to strengthening the decentralized system of management and instructional support. Project financing will cover the costs of:

- a fiscal policy study, for the purpose of (a) determining alternative sources of support available to education, and (b) developing coordinated programs of public finance toward an expanded flow of resources to education;
- long and short-term technical assistance for the design and implementation of an educational finance and budgeting system for the Ministry;
- long and short-term technical assistance for the design and implementation of an information base for management decision-making, and the procurement of system equipment;
- a study to determine the feasibility and, pending results, the design of a radio communications network connecting national-district, district-local levels;
- a study to design, technically and administratively, a system of instructional mobile units for use by District personnel in the rural areas;
- a special fund for small research projects in areas such as low-cost curriculum materials, specialized student services, student testing/evaluation standards, and a pilot project in bilingual education.

6. FINANCIAL PLAN: The preliminary cost of the project is estimated at \$8.35 million, of which \$5.3 million are the proceeds of the Loan, \$2.2 million account for the GOB contribution, and \$850,000 are AID grant funds. The major components of the Project broken down by activity and line-item, source of financing, and local and foreign exchange costs are outlined in the Table below.

ESTIMATED PROJECT COSTS
In thousand U.S. Dollars

ACTIVITY	A.I.D. Loan			AID Grant	GOB ^{7/} Contr.	Project Total
	Dollar Costs	Local Costs	Total Loan			
<u>1. DISTRICT CENTERS</u>						
a. Land for sites	--	--	--	--	250	250
b. Construction	600	1,900	2,500	--	--	2,500
c. Eng. Services	--	--	--	--	125	125
d. Furniture & Office Equipment	100	--	100	--	125	225
e. Educ. Equipment (Inst. Media)	150	--	150	--	--	150
f. Vehicles	180	--	180	--	--	180
g. Motorcycle Fund	--	--	--	--	100	100
Sub-Total	1,030	1,900	2,930	--	600	3,530
<u>2. PROFESSIONAL DEVELOP.</u>						
a. Admin. Institutes (Land, Renovat. & Equipment)	20	120	140	--	100	240
b. Technical Assistance	--	100	100	450	--	550
c. Training (In-country & Exterior)	<u>300</u>	--	<u>300</u>	--	<u>400</u>	<u>700</u>
Sub-Total	320	220	540	450	500	1,490
<u>3. PUBLICATIONS</u>						
a. Admin. Manuals	--	200	200	--	100	300
b. Teacher's Manuals & Guides	100	200	300	--	100	400
c. New Textbooks	100	450	550	--	100	650
d. Publicat. Diversif.	--	50	50	--	--	50
e. Bilingual Language-Arts Materials	--	50	50	--	--	50
f. Newsletter & Other Materials	--	<u>50</u>	<u>50</u>	--	<u>50</u>	<u>100</u>
Sub-Total	200	1,000	1,200	--	350	1,550

^{7/} In addition to the \$2.2 million GOB contribution to the project, the Ministry plans to spend about \$2.0 million for a new national Ministry building which will house all Ministerial activities on the national level. At present Ministry offices are dispersed among 22 different buildings in La Paz and most are in poor condition. This new building will clearly contribute to a more efficient administration of the system.

	<u>A.I.D. Loan</u>			<u>AID Grant</u>	<u>GOB Contr.</u>	<u>Project Total</u>
	<u>Dollar Costs</u>	<u>Local Costs</u>	<u>Total Loan</u>			
4. <u>RESEARCH AND DEVELOPMENT</u>						
a. Educat. Finance Budgeting System	100	125	225	200	75	500
b. Information Management System	200	100	300	200	75	575
c. Radio Comm. Feasibility Study	15	10	25	--	--	25
d. Mobile Units Feasibility Study	15	10	25	--	--	25
e. Fiscal Resources Study	--	25	25	--	--	25
f. Fund for Special Studies	--	30	30	--	50	80
Sub-Total	330	300	630	400	200	1,230
5. <u>INTEREST AND ADMINISTRATION</u>	--	--	--	--	550	550

S U M M A R Y

<u>Activity</u>	<u>AID Loan</u>	<u>AID Grant</u>	<u>GOB</u>	<u>TOTAL</u>
1. District Centers	2,930	---	600	3,530
2. Professional Dev.	540	450	500	1,490
3. Publications	1,200	---	350	1,550
4. Research & Dev.	630	400	200	1,230
5. Interest & Admin.	---	---	550	550
TOTAL	5,300	850	2,200	8,350
% of TOTAL	63.5%	10.2%	26.3%	100%

As reflected in the table above, Loan funds will finance all Code 941 imported materials, construction services, some short term foreign consultants, all Bolivian technical assistance, and foreign training costs.

It is planned that over a 3-year period A.I.D. grant funds will be used to finance all long-term and some short-term foreign technical assistance (TA). Long-term TA will be utilized in the areas of

educational administration and supervision, community education (formal and non-formal program development), school/teacher administration, national education planning, educational finance and budgeting, and information management. Short-term foreign expertise will be procured for curriculum development at the two administrative training institutes, school facility planning, and cost effectiveness of education programs. It is anticipated that a good part of the above grant-funded technical assistance will also operationally support the FY'75 rural education loan.

As an approximate percentage of its total, the GOB contribution is divided into the following categories: 40% new cash, 40% on-going budgetary items, and 20% "in-kind" items. The interest and administration item was conservatively calculated by first taking a 2% rate on one-half of the Loan amount for 1-1/2 years for interest and adding to it salary and operational costs for basic project implementation (CRA and Training Institutes for Administrators). The GOB will also cover the cost of land acquisition, engineering services, furnishings and basic equipment for the centers and training institutes, rental of computer time for information management, counterpart activities for all TA, ISAP (the Superior Institute of Public Administration) and other in-country training costs, and some local publication costs. The cost items shown as a part of the GOB contribution have been informally discussed with the Minister of Education who has indicated his oral concurrence. In addition, the Minister of Finance was informed in writing that a loan for approximately \$5.0 million for education was under study and that the GOB would have to provide at least 25% of the Project costs. He replied in writing that such a loan was acceptable. Once project costs are finalized during the Intensive Review, written assurance will be obtained from the GOB confirming its willingness to budget the necessary funds for project execution during the next three years.

7. PAST AID PROGRAMS IN EDUCATION: This funding proposal marks the first major dollar Loan effort the United States Government has made in Bolivian Education. From 1944 to 1963, the U.S. assisted with the creation and financing of the Education Servicio (SCIDE), whose objective was to develop Bolivian education through professional interchange with the United States. During the 19 years of its operations, the U.S. contributed \$2.3 million to the Servicio and its training programs. Since 1964, A.I.D. has contributed about \$2.2 million in grant funds for programs in teacher training, curriculum and textbook development, a human resource survey, and assistance for the Ministry's administrative reform. Another \$2.7 million under Program Loans 511-L-041 and 511-L-045, and Program Grant 610 has supported school construction activities and an additional \$1.0 million for construction and repair of schools was financed in earlier periods by counterpart funds on a grant basis.

Until now AID assistance has been less than major in the Education Sector (averaging on an annual basis about \$270,000 over a 30-year period) and has approached sector problems only on a piecemeal basis. Neither AID nor other donor efforts have been sufficient for assisting the GOB in the accomplishment of any long range goals in education development. Now, however, both the GOB (through its unification of the education system) and AID (through its assistance in administrative reform) have laid the basis for a substantial effort to modernize education in Bolivia.

Efforts in reform have been supported through the aforementioned AID-financed San Jose State Contract, which is scheduled to terminate June 1974. Total funding of the contract will be about \$634,000 and the GOB contribution to the project will approximate \$200,000. During the past two years the San José State Team has worked with the Ministry in studying its administrative system, and has assisted CRA to design a reform program, to write job-function-task descriptions for National and District management positions, and to lay the groundwork for the immediate implementation of SIDA in four of the five departments scheduled for assistance under this Loan. Training for some SIDA personnel will begin this month. Additionally, the Team has conducted training programs for 450 administrative personnel in the Ministry of Education, made data processing studies, and formulated the plan for a central division of administration on the national level. The purpose of the last extension of the contract from February through June 1974 was to continue the training programs, execute certain studies, field test manuals, and assist the USAID in the formulation of a loan proposal in Educational Management.

8. PROJECT FEASIBILITY: A preliminary appraisal of the loan project as envisioned indicates that it is feasible. Below is a brief analysis of each factor affecting feasibility.

A. Economic - There are no economic constraints, other than the lack of resources to be provided by the loan, which would prevent the successful execution of the Project. A number of alternative approaches have been considered and for the decentralization aspect of the project, at least, USAID is already convinced that the least cost alternative already has been chosen. During the course of intensive review USAID expects to develop an internal rate of return calculation based on an estimate of improved effectiveness of administrative personnel as a continuing output related to investment cost. However, since there is skepticism as expressed in the appraisal guidelines as to the usefulness of internal rate of return analysis for educational and similar projects, there will probably be a continued reliance on least cost analysis.

In this regard, it should be noted that one of the outputs expected from this loan will be an increased capacity on the part of the

Ministry to develop its own least cost analysis of rural education projects. This has special importance since the development of less costly (and hence higher output per unit of input) systems for delivering educational services to rural areas has long been considered a key problem in the sector.

For this loan there will be no attempt to quantify economic benefits from education, saving that for later rural education loans, but there will be an attempt to quantify administrative improvement outputs. For example, it is already recognized that the unification and standardization of administrative functions will eliminate many man-hours of heretofore wasted or duplicated administrative time. The organizational unification of supervisory personnel as well as the decentralization of instructional support services to the District Centers will lessen considerably the need for duplicating resources, materials, and space, while at the same time serve as a catalyst in improving the efficiency and effectiveness of supervision with the same amount of personnel.

There can be expected, as well, certain short-term direct economic benefits from the Loan. For example, construction alone can be expected to provide about 1,700 man years of employment.

B. Technical - The project is technically feasible from all aspects. The current sector assessment and the work of both CRA and the San José State Team indicate that the national, district and local education structures can absorb the changes contemplated without difficulty. Project concepts have been introduced and difficulties of acceptance overcome during the San José State Contract.

In construction terms, the project consists of buildings that are common to all parts of the country and require no special treatment in design or construction. These activities can be accomplished at a reasonable cost in a reasonable length of time.

It is anticipated that all services and materials financed by the Loan will be procured from the private sector and are available within Bolivia or Code 941 countries.

C. Financial - The preliminary cost estimate of the project is relatively firm, but will be refined and verified during intensive review. The financial resources of the project will consist of the loan proceeds, AID grant funds, and the GOB contribution. The additional financial support required of the Ministry of Education budget for the project following disbursement of the loan will be analyzed during intensive review. The Sector Assessment will attempt to analyze the GOB ability to meet budget requirements implied by all planned AID-financed Education projects during 1974-77.]

D. Social, Cultural and Political - There are many social, cultural and political variables inextricably involved in the kind of administrative reform and change contemplated in this program. For instance, the institutional design of the education system must complement not contradict the traditional patterns of organization and administration developed over hundreds of years; new patterns of administrative behaviour must be consistent with, yet challenging to, the present skills and capability of key administrative and supervisory personnel; new technologies used for extending educational experiences to children and adults must be functionally appropriate and sensitive to the perceptual realities and experiences of those persons using them; and administrative decision-making processes must be compatible with both the tradition of centralized power historically characteristic to Bolivian education and to the national government's new emphasis on decentralizing some functions to district and local levels.

CRA and the San Jose Team have deliberately designed a reform program which takes into account the socio-cultural and political realities cited above. Even though, for example, it may have been more efficient organizationally to have only one District Director of education, politically it is not considered possible, and, in the opinion of the reform team, sociologically it could have had a negative effect, particularly on rural education. Thus every effort possible has been made to maintain the integrity and viability of the national rural education program and to give it the support and prestige it has heretofore lacked. Again, the tripartite administrative design at the district level illustrates a conscientious effort to raise the decision making potential of rural education to a level equal to that of urban education, without diminishing the urban education sphere of influence. In this same manner, the national design for decentralization has been developed. Only those administrative functions germane and within the legal authorization of districts and school directors have been assigned downward. Much in-service training and explanation have been given to "clear the way" toward smooth implementation and much more is planned for under the loan. It is accurate to say that in those districts designated for implementation, decentralization both in design and concept has been fully endorsed by the rural and urban administrative leadership and teacher's unions.

In conclusion, it is believed that the impact of existing social, cultural, and political patterns on project implementation has been taken into consideration during the formulation of the program. The reform has been functionally designed to support and improve the existing Bolivian teaching/learning process and patterns of administrative behaviour.

E. Administrative: Based on discussions with the Minister of Education it is contemplated that the project will be administered by CRA in the Ministry of Education. Plans will be made to give to

CRA expanded technical expertise (particularly in the areas of finance and construction) to carry-out its new responsibilities. This unit will be charged with all aspects of project implementation, management and coordination. Although this unit has not had experience with externally financed projects of this magnitude, it has had adequate exposure to the development of the reform program over the last several years. The administrative capability of this unit will be evaluated in depth during intensive review, although a preliminary evaluation suggests adequate institutional capability to administer the project.

In addition to the CRA unit, a high-level intra-Ministerial committee has been named to oversee all aspects of the Administrative Reform and its financing by the AID Loan. It will represent major organs of the Ministry: Finance, Planning, Director General for Education, and CRA. The fifth member of the Committee will be the Director of CRA who will head this group.

9. ENVIRONMENTAL CONSIDERATIONS: The project does not have a significant environmental impact, as is typical with most education programs. This initial determination, however, will be addressed and tested for the different project components during intensive review. Such obvious environmental protection measures as waste disposal will, of course, be incorporated in all project construction activities.
10. OTHER INTERNATIONAL DONOR PARTICIPATION: There are several other externally financed projects which will complement the USAID effort. In the area of educational planning, for instance, the grant funded technician who will assist in reorganizing the planning office on a modern, technological basis will be supported by an UNESCO expert assigned to the special projects division. West Germany and Holland are also expected to have advisors working in the area of planning for rural normal and technical schools for the Departments of Chuquisaca and Cochabamba.

As stated in the project description, implementation below the national level will be in those departments designated to receive assistance in rural education. UNICEF and the Government of Holland are planning assistance for projects in the Department of Chuquisaca. It is expected that Cochabamba will receive a sizeable input for its rural education program from the German Government. The USAID financed projects programmed in Oruro, Potosí, and Sucre in the scheduled 1975 Rural Education Loan will be distinct from, but complementary to, the UNICEF, German, and Holland Government efforts in rural education development. The improvement in educational management under the present Loan proposal will be of direct benefit to these other international donor programs since they will be working within the public education system. Their efforts will be expedited by the more effective administrative and instructional support services contemplated for rural education under this Project.

11. ISSUES:

Legal Requirements - It is anticipated that a Ministerial Resolution will be required to approve the expanded District structure to include the "Instructional Support Services" discussed under Section 5 of this paper. A Ministerial Resolution has been issued covering the establishment of S.I.D.A. The structure of the new District Education Development Center has been thoroughly discussed with the Minister and his Technical Council and their approval granted. The need for a Ministerial Resolution has also been discussed and its execution is planned for before submission of the Capital Assistance Paper.

Textbook Publications - The Bolivian Government presently has four unpublished primary level textbooks, which were developed with AID grant assistance. The lack of sufficient financial resources in the Ministry of Education's budget has been the only reason preventing their publication and distribution. The textbooks are written in the Spanish language. During preparation of the Intensive Review Request the Mission carefully considered the validity of including the publication of textbooks in this loan proposal. Two basic questions have been asked: Is this planned activity more properly within the scope of the Rural Education Loan planned for FY 1975? Is the distribution of textbooks in the Spanish language an activity with which AID would want to be associated given that two-thirds of the population does not speak Spanish at all or speaks it as a second language.

In response to the first question the Mission concluded that ongoing research, design, publication, and distribution of curriculum materials are essential to the instructional development of any education system and textbook publication activities are fundamental to these key management responsibilities. Accordingly, this proposed loan component is one part of a larger effort to strengthen in a comprehensive manner the curriculum laboratory of the Ministry. Publication activities will be complemented by experiments with low-cost curriculum materials; training for personnel in the curriculum laboratory; and the establishment of a rotating fund from the sale of textbooks, which will help cover future publishing costs. The textbooks in question are designed and ready to be used by school children and their teachers. There is no reason to delay their introduction as part of the instructional support services of the education system.

In relationship to the second question, that of the language to be used, the basic operational fact is that the GOB has no present plans to deliver multi-lingual instructional services. Though the Government officially recognizes its society as being multi-lingual, it also establishes Spanish as its official language. This is in

keeping with the fact that non-Spanish speaking Bolivian parents want their children to become literate in the Spanish language.

In order to reconcile the multi-lingual requirements of the society, the GOB has begun to support, as evidenced in the Diagnostico and the forthcoming National Education Plan, a bilingual approach to education, which in essence is the method of "teaching Spanish as a foreign language". This method has been developed by the Summer Institute for Linguistics in Bolivia, where they teach basic reading, writing, and speaking skills in Spanish, with the use of the native language as a base. At present, the instructional system is not sensitive to the need for a systematic transition from the native language to Spanish. The bilingual approach addresses this need.

The publication component of this Loan is consistent with the GOB approach to its linguistic problem, which is further supported by the pilot project in bilingual education financed under the Loan. The introduction of these primary textbooks provides an immediate vehicle for change by providing heretofore non-existent systematized learning materials in the areas of social studies, science, and mathematics.

12. INTENSIVE REVIEW PROCEDURES:

A. Negotiations - The GOB is prepared to submit a loan application upon approval of this IRR. During the intensive review of the project USAID will seek certain commitments from the GOB designed to maintain the gains in efficiency anticipated as a result of project activities. Commitments to be sought will be related to key questions such as: improving the ratio of investments to operational expenditures for education; increasing the percentage allocation of resources to rural education; maintaining control over the ratio of administrative personnel to teachers and students; and developing the capacity for making cost-effective studies in the education delivery system.

B. Timing: Based on the results of the Education Diagnostico, USAID is preparing its Sector Assessment. TDY assistance is now in Bolivia working on sector areas not included, or which were weak, in the Ministry's sector study. Submission of this document is scheduled for the month of April.

It is estimated that the following TDY expertise will be required during the intensive review of this Loan proposal: one educational economist; one rural education analyst for the integration and rural administration aspects of the project; one financial expert from the Berkeley contract on financial analysis and management; and one specialist in management information systems under the AID Regional

Contract with Florida State University. Timing requirements necessitate that this TDY assistance be available by mid-April; it is planned that approximately three-weeks for each expert will be required for preparation of the CAP.

The Mission plans to submit the Capital Assistance Paper to AID/W not later than June 1, 1974.

13. PROJECT COMMITTEE:

The Mission has designated the following Project Committee to prepare this IRR, conduct the intensive review, and prepare the CAP:

Catherine Ann Balsis	Loan Officer and Coordinator, USAID/Bolivia
E. Clayton Sceley	Education Officer, USAID/Bolivia
Loc B. Eckersley	Financial Analyst, USAID/Bolivia
Hasan A. Hasan	Deputy General Engineering Officer, USAID/Bolivia
Randolph Mye	Economist, USAID/Bolivia
Raul Oñoro	Chief of Party, San José State Team
R. Rorex	Member, San José State Team
Eugene Lamb	Campus Coordinator, San José State Team

Drafted by Project Committee,
with economic contributions from
Daniel C. Rogers, AID/W
March 14, 1974

SOCIAL - ECONOMIC INDICATORS

Population (1973)	5.0 million
% Urban	37% <u>a/</u>
Growth rate	2.5 %
GNP (1972)	\$ 993 millions <u>b/</u>
Per capita (1972)	\$ 234
Exchange Rate to Oct. 1972	12 pesos = 1 dollar
Nov. 1972 - present	20 pesos = 1 dollar

Source: Estadísticas Económicas, (USAID - Bolivia 1973).

a/ Urban is defined as those towns with 2,000 people or more.

b/ Estimated: using 12 pesos = 1 dollar.

EDUCATIONAL EXPENDITURES BY LEVEL 1970
(1000 Dollars)

	U R B A N				R U R A L				T O T A L				%
	Public	Decent*	Private	Total	Public	Decent*	Private	Total	Public	Decent*	Primary	Total	
Pre primary & basic Primary	23,192	1,878	2,052	27,122	9,347	-	1,231	10,578	32,539	1,878	3,283	37,700	63
Secondary: General	5,830	603	2,313	8,746	45	-	49	94	5,875	648	2,352	8,840	15
Tech. & Prof.	1,098	101	-	1,200	524	-	-	524	1,622	625	-	1,724	3
Higher: Technical & Prof.	1,647	-	-	1,647	-	-	-	-	1,647	-	-	1,647	3
Bachelor & Adv. Degree	7,868	-	1,625	9,493	-	-	-	-	7,868	-	1,625	9,493	16
Adult	757	279	-	1,035	-	-	-	-	757	279	-	1,035	02
TOTAL	<u>40,392</u>	<u>2,861</u>	<u>5,990</u>	<u>49,243</u>	<u>9,916</u>	<u>-</u>	<u>1,280</u>	<u>11,196</u>	<u>50,308</u>	<u>2,861</u>	<u>7,270</u>	<u>60,439</u>	<u>101</u>

* Decentralized education refers to education provided by two major public corporations: COMIBOL and Y.P.F.B.

NATIONAL ENROLLMENT (1,000)

	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971^p</u>	<u>1972^e</u>
Pre-Primary	54	56	59	64	67	68	66	59	72	76
Primary	482	508	543	570	608	635	659	704	747	789
General Secondary	28	31	36	41	44	49	62	77	86	97
Other Secondary	9	10	10	10	9	9	9	10	11	11
Normal	4	5	5	7	7	8	10	11	12	14
Adult Literacy	15	12	12	10	10	11	11	15	16	16

p. provisional
e. estimated

Source: Estadísticas Económicas (USAID - Bolivia, 1973).

PRIMARY ENROLLMENT AS A PERCENT OF POPULATION 6-12 YEARS: 1971
(1000)

Department	R U R A L			U R B A N			T O T A L		
	Population 6-12 Years	Enrollment	% ^{a/} Enrolled	Population 6-12 Years	Enrollment	% ^{a/} Enrolled	Population 6-12 Years	Enrollment	% ^{a/} Enrolled
Chuquisaca ^{b/}	67	22	33	24	15	64	91	37	41
La Paz	171	68	40	119	125	105 ^{c/}	290	193	66
Cochabamba ^{b/}	106	38	36	48	62	130 ^{c/}	153	100	65
Crucero ^{b/}	33	17	51	30	34	115 ^{c/}	63	51	81
Potosi ^{b/}	125	39	31	40	38	97	166	76	47
Tarija	27	15	54	12	12	105 ^{c/}	39	27	69
Santa Cruz ^{b/}	53	42	78	39	61	156 ^{c/}	93	102	90
Beni	18	14	77	21	15	74	39	29	76
Pando	<u>6</u>	<u>2</u>	<u>39</u>	<u>1</u>	<u>1</u>	<u>139 ^{c/}</u>	<u>6</u>	<u>3</u>	<u>50</u>
TOTAL	<u>610</u>	<u>257</u>	<u>42</u>	<u>329</u>	<u>364</u>	<u>111 ^{c/}</u>	<u>939</u>	<u>621</u>	<u>66</u>

^{a/} Percentages based on numbers before rounding.

^{b/} Departments which are targets of AID Loan.

^{c/} Enrollment percentages greater than 100 probably result from underestimation of population (the last census was in 1950), influx of children from rural areas into urban schools, and/or statistics which are basically faulty.

Source: Diagnostico: Economic, Social and Financial Analysis of Education in Bolivia (February 1974).

AVERAGE COST PER STUDENT: CURRENT PRICES, US DOLLARS

	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
<u>Primary</u>					
Pre-primary					
National	20	37	39	38	39
Urban	48	50	51	44	49
Rural	8	32	33	34	35
Basic					
National	38	37	38	42	42
Urban	41	41	42	49	50
Rural	34	32	34	33	33
<u>Secondary</u>					
General Secondary					
National	55	51	50	58	57
Urban	55	53	50	76	59
Rural	-	26	34	15	15
Femine Tech.	120	124	165	177	203
Industrial	271	275	253	284	417
Commercial	41	54	70	39	59
Rural Normal	121	109	101	119	120
<u>Higher/Post-Secondary</u>					
Urban Normal	98	96	65	113	124
Industrial	1,011	1,320	1,332	1,155	1,504
Commercial	102	97	114	198	186
University	N.A.	N.A.	N.A.	N.A.	N.A.*
<u>Adult</u>	134	147	165	77	44

* N.A. = Not available

Source: Diagnóstico: Social, Economic, and Financial Analysis of Education in Bolivia
(February, 1974).

WASTAGE*

	<u>1960/65</u>	<u>1963/68</u>	<u>1966/71</u>
Total primary	79%	78%	74%
<u>Rural Total</u>	95	94	92
PUB.	95	94	na
PRIV.	96	96	na
<u>Urban Total</u>	49	48	43
PUB.	55	52	na
PRIV.	31	43	na

* Percentage of students who begin first grade in year n who do not finish in year n + 5.
na: Not available.

Source: Diagnóstico and Statistics, 1960-1970, Ministry of Education.

DISTRIBUTION OF URBAN AND RURAL ADMINISTRATIVE UNITS
BOLIVIA, 1966*

City	Type of Administrative Unit		
	Urban Regional & District Offices	Rural Regional & District Offices	Urban Inspection Offices
Aiquile	-	1	-
Camiri	1	1	-
Cobija	1	1	-
Cochabamba	1	1	-
La Paz	1	1	-
Montero	-	1	-
Oruro	1	1	-
Potosí	1	1	-
Puerto Suarez ..	1	-	-
Riberalta	1	1	-
Robore	-	1	-
Rurrenabaque ...	-	1	-
Santa Cruz	1	1	-
Sucre	1	1	-
Tarija	1	1	-
Trinidad	1	1	-
Tupiza	1	1	-
Uncía	-	1	1
Uyuni	-	1	1
Vallegrande	1	1	-
Villamontes	1	1	-
Villazón	-	-	1
Yacuiba	-	-	1
Totals	15	20	4

* Still considered illustrative of pre-reform status

SOURCE: Ohio State University Human Resource Study, draft April 1969, p. V-9.

SHARE OF MINISTRY OF EDUCATION IN CENTRAL-GOVERNMENT BUDGET
(Figures in Thousands of Current Bolivian Pesos)

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1973*</u>
(1) General Budget of Central Government (effective expenditure)	361,900	763,861	1,248,842	2,777,457
(2) Education - Ministry Budgetary Allocation** (effective expenditure)	70,242	215,710	374,275	704,661
(2) as percentage of (1)	19.41	28.24	29.97	25.37

* Estimate based on eleven-month Treasury figures.

** Other public educational expenditures are those of other Ministries, decentralized agencies, and Universities.

TOTAL EDUCATION EXPENDITURES AND GROSS DOMESTIC PRODUCT
(In Thousands of Current Bolivian Pesos)

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1973*</u>
(1) Total education expenditures	112,349	342,751	725,268	1,168,309
(2) Gross Domestic Product	4,479,000	7,180,000	12,080,000	19,088,000
(3) Education expenditures as percentage of GDP	2.5	4.8	6.0	6.1

* Preliminary estimate

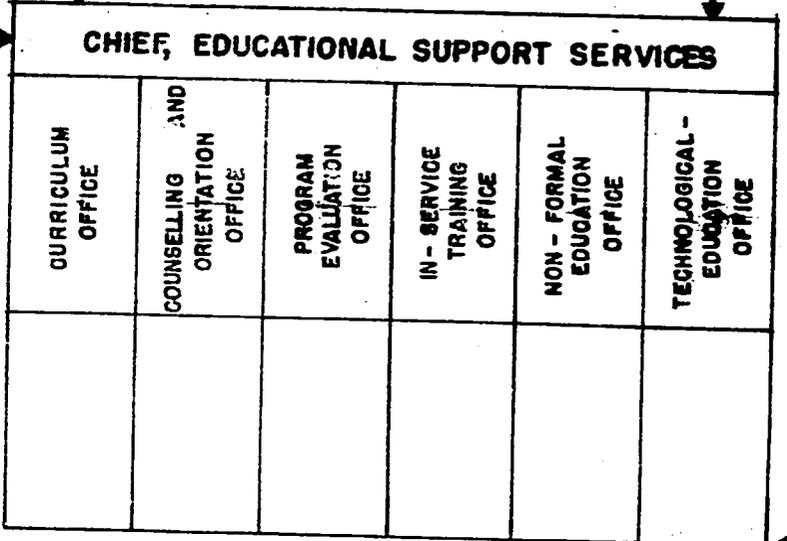
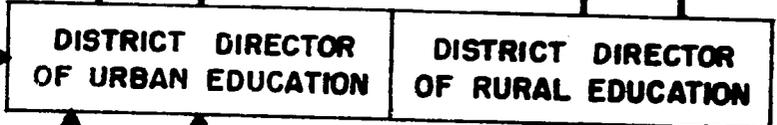
SOURCE: GDP: Boletín Estadístico, Banco Central
Education Expenditures: USAID estimate

DIRECTOR OF ADMINISTRATION

DIRECTOR GENERAL OF EDUCATION

NATIONAL LEVEL
DISTRICT LEVEL

DISTRICT EDUCATION DEVELOPMENT CENTER



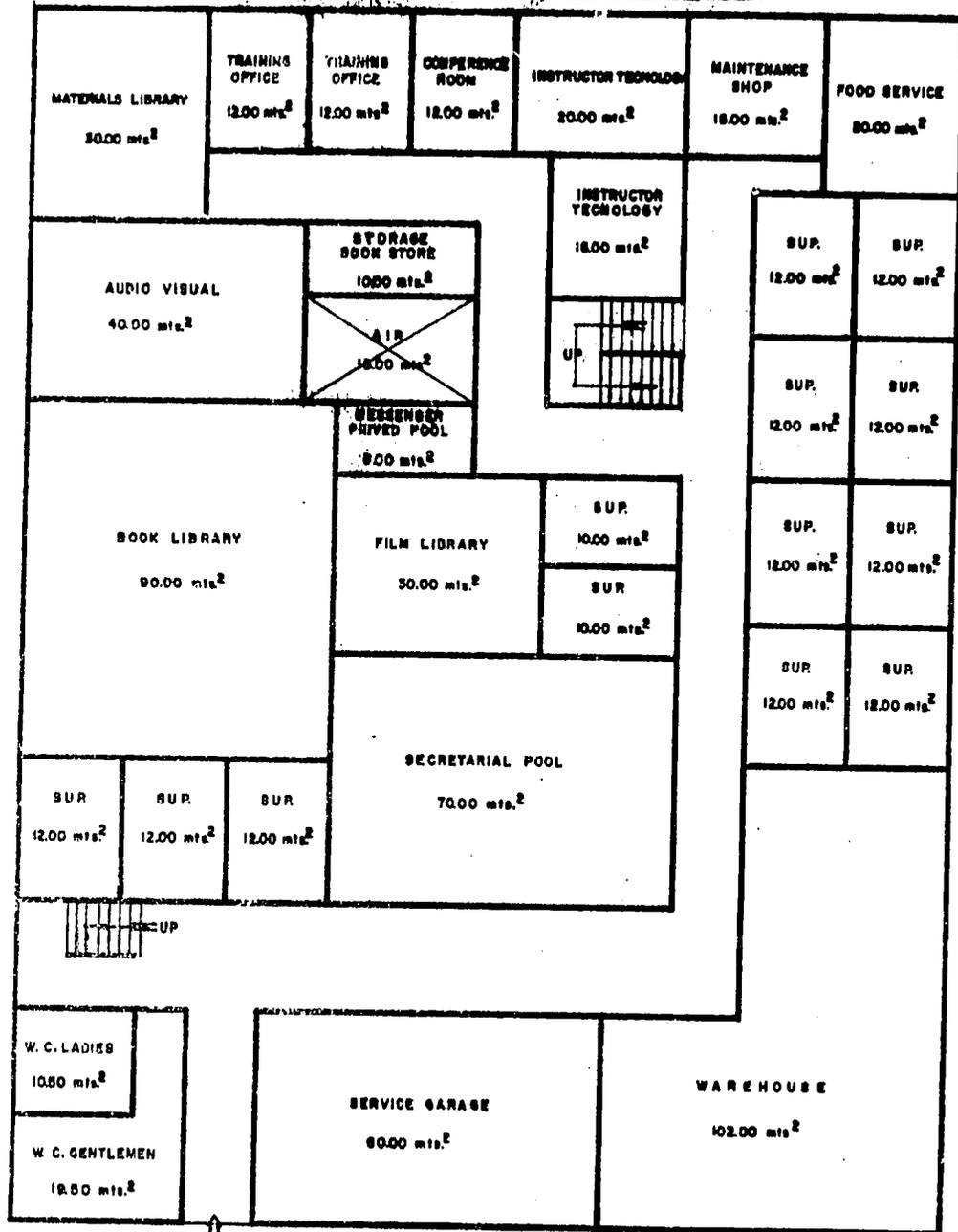
S. I. D. A. H. F. A. D.		
FINANCIAL ADMINISTRATION DEPARTMENT	PERSONNEL DEPARTMENT	GENERAL SERVICES DEPARTMENT
ACCOUNTING	IN-SERVICE PROMOTIONS	STATISTICS
PROGRAM AND BUDGETTING	TECHNICAL ASPECTS	AUXILIARY SERVICES
PURCHASING	ASSISTING SERV- ICES OFFICE	STUDENT SERVICES

ADMINISTRATIVE SERVICES

TECHNICAL PEDAGOGICAL SERVICES

DISTRICT EDUCATION DEVELOPMENT CENTER

SCHEMATIC FLOOR PLAN



ENTRANCE

S T R E E T

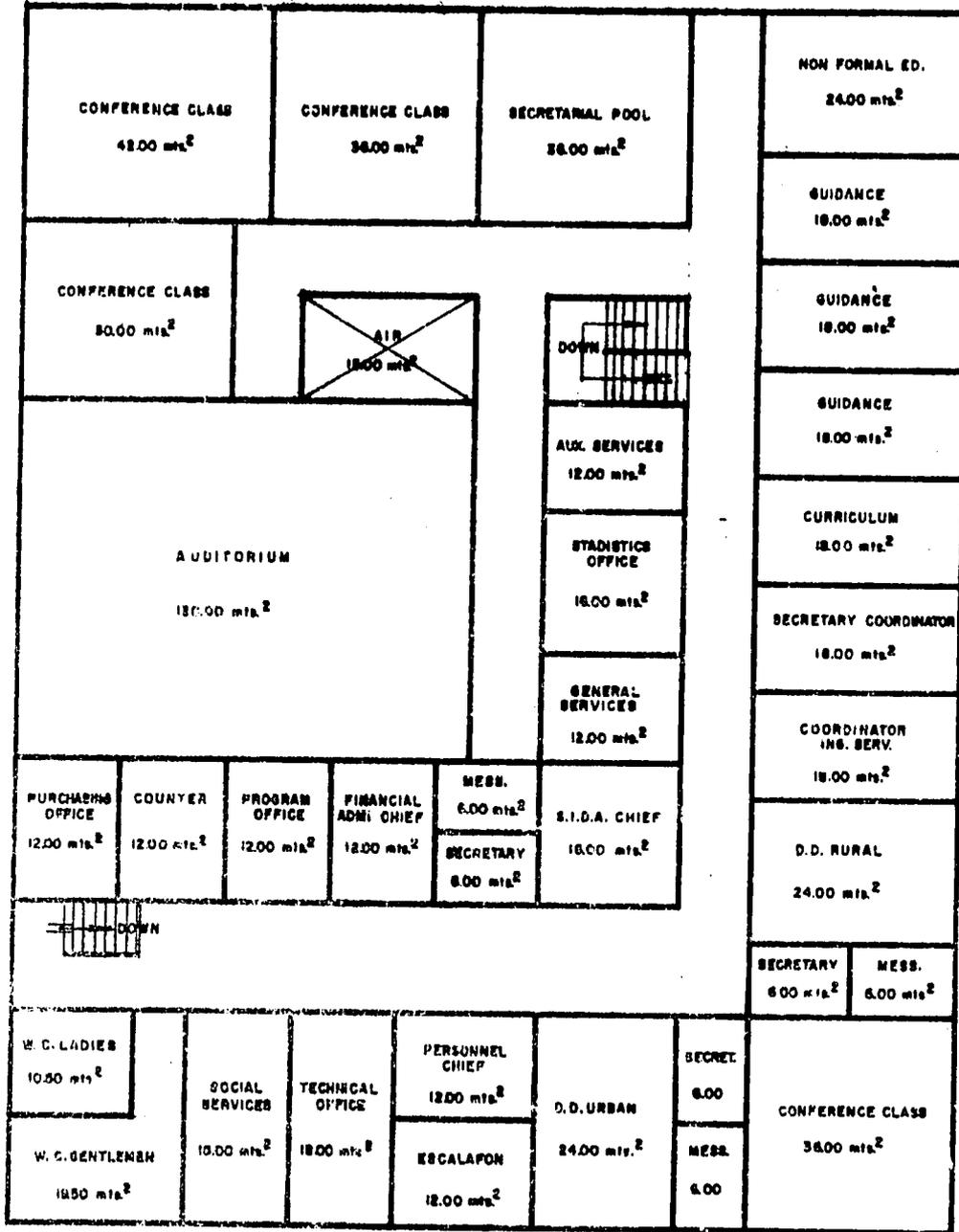
GROUND FLOOR

SUPERFICIE TOTAL 903.00 mts.²

ESCALA 1:200

DISTRICT EDUCATION DEVELOPMENT CENTER

SCHEMATIC FLOOR PLAN



S T R E E T

SECOND FLOOR

SUPERFICIE TOTAL 903.00 mts.²

ESCALA 1:200