

UNITED STATES GOVERNMENT

Memorandum

525-145 # 1713
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TO : Office of the Director

DATE: September 6, 1974

PD-AAB-180-F1

FROM : Henry H. Bassford, Chief, Education Sector

SUBJECT: Education Sector Review

EDUCATION SECTOR LOAN (525-L-036)

Participation in Project:	A.I.D.	\$8,500,000.00
	G.O.P.	8,900,000.00

Date Signed: January 19, 1971

Terminal Commitment Date: December 31, 1975

Terminal Disbursement Date: June 30, 1976

Amounts Committed \$7,707,708.27

and
Disbursed 5,101,209.24

as of July 31, 1974

LOAN PURPOSE (CAP)

To assist the Government of Panama (GOP) in the implementation of the first Phase of the National Plan for Education, the overall goal of which is to assure adequate resources and orderly growth of education in Panama to achieve maximum development of the human resources of the Republic.

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(Letter to MOE Loan Administrator dated September 2, 1974)

Annex I

Loan status forms

1. Historical Perspective:

One index of the importance attached to education in any society is the share of the nation's operating budget assigned to promotion of formal education. Currently, approximately 27% of the operating budget of the National Government is devoted to education. Likewise, the national goals for education have been traditionally broad and democratic. The Constitution of Panama has always reflected a deep National Support for education and a profound intellectual-level interest among Panamanian leaders in seeking to establish the Republic of Panama as a leader in providing educational opportunities for its citizens. The 1972 changes in the Panamanian Constitution reflect a continuation of this national determination to build a system of public elementary and secondary education available to all.

The rapid expansion of the Panamanian economy in the 1960's was paralleled by growth in training and education. However, the heavy quantitative expansion aggravated the already existing need for qualitative improvements throughout the system.

In 1969 the MOE and Penn State University undertook a joint study of Panama's formal education system which included the delineation of its major weaknesses and the classification of long-run objectives. The findings were largely incorporated in 1970 into Panama's National Plan for Education, which covered all areas of education, including the expansion of the institutional structure, a streamlining and regionalizing of the administrative system, the reform of the curriculum, teacher training and supervisory system, and the re-training of teachers in service.

A ten member National Education Reform Commission was created in 1970 to review the National Plan for Education. Working outside the official MOE structure, the commission drafted an alternative Educational Reform Plan which was purported to be somewhat "more Panamanian" than the MOE/Penn State proposal.

While the two plans were basically similar in content, priorities placed on major problem areas differed significantly. The National Plan for Education articulated the need to improve and modernize the existing education requirements. The Education Reform Plan, while recognizing these needs, placed greater emphasis on the need to develop a rural educational system which would provide a practical formative education relevant to the needs of the residents of agricultural areas of the country.

Severe urban/educational pressures prompted a MOE decision in 1971 to begin implementing the National Plan for Education with USAID loan assistance. The Reform Commission, however, continued to gain strength and in April, 1974 a major reorganization took place in which all Commission members were established officially in middle and upper level power positions in the MOE. This new administration, operating under a

different philosophical mandate, is now developing plans and programs according to priorities outlined in the Educational Reform Plan. This means that the Ministry will seek a wider spectrum of the population with formative rather than informative education, and will insist that the curriculum in rural and urban areas be appropriately differentiated so that students may learn appropriate skills relevant to both the development needs of Panama and to the life and career goals of a young Panamanian population.

Thus educational priorities and policies are evolving which clearly start with the questions For whom should the educational system be designed? and How should the educational process be carried out? There is an astute awareness that Panama has a young population and that approximately 500,000, or one third, of the population is already in school in one way or another. This awareness has led to a deep concern about the potential contribution of those in school to Panama's national development. This means that the MOE is committed to restructure school programs to be responsive to the kind of training Panama needs for its population at this moment in history. A priority is also being placed on making vocational education more attractive to promising students. Traditionally, graduates of vocational schools have been assigned a lower status and only economically poor or less promising students have chosen this educational alternative. MOE wishes to avoid the creation of an elite student who would use the educational system as a means of escaping service to his country by seeking only remunerative positions, and seeks to instill a national pride in serving the rural and backward areas of Panama. The population dispersion problem is now receiving emphasis and the MOE is exploring and experimenting with the concept of bringing students to centrally located schools rather than continuing to create dead-end 25-student schools in remote areas. Thus, MOE plans to establish larger schools in the rural areas and provide a more comprehensive and relevant curriculum. In higher education, the priorities are being placed on development of University extension centers (e.g, David and Santiago) and on developing post-high school technological education as an attractive alternative to the National University.

Implicit in the Educational Reform movement is the GOP commitment to develop a wholly Panamanian education system and to use education as a vehicle to instill a sense of nationalism and national pride.

To carry out this broad educational philosophy, the GOP has articulated the following development strategy:

1. Increase use of available classrooms, and investigate the effect of increased student/teachers ratios on the quality of education.

2. Reduce the number of incomplete and rented school facilities. Emphasis will initially be placed at the primary school level.
3. Convert existing academic "primeros ciclos" schools to "ciclos basicos" or "vocacionales" and to provide a diversified practical curriculum relevant to development needs of distinct regions of the country.
4. Expand University of Panama's closed circuit television station to serve the general public.
5. Establish basic production schools at the junior high level in the 27 poorest districts of the country.
6. Expand remedial education efforts both during the school year and during the summer months to reduce dropout and repeater rates.
7. Expand literacy programs.
8. Reduce proportionally the number of graduates of academically oriented secondary schools and increase the numbers of graduates from vocational technical secondary schools for which there is a greater demand in the labor market.
9. Create various polytechnical institutions to provide an attractive post-secondary educational alternative to the University of Panama.
10. Control University enrollment in career programs in relation to current and future labor market needs.
11. Establish a mechanism to coordinate educational research activities among the MOE, University of Panama and Ministry of Planning to avoid duplication of efforts and to make maximum use of available resources.

The JOP is looking toward both A.I.D. and I.D.B. for the financial and technical support required to carry out this strategy.

2. Analysis of loan progress in terms of goals outlined in National Plan for Education and Loan Paper (CAP):

The recommendations of the National Plan for Education are embodied in the Education Sector Loan paper (CAP) which outlined a basic strategy for educational development in Panama.

To carry out this strategy the loan agreement signed on January 18, 1971 envisioned that the following functions would be carried out:

1. Reorganization of the MOE to be more responsive and flexible.
2. Establishment of a planning and evaluation function within the MOE.
3. Establishment of a decentralized system of administration.
4. Establishment of an effective communication network between provincial or regional units and the MOE.
5. Reorganization and revision of the curriculum in primary, secondary and teacher education; establishment of a Department of Curriculum Development.
6. Improvement of teacher education.
7. Promotion of educational research.
8. Expansion and equipping of educational facilities.
9. Development of innovative educational programs designed to improve the quality of education and to reduce per unit costs.
10. Training of supervisors and administrators for primary, secondary and normal education.
11. Provision of teaching materials and audio-visual aids.

To implement the program 81.9% of loan funds were programmed for construction activities, 3% for improving the quality of administration and 15% for improving the quality of education services. However, most of the latter money, 8.5% of the total loan, was programmed for the provision of teaching materials and audio-visual equipment.

Still, the loan paper states, in spite of the fact that 82% of the funds were programmed for construction activities, that the major focus of the Mission and the GOP was on system improvement rather than expansion.

For purposes of evaluating the loan in terms of its broad objectives, it is convenient to examine the extent to which it is achieving its own articulated goals of:

- A. Expansion of facilities.
- B. Improvement of the quality of primary, secondary and normal school education.
- C. Improvement of the administrative capacity of the Ministry of Education.

A. Expansion of Facilities:

The analysis of construction requirements contained in the loan paper is useful as a view of what the aggregate demand for education was in demographic terms at the time of the project's initiation. However, the analysis did not disaggregate the projected enrollment figures by region, by urban-rural areas, nor by advantaged and disadvantaged children to provide a guide toward school expansion.

More importantly, it did not relate attendance at school to opportunities for specific and differentiated educational experience, which in turn would affect Panamanian society and the Panamanian economy. To know that X number of children will seek access to secondary education is certainly not to know what they should be offered in a school curriculum in order to participate effectively in Panama's rapidly growing and changing economy.

Thus, although the National Plan emphasized as its first major goal "the formation of national goals and objectives which are closely related to the demands and responsibilities made upon education by overall plans for social and economic growth," it ignored its own advice by concentrating not upon social or economic growth, but on population growth and community pressure as the primary determinant for access. The Education Reform is now aware of this problem and has embarked on a program to diversify educational programs and to design a flexible system that can provide a formative education responsive to the differing needs of Panama's rural and urban populations. The implementation of this program will necessitate in the future: (1) the conversion of existing schools from a traditional, academically-oriented approach to a more diversified approach that will provide both academic and practical instruction; (2) the construction of additional schools, and (3) a major effort to redesign school curricula in order to provide relevant educational opportunities.

Implementation of Construction Activities

While the loan began principally aimed at primary school construction, in 1972 the MOE requested a significant redistribution of funds to secondary school construction as well as a shift in emphasis from smaller to larger urban centers. The MOE was basically reacting to very strong social pressures in urban areas.

Because the basic goal of the original loan was simply to provide more spaces in schools, no arguments could be made against the shift of funds from primary to secondary school construction, since the overall space considerations would still be maintained. However, since 1972, due to the growing influence of the Education Reform, there has been a reordering of MOE priorities to now emphasize increased equity for poor and rural youth. As a result, in September 1973 a major reorientation of construction activities was effected which placed emphasis on rural construction. To support MOE's new priorities, loan construction funds were redirected to support the construction of 12 rural, self-help schools.

Despite the loan's limitations, it is providing a large number of well-constructed classrooms which will increase opportunities in general for many thousands of Panamanian children. Although the MOE might have explored other cost/benefit alternatives to increase access to education and only recently has considered factors other than population growth and community pressures in determining the numbers and types of schools needed, the facilities constructed under the loan have and will continue to play an important role in the overall educational development of Panama.

All loan funds originally budgeted for construction activities (\$6.9 million) have been committed, and as of July 31, 1974, \$4.4 million had been disbursed. Of the 31 primary schools, with 640 classrooms programmed, 12 schools totaling 272 classrooms, have been completed with the remaining 19 schools and 268 classrooms under construction. Of the nine secondary schools with 390 classrooms programmed, 6 schools totaling 348 classrooms have been completed with the remaining 3 schools and 42 classrooms nearing completion. The University Extension Center in David has been completed and the one in Santiago will be completed by September 30, 1974.

The planned construction of four provincial decentralized units was cancelled in order to utilize limited loan resources for

rural school construction. The existing rented facilities for these decentralized units were considered to be adequate (rental office space is far more suitable for the effective functioning of the decentralized units than rented school facilities are suitable to the needs of rural students).

It is expected that total construction will be completed before the end of FY1975, one year prior to the loan terminal disbursement date.

B. Improving Quality of Education

The loan paper provides a global approach for improving the quality of education. It stresses the need to improve and modernize at the primary, secondary and normal levels, teacher training, supervision, evaluation, curriculum, guidance, health services and special education; and recommends the increased application of educational technology and modern educational materials.

However, other than to identify broad categories, the loan paper does not define specific goals. Further, it allocated only \$1,270,000 (later reduced to \$1,028,000) to improve the quality of education, of which \$719,000 (later reduced to \$660,000) was budgeted for the purchase of teaching materials and audio-visual equipment.

Seemingly, there was little consideration given to what problems actually existed and what needed to be done in the above areas, how long it would take, and what resources would be needed to carry out necessary programs. Quality improvements are difficult to measure and impossible if no guidelines are provided. For example, the loan paper states that a major objective of the loan is the "reorganization and revision of the curriculum in primary and secondary and teacher education programs and the establishment of a Department of Curriculum".

To accomplish this objective, the loan paper states "the initial activity of this component will be technical assistance consisting of 24 man-months in the field of curriculum, 12 man-months in guidance and 12 man-months in the field of special education. These individuals will commence simultaneously and assist the Ministry to: fully develop an educational philosophy responsive to the social, economic and political needs; establish educational objectives to determine means of learning; develop a system of learning and establish guidelines for research and evaluation as a basis for future revisions. The technician will prepare workshops and seminars for 64 persons for 32 weeks in four sessions as a system of curriculum develops. The technicians will also

assist the Ministry in developing criteria for the selection of three individuals for out-of-country training."

The drafters of the loan paper did not take into account the fact that, at the secondary school level alone, there are at least 15 distinct programs with differing curriculum requirements. Furthermore, curriculum reform also must encompass teacher training at the normal school level as well as the creation of a system and a curriculum (which currently does not exist) to train secondary level vocational arts teachers. One could also continue this point at the primary school level. However, it is sufficient to point out that the Education Sector Loan was, from the start, incapable of reaching its stated goals utilizing available resources.

In retrospect, the principal means for improving quality, i.e., the provision of technical assistance and limited out-of-country training, were not adequate to meet the large scale goals of quality improvement the loan set for itself. A more useful approach might have been to focus on smaller scale definable goals which the Ministry of Education considered important and provide adequate assistance to deal fully with them. This might have led to the use of more short-term consultants rather than the long-term technicians that has been the case.

Implementation

Because no definable goals nor specific programs were identified in the loan paper, activity in this area for the first two years was slow and results limited. Technicians came and went without a discernible change in the Ministry's programs. Technical assistance was provided in the areas of guidance, research, evaluation, supervision, teacher training and curriculum, but because of internal conflicts within the MOE, technical advice bowed to the jealousies of section chiefs fighting to preserve the status quo. However, despite these problems, the seeds of change were planted, and attitudes began to shift noticeably about mid 1973. The ascendancy of the Education Reform early in 1974, brought with it a well-defined educational philosophy with stated goals and priorities. They viewed technical assistance as an asset to be fully utilized to perform specific tasks and not a burden imposed upon them.

The MOE is now, after an initial period of administrative re-shuffling and consolidation, developing plans and programs according to priorities outlined in the Educational Reform Plan. This means that the MOE will seek to serve a wider spectrum of the population with formative rather than informative education, and will insist that school programs in rural areas be reorganized,

curriculum be appropriately differentiated, guidance programs improved and reoriented, and teacher training programs updated so that students may learn appropriate skills relevant to both the development needs of Panama and to the life and career goals of a young Panamanian population. The MOE has recognized the need to focus on specific priority problems in the areas of curriculum development, administration, guidance, research and planning, and to determine what needs to be done and what resources will be necessary to develop concrete programs, and to then obtain the required expertise to carry out these programs.

Thus, loan funds, while not achieving the impossible dream, have helped to bring about an attitudinal change and have, for the most part, been of significant value in the development of a number of innovative plans and programs which are now being implemented.

Progress to Date

As previously mentioned, technical assistance has been and is being provided to the Ministry by A.I.D. in the areas of guidance, evaluation, teacher training, supervision, curriculum development and research.

Principal achievements resulting from this assistance include:

1. Establishment within the Ministry of an Educational Services Department to promote and coordinate guidance and counselling activities at the primary and secondary school levels. The functions of this Department, which include guidance, remedial reading, school health and education psychology, have been reviewed and analyzed and a broad action plan has been formulated to improve, modernize and decentralize its operation. Workshops and seminars are planned for in-service personnel to reorient them to changing guidance needs.

The MOE also plans to expand the coverage of educational services through the increased use of publications and audio-visual materials.

2. The training of teachers, administrators and supervisors has received special emphasis under the loan. With A.I.D. Sector Loan assistance, a successful pilot in-service project was conducted to train 130 uncertified primary school teachers in the Darien. Classes were conducted during mid 1972 and on weekends during the school year in the Darien. An expansion of this program to include 3,000 uncertified teachers in Panama, Santiago and David was begun in mid 1973 and is continuing. The newly established Teacher Training Department is now responsible for further application of this and other in-service training program.

In addition, professional seminars supported by the Central American Institute for School Administration and Supervision (ICASE) are being carried out in the fields of supervisory administration and evaluation and secondary teacher training courses have been held and more than 200 teachers have graduated from ICASE courses in the fields of English, mathematics, science and physical education. This program has provided specialized courses, seminars and workshops for more than 12,500 educators and is being given increasing support and broader responsibility by the MOE. ICASE and A.I.D. have coordinated their efforts to avoid duplication (ICASE is also currently conducting an in-depth survey for the MOE under an A.I.D. Innovations in Education grant-supported project). As

a result of ICASE's assistance, AID/MOE have been able to redirect loan resources to other areas. However, MOE has recognized that in addition to utilizing resources provided by ICASE, there is an urgent need to redesign, upgrade and diversify formal teacher training programs at the normal school level and to create an institution(s) to effectively train secondary school teachers.

This has become a priority goal to be addressed in the next A.I.D. loan. A.I.D. technical assistance was instrumental in convincing the MOE to adopt a coordinated, systematic approach to address Panama's teacher training needs.

3. An intensive three-year summer program to train 50 primary and secondary school librarians in-service was completed in April 1974. The program included courses in (1) classification and cataloging, (2) administration, (3) library guidance, (4) repair and maintenance of books, (5) use of bibliographies and reference materials. Initiated in 1972, the program was conducted for four months each summer, and 34 of the fifty original participants successfully completed the course.
4. Initial results in the area of curriculum have been limited, somewhat because of the complexity of the problem. Compounding this problem has been the difficulty in obtaining high level technical assistance to help the MOE define priorities and objectives and develop a comprehensive action plan to carry out programs in a systematic manner.

However, in April 1974 the Department of Curriculum was officially established as a separate department in the MOE, and as a first step Dr. Aristobulo Pardo was hired under the Education Sector Loan to provide guidance in the restructuring and reorientation of Spanish Curriculum at the primary and secondary levels. To date, this has been the most effective utilization by the MOE of the services of an outside consultant. Objectives have been determined, priorities have been established, and a basic action plan is now being developed to guide MOE in the revision of Spanish Curriculum. Because of this initial success, the MOE has now committed itself to a major overhaul of school curriculum and is determining the next priority subject areas at both primary and secondary levels requiring curriculum revision. It is also determining the external resources that will be necessary and will be developing work plans similar to the one prepared for Dr. Pardo for curriculum expert(s) in the subject area(s) selected.

5. The MOE initiated with A.I.D. loan assistance a pilot programmed instruction project in commercial education to determine if the quality of education could be improved and if the per unit cost of education could be reduced through the application of more efficient techniques of instruction. The project was initially conceived by Ministry personnel with assistance from Florida State University, which conducted a seminar on cost reduction in Panama and also trained key Ministry personnel. Results of this project have indicated that students utilizing this method can achieve a mastery of course material in less time with a significantly lower dropout rate than students utilizing conventional instruction methods. In addition, this experiment provided evidence that the use of programmed instruction methods can increase student-teacher ratios and reduce the number of course repeaters, as students can complete courses at their own speed on an individualized basis. Because of this initial success, the project is now being expanded with A.I.D. grant assistance to develop eight programmed instruction courses which will be introduced and evaluated in one industrial and one commercial secondary vocational school to determine their possible incorporation in other vocational schools in Panama.
6. Ministry plans to initiate a year-round school program, which would make more efficient use of school facilities and thereby reduce per unit costs, have been postponed as the Minister of Education has requested further indication of local community support prior to initiating this project. This was a setback as the project was approved by the previous Minister and scheduled to begin the week after he was replaced. However, there is still a great deal of interest in the Ministry for this program and it is hoped that the year-round school will be introduced on a pilot basis in 1975.

C. Improve Administrative Capacity of Ministry of Education

The loan paper emphasizes the need for improved management of education and proposed that MOE should "develop greater capacity for leadership, coordination and administration in order to advance the development of an effective school system." The loan paper also provides for the creation of an effective research unit "to help improve the quality and reduce the cost of education in the country."

Specifically, the loan paper notes the following objectives for improved management:

1. Decentralization of MOE.
2. Definition of goals and priorities.
3. Improved research and planning.
4. Evaluation of programs.
5. Establishment of an effective system of communication.
6. Effective service support.
7. Coordination between the MOE and the private sector and the MOE and other government agencies.
8. Improved professional growth of MOE staff.

To these major and difficult tasks the loan dedicates \$352,000 (later reduced to \$305,000) or 2% of total loan funds to be distributed as follows:

Financial Resources

Reorganization of MOE	\$123,000
Planning and Evaluation	85,000
Maintenance of Facilities	50,000

Human Resources

Technical Assistance

Reorganization of MOE	36 man-months
Planning and Evaluation	24 man-months
Maintenance	18 man-months

In-Country Training

Reorganization of MOE	1 man-month (100 men)
Planning and Evaluation	3 weeks (50 men)
Maintenance	None

Out-of-Country Training

Reorganization	36 man-months
Planning and Evaluation	24 man-months
Maintenance	None

However, the loan paper does not identify operational goals of improved management other than the long run general goals above mentioned. The loan paper concentrates on the means, principally long-term technical assistance and training. The only general objectives initially turned into manageable defined programs were the establishment of (4) decentralized units and the creation of a research center in the MOE.

Implementation

The MOE has made significant progress in decentralizing administrative services. It has moved from a pilot decentralized project in Herrera/Los Santos provinces to establish additional regional decentralized units in David, Santiago and Coclé. Administrators in these units are responsible for making decisions at the local level with regard to planning, organization, implementation, control, supervision, coordination and evaluation of programs and school activities for both the primary and secondary levels in both the public and private sectors. Budgets, operational plans and administrative guidelines are being prepared and the full support from all Ministry central level units has been provided. The loan has funded both technical assistance and participant training in support of this program. Based on recommendations presented by a loan-financed technical audio-visual expert, plans have been advanced to establish Learning Resources Centers as part of each Regional Unit. The effective operation of these units will require audio-visual equipment and materials, and further technical assistance in organization, administration and production of materials as well as in the effective development and utilization of audio-visual aids in rural primary and secondary schools. Loan funds have already been budgeted for this purpose, and USAID assistance has been requested by MOE to obtain the services of a qualified technician.

One of the A.I.D.-loan funded participants, who received his M.A. in Administration from Stanford University, has recently been appointed as national coordinator of the decentralization program, and is working directly out of the office of the Minister

of Education in carrying out his functions. Two other loan supported participants, who completed six months training in the UNESCO/Mexico ILCE audio-visual training center, are working in the Herrera/Los Santos decentralized unit.

A research section staffed by three middle level professionals was created in the MOE in 1973. A small research library was established and resource materials and reference texts were purchased with loan funds. Technical assistance was provided by A.I.D., OAS and UNESCO experts, who initiated studies on year-round schooling, programmed instruction, educational supervision and evaluation techniques, and on cost reduction possibilities.

Among several projects originating from studies carried out, are a pilot programmed instruction project, pilot rural vocational agricultural school, and the development of a concrete plan to introduce year-round schooling on a pilot basis in two urban schools.

The research unit suffered a setback as a result of the reorganization of the MOE in April, 1974 as a communication gap developed temporarily between the new Director of Planning and the Research Section staff. However, after a period of consolidation, the MOE has taken steps to strengthen the capacity of the Research Section. An A.I.D. loan funded education economist has been hired, and has been assigned the task to assist in the preparation of a five-year budgetary plan for the MOE as well as to undertake cost/benefit studies of different secondary school programs.

Loan funded out-of-country training at the Universities of Stanford and Chicago is also being provided to two MOE participants in the areas of educational planning and comparative statistics. Upon their return they will add considerable professional depth to the planning and research sections of the MOE.

MOE has also requested short-term technical assistance to study possible implications of increasing student/teacher ratios and to study alternative programs to reduce the incidence of school dropouts and repeaters.