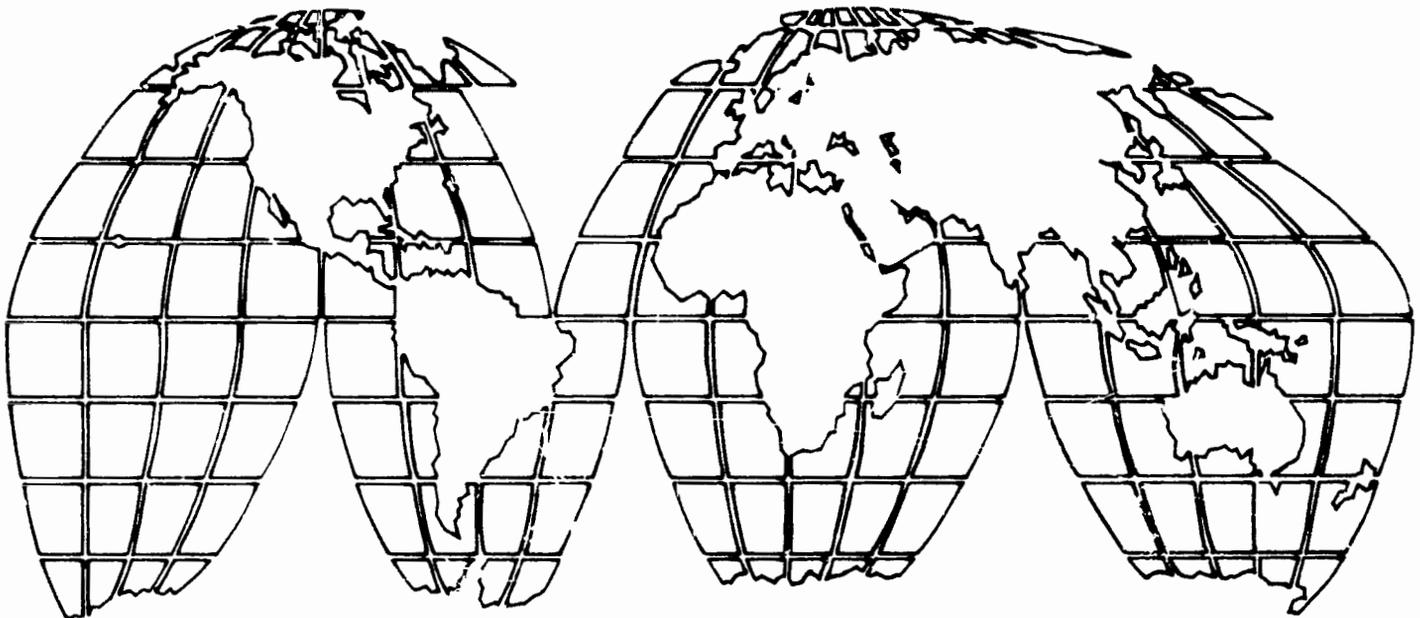


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# **AID AND EDUCATION: A Sector Report on Lessons Learned**



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AID AND EDUCATION:  
A Sector Report on Lessons Learned

A.I.D. Program Evaluation Report No. 12

by

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U.S. Agency for International Development

January 1984

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Marion Kohashi Warren

## SUMMARY

Over the past 30 years, the Agency for International Development (AID) has been a major contributor to international educational development. AID has helped to establish local, national, and regional institutions. It has constructed schools, helped to strengthen managerial capabilities, donated equipment, and introduced reforms that have profoundly changed the character of formal education in some countries. It has assisted both in expanding enrollment and in solving some of the problems inadvertently created by that expansion.

While AID's contribution has been substantial, since the mid-1970s its level of commitment to the education sector has declined precipitously. Because one-third to one-half of the AID education account assistance actually goes to educational activities associated with other sectors or to "special programs" not directly related to host country educational priorities, the reduction in support takes on even greater significance than might first appear. Assistance to general formal and nonformal education systems in 1980 was half the 1965 level.

These trends were due in part to changed sectoral and regional emphases and to increased budgetary strictures. Steadily declining resources, coupled with growing sensitivity to the magnitude and immediacy of problems in other sectors, led to proposals to reduce or eliminate education as an area of full-scale involvement and, instead, to incorporate education and training assistance as components into projects and programs in other sectors that were given higher priority, such as agriculture.

A debate arose within AID and its sometime parent organization, the International Development Cooperation Agency, concerning the extent to which involvement in an education sector represented the best utilization of limited foreign assistance funds. Participants to the discussion found that they lacked crucial information concerning the overall impact and significance of AID's past record in education support as evidence for informed argument. In an effort to establish whether past education programs were successful and what impact they had had, the Administrator requested in 1980 that the sector be included in the series of impact evaluations conducted by AID's Office of Evaluation, Bureau for Program and Policy Coordination.

The purpose of conducting these impact evaluations, then, was to assess and clarify (1) the extent to which selected, completed AID-funded education projects succeeded (or failed) in achieving their goals; and (2) the extent to which these

projects left a lasting social, economic, or institutional imprint on the countries or locales in which they were implemented. Conclusions based on the findings would then provide information necessary for AID to make more informed choices concerning future policies and programs in the sector.

The 12 evaluations of education projects on which this summary report is based were conducted between October 1980 and October 1981. Projects were selected according to regional location, the elapsed time since their completion, the diversity of their component parts, and their focus on particular sector aspects. The aim was to assemble findings from a broad spectrum of types of educational support and from a wide range of sociocultural settings, to provide a sample of AID project results both in scope and in geographic distribution. The evaluations thus include discussions of interventions that cover a wide range of AID development activities: the founding of institutions and institutional processes (for teaching, administration, planning, research, and textbook production); curriculum reform (primary, secondary, and post-secondary levels); distance teaching (radio and TV); vocational and nonformal education for out-of-school adults; teacher training; construction and equipping of facilities; and third-country training for professional educators. Their cost in dollars obligated by AID is estimated at \$241.8 million.

The evaluations also include projects in different major world regions: four in Asia (Philippines, Nepal, Thailand, Korea); two in Africa (Kenya, Nigeria); four in Latin America (Colombia, Brazil, Paraguay, Ecuador); and two in the Near East (Jordan, Afghanistan).

Four of these (Colombia, Brazil, Ecuador, Afghanistan) were "desk reviews," involving no field work. The rest were actual "impact" evaluations, involving three to four weeks in the countries where evaluated projects were implemented. Research teams consisted of two to four professionals (AID direct hires and contractors) and typically included a social scientist familiar with the geographic area and an education specialist familiar with the type of assistance provided. The teams employed rapid assessment research methods: field trips focused on gathering qualitative data about project impacts through on-site observations and through both structured and open-ended interviews with various categories of project participants--parents, teachers, students, administrators--both in the field and in the capital.

The results of the evaluations demonstrate that the histories of these projects provide clear lessons for future education policies and programs.

1. The enduring effects of an education project cannot be determined until a number of years have elapsed after the project has been launched.

Development of a country's human resources is a process that takes a number of years from the time resources are made available to the time trained people are ready to use their knowledge and skills. There is no simple relationship between the number of buildings, technicians, or commodities provided and the durability of the educational programs that receive assistance. Not meeting initial goals is not a measure of failure, although it may appear to be during the project's lifetime. These studies show that certain elements of a project may continue long after donor withdrawal and appear--in retrospect--to be well-established, despite apparent shortcomings in project execution.

2. AID education programs and projects made an important contribution to increasing and equalizing access to educational services.

AID has contributed substantially to building and supplying schools in rural areas and to increasing educational services for adults and young people in remote localities. AID education projects increased opportunities for girls and women to enter school or to make up for limited schooling through nonformal programs. Some of these projects made up for the present population's educational deficits through nonformal education programs. Others assured more equitable education for future generations by extending the formal school system into isolated areas and opening it to women.

3. AID has had considerable success in training educational professionals and supporting educational institutions in developing countries. Its contributions to teacher training have been most successful in places where job and career advancement opportunities and salary incentives supported training efforts.

Teachers and professional educators are most likely to take appropriate positions in the field of education when the salary structure and career ladder offer good incentives, compared to those in other sectors.

In countries where salary and working conditions for teachers are poor, on the other hand, it is impossible to guarantee an adequate supply of trained teachers, no matter how good the training program. These studies demonstrate the need to consider working conditions and incentives, as well as the quality of training provided, in planning training programs to increase the number of qualified teachers.

4. Careful prefeasibility studies and serious collaborative planning with recipient communities are essential to the success of projects that introduce innovative teaching methods and curricula, especially in remote areas.

Curriculum reform, innovative teaching techniques that promise cost savings per student, or expansion of services to remote areas sometimes hold far more appeal for central government officials than they do for the prospective beneficiaries, yet their success depends on local communities' acceptance and willing involvement.

Several reports point out the importance of "selling" the project to the various groups, from government officials to local recipients whose support is required, and the need for interactive collaboration at all levels during project execution. Continuity of staff and management on the donor side, from planning and design through the implementation period, contributes to the effectiveness of this process.

5. To ensure continuity of education programs AID must not only introduce cost-effective reforms but must determine how current costs are apportioned between central and regional governments and local entities who will bear recurrent costs, whether these costs are reasonable in light of the resources available, and what will motivate payment of maintenance expenses.

AID has proved it can design appropriate cost-effective educational programs for developing nations, but these often involve trade-offs in spending. Savings on teachers' salaries, for example, may need to be redirected toward production of self-instructional materials to achieve the planned results.

Recurrent costs sometimes fall on local communities, not on the central education budget. If savings go to one account and maintenance is paid from another, there is increased risk that the program will deteriorate after project support ceases. If maintenance costs are usually paid by localities rather than by the central government, official assurances that the host country will pick up recurrent costs should be weighed against the incentives communities will have to continue this support.

6. Education planners need to examine the wider economic context into which a project fits to determine how it will respond to workforce needs and how it will advance economic growth of the area.

The capacity of the host country to absorb the products of an education program--school graduates, newly trained professionals, teachers, craftspeople, or the like--into the national or regional economy is a crucial factor in determining whether

that program will contribute to economic growth and development. Employment opportunities for graduates, in turn, depend on the present and projected economic development of public and private sectors within the country and the workforce needs and economic growth of the wider region, as well. Educational planning thus needs to be tied to broader economic analysis.

7. Good coordination among the host country officials, the AID mission, the host country sponsoring institutions, and the AID contractor is an important factor in project success.

This observation is not unique to education sector projects. Nevertheless, several evaluation reports point out problems that arose because of conflicting task assignments and poor communication between the various parties involved in an education project.

8. AID should be prepared to make a long-term commitment of resources in areas in which it hopes to have serious impact.

The projects that achieved the most pervasive impact were ones that received a substantial commitment of resources over a long period of time. AID should anticipate having only limited impact in countries in which its efforts are more restricted. As a first step, AID should formulate a long-range plan to serve as a blueprint for its continued involvement in the sector.

9. Careful consideration must be given to host country policy and institutional, cultural, and socioeconomic constraints during initial phases of project design.

To be effective, intended interventions must be designed to circumvent the limitations of host country financial and political resources and to accommodate surrounding cultural realities.

This series of evaluations also raises some important issues that cannot be resolved on the basis of these studies alone.

1. There is often pressure to expand the school system in developing countries, even if it means providing education of poorer quality. The question of how to balance such demands with maintenance of acceptable quality in education is unresolved. AID has attempted to meet the problem by supporting teacher training and by advocating curriculum reform and the use of innovative or technologically advanced teaching methods. According to the findings of these studies, none of these approaches has had unblemished success. These evaluations give no clear indication of how or to what extent quality education can be promoted in an expanding system.



GLOSSARY

|               |   |
|---------------|---|
| <b>AID</b>    | <b>Agency for International Development</b>                             |
| <b>CCU</b>    | <b>Correspondence Course Unit</b>                                       |
| <b>IDRC</b>   | <b>International Development Research Center</b>                        |
| <b>LAC</b>    | <b>Bureau for Latin America and the Caribbean</b>                       |
| <b>LJC</b>    | <b>Life-long Education Center</b>                                       |
| <b>KEDI</b>   | <b>Korean Education Development Institute</b>                           |
| <b>MEC</b>    | <b>Ministry of Education and Culture</b>                                |
| <b>MTTS</b>   | <b>Mobile Trade Training Schools</b>                                    |
| <b>MOE</b>    | <b>Ministry of Education</b>  |
| <b>NFE</b>    | <b>nonformal education</b>  |
| <b>NNTEP</b>  | <b>Northern Nigeria Teacher Education Project</b>                       |
| <b>PPC/E</b>  | <b>Bureau for Program and Policy Coordination, Office of Evaluation</b> |
| <b>REC</b>    | <b>Regional Education Center</b>  |
| <b>REDP</b>   | <b>Rural Education Development Project</b>                              |
| <b>SEAMEO</b> | <b>Southeast Asian Ministers of Education Organization</b>              |
| <b>TA</b>     | <b>technical assistance</b>   |

## I. INTRODUCTION

### A. Background

During the past quarter century, education in developing countries has been characterized by impressive increases in school enrollments at all levels of the education system. In 1975 primary school enrollment was three times larger than it was in 1950; secondary enrollment was five and a half times larger, and tertiary enrollment was six times larger than in 1950.<sup>1</sup> Total expenditure on education among developing countries rose from 2.4 percent of their collective GNP in 1960 to 4.0 percent in 1976.<sup>2</sup> Clearly, these countries have demonstrated a strong and continuing commitment to raising the level of education of their peoples.

A variety of educational problems have emerged in the wake of this expansion. Unable to provide financial support to both expansion and maintenance of quality, developing countries have chosen to emphasize quantity over quality. Thus, while primary schools may now exist in the most remote areas, the quality of education is often very poor. At the primary level particularly, failure, dropout, and repetition rates tend to be high. Physical facilities at all levels are often badly overcrowded, inadequately equipped, or nonexistent. Teachers are frequently poorly trained and rely on outmoded or irrelevant curricula and teaching techniques. Managerial capabilities to plan, implement, administer, and assess educational systems in developing countries are often deficient. There continues to be a striking maldistribution of education services by region, social status, and sex. Finally, because of world population growth, despite the expansion in enrollments, the number of children aged six to eleven who were not in school actually grew by eleven million between 1960 and 1975.<sup>3</sup>

Over the past 30 years, AID has been a major contributor to international educational development. The Agency has helped to establish local, national, and regional institutions. It has constructed schools, helped to strengthen managerial capabilities, donated equipment, and introduced reforms that have profoundly changed the character of formal education in

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<sup>1</sup>World Bank, Education Sector Working Paper, 1974, p. 64; World Bank, Education Sector Policy Paper, 1980, p. 17

<sup>2</sup>World Bank, World Development Report, 1980, p. 46

<sup>3</sup>Education Sector Policy Paper, p. 106

some countries. It has assisted both in expanding enrollment and in solving some of the problems inadvertently created by that expansion.

While the contribution has been substantial, there has been since mid-1970 a precipitous decline in AID's level of commitment to the sector. Technical assistance fell from about \$336 million for the period 1960-1965 to about \$234 million for the period 1971-1976. In constant 1970 dollars, this represents a drop of 55 percent between 1960 and 1976. Loans underwent a comparable, though less severe reduction of 46 percent between 1966 and 1976 (see Table 1).

Table 1. Technical Assistance and Loans Obligated to the Education Sector by AID, 1960-1976  
(in millions of actual and constant 1970 dollars)<sup>1</sup>

| Category             | 1960-1965 |          | 1966-1970 |          | 1971-1976 |          |
|----------------------|-----------|----------|-----------|----------|-----------|----------|
|                      | Actual    | Constant | Actual    | Constant | Actual    | Constant |
| Technical Assistance | 336       | 399      | 264       | 288      | 234       | 160      |
| Loans                | 45        | 54       | 219       | 239      | 166       | 127      |

<sup>1</sup> Annual consumer price indices were recalculated into average values for periods 1960-1965, 1966-1970, and 1971-1976 (1970=100). Recalculations indicate that during 1960-1965, the average purchasing power of the dollar was 18.8% higher than in 1970. During 1966-1970, the dollar's average purchasing power was 9.3% higher than in 1970. During 1971-1976, the dollar's average purchasing power fell 23.1% below that in 1970. These percentage values were applied to actual obligation amounts to arrive at the constant amounts in 1970 dollars.

Sources: Fred Hirsch and John Goldthorpe (eds.), The Political Economy of Inflation, (Martin Robertson & Co., Ltd., 1978), p. 10.

OECD Report by the Secretary General, Inflation: The Present Problem, Annex A., 1970, p. 59.

Francis J. Method, AID Assistance to Education: A Retrospective Study, Appendix A, 1981.

These trends were due in part to changed sectoral and regional emphases and to increased budget strictures. Steadily declining resources, coupled with growing sensitivity to the magnitude and immediacy of problems in other sectors, led to proposals to reduce or eliminate education as an area of full-scale involvement and, instead, to incorporate education and training assistance as components into projects and programs in other sectors that were given higher priority, such as agriculture.

A debate arose within AID and its sometime parent organization, the International Development Cooperation Agency, concerning the extent to which involvement in an education sector represented the best utilization of limited foreign assistance funds. Participants to the discussion found they lacked crucial information concerning the overall impact and significance of AID's past record in education support as evidence for informed argument. In an effort to establish whether past education programs were successful and what impact they had had, the Administrator requested in 1980 that the sector be included in the series of impact evaluations conducted by the Agency's Office of Evaluation, Bureau for Program and Policy Coordination (PPC/E).

More specifically, the purpose of conducting these impact evaluations was (1) to assess and clarify the extent to which selected, completed AID-funded education projects left a lasting positive social, economic, or institutional imprint upon the country or locales in which they were implemented; (2) to suggest possible explanations for the extent and type of imprint made; and (3) to articulate some lessons, based on analyses of evaluation findings, that might be useful for designing development programs. These evaluation reports would thus provide information necessary for AID in making more informed choices concerning future policies and programs in the sector.

## B. Approach

The 12 evaluations of education projects on which this summary report is based were conducted between October 1980 and October 1981 by the Studies Division of the Office of Evaluation of PPC. The Office of Evaluation, in consultation with the Agency's Coordinating Committee on Education, originally selected seven past AID-financed projects for on-site impact

evaluations and two projects for "desk review."<sup>4</sup> Later, an eighth project directly financed by the (Canadian) International Development Research Center (IDRC) was added. This was a project carried out under the aegis of the Southeast Asian Ministers of Education Organization (SEAMEO), which AID assisted. In addition, the Bureau for Latin America and the Caribbean (LAC) undertook desk reviews of past education programs in Brazil and Colombia, both of which are discussed in this report.

Projects were selected according to regional location, the elapsed time since their completion, the diversity of their component parts, and their focus on particular sector aspects (primary, vocational, and nonformal education; teacher training; and infrastructure). The aim was to assemble findings from a broad spectrum of types of educational support and from a wide range of sociocultural settings, to provide a sample of AID project results both in scope and in geographic distribution. The impact evaluations thus include projects ranging from broad program support and technical assistance, through construction and commodity support, curriculum reform, and innovative small-scale pilot projects. They also include projects in the different major world regions: four in Asia; two in Africa; four in Latin America; and two in the Near East.

Education impact evaluations were undertaken as short, one-month field studies. The research teams consisted of two to four professionals (AID direct hires and contractors) and typically included a social scientist familiar with the geographic area, and an education specialist familiar with the type of assistance given. A preliminary review of project documentation and other available outside studies pertinent to the project and to development of the project area preceded the field research. The teams employed rapid assessment research methods: field trips focused on gathering qualitative data about project impacts through on-site observations and through both structured and open-ended interviews with various categories of project participants--parents, teachers, students, administrators--both in the field and in the capital. The teams were not equipped to undertake quantitative surveys, although they reviewed and incorporated any relevant survey findings that were available.

The impact evaluation teams were instructed to travel to the original project sites and to investigate the following questions:

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<sup>4</sup>A desk review is done in AID/Washington. It is a coherent summary of project description and performance based on existing documents and records.

1. Was the project/program effective (i.e., did it successfully achieve stated objectives)?
2. Who benefited from the project?
3. What was the social impact on the surrounding community?
4. What was the economic impact on the surrounding community?
5. What was the impact on host government institutional practices and procedures?
6. Are there lessons to be learned for application to future AID projects?

The two desk reviews conducted in PPC/E for Ecuador and Afghanistan attempt to provide, as far as possible, the same types of information in the same format as the impact evaluation reports. The two prepared by the LAC Bureau (Brazil, Colombia) cover similar categories of data but differ in organization and emphasis, focusing more on implementation and less on long-term impact. All the desk reviews, of necessity, are methodologically different from the impact evaluations, since they are based on relevant literature and AID documents currently available in the United States, supplemented by interviews conducted in the United States. These sources provide, at best, only limited information on long-term or indirect impact.

In conclusion, the impact evaluations on which this sector review is based represent a focused probe of AID's past involvement in the education sector. They examine a selected fraction of the education activities in which AID has been involved. There are gaps, of course; none examines the education components which often make up major portions of projects and programs in other sectors, for instance. Still, these microstudies of the enduring effects of past projects investigate the causal links between project results and the social, economic, and political context in which each project was conceived and implemented. They also trace subsequent historical developments that have affected the course and present impact of each project.

In recent years, other studies have reviewed the directions AID planners have taken in supporting education

assistance,<sup>5</sup> the actual allocation of education assistance funds and the distribution of projects by area and by type of intervention,<sup>6</sup> and the effectiveness and long-range economic impact of educational improvement on development.<sup>7</sup> This series of impact evaluations does not replicate these broad-based studies but complements and builds on them. By concentrating on a small, carefully selected number of education projects, these studies explore the effects of contextual conditions on the success of projects not only during a project's lifetime but also with regard to its long-range contribution to economic and social development. In spite of differences in each team's approach, these impact evaluation microstudies support and illuminate the findings of other, more general surveys. Despite the variety of the programs and projects reviewed, teams reached similar conclusions about the success of the activities evaluated and about the lessons to be drawn from them.

The lessons these evaluations offer can help planners to identify variables that have a bearing both on the chances for success of a particular project in a particular setting and on the kinds of results that can be anticipated. Their findings suggest that the story of AID development work in education is an important one that deserves to be told and is worth a closer look.

### C. Summary of Project Interventions

The twelve projects and programs reviewed in this sector report are listed in Table 2. Table 3 summarizes the types of educational intervention involved in each of the projects.

Activities in Nepal, Afghanistan, Jordan, Paraguay, Brazil, and Colombia involved broad support for country-wide

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<sup>5</sup>See the Agency for International Development, Investments in Education in Developing Countries: The Role for AID, (Washington, D. C.: AID, 1982).

<sup>6</sup>See AID Assistance to Education: A Retrospective Study, (Washington, D. C.: Creative Associates, 1980).

<sup>7</sup>See, as examples, World Bank, Education Sector Review, 1980; G. Psacharopoulos and K. Hinchliffe, Returns to Education: An International Comparison, 1973; and Development Assistance Committee, Aid for Human Resources Development: Review of Situation and Possible Subjects for Further Work, Development Assistance Committee (DAC) Report, (Paris, 1980).

Table 2. Education Projects and Programs Evaluated

| Country  | Name of Project   | Years of Implementation | Dollars Obligated (millions) |
|----------|---|-------------------------|------------------------------|
| Brazil   | Education Sector Loans (I-II)   | 1969-1975               | 82.0                         |
| Colombia | Education Sector Loans (I-V)  | 1969-1976               | 75.3                         |
| Jordan   | Technical Assistance Supporting Activity<br>Agricultural Education<br>Field Project Assistance<br>Commercial Departments<br>Supplemental English Library<br>Teacher Education<br>Industrial Education<br>Khadouri Agricultural School<br>Bedouin Education<br>Expanded Educational Facilities<br>Human Research Development Education<br>Bir Zeit College<br>Arab Development Society<br>Construction and Equipment Schools<br>Constructions and Equipment Teachers Colleges<br>Rural Training Centers<br>Agricultural Education<br>Demonstration Laboratory Facilities<br>Agricultural Extension Department<br>Agricultural Research and Development<br>Agricultural Research Facilities<br>Vocational Secondary Schools<br>Development Administrative Training<br>Faculty of Agriculture (University of Jordan) | 1952-1982               | 30.0                         |

Table 2. Education Projects and Programs Evaluated (cont.)

| Country           | Name of Project  | Years of Implementation | Dollars Obligated (millions) |
|-------------------|--|-------------------------|------------------------------|
| Jordan<br>(cont.) | School Construction I<br>Development Administration<br>Training II<br>School Construction II<br>Vocational Training<br>Village Development I *<br>Village Development II *<br>Village Development III *  |                         |                              |
| Nepal             | Educational Activities<br>Teacher Training and<br>Related Activities<br>Education Development<br>Education and Training<br>Primary Education<br>Teacher Training/Higher<br>Education<br>Education Materials<br>Development<br>Primary and Teacher<br>Training<br>Teacher and Technical<br>Education<br>Teachers and Materials<br>Utilization and Development | 1954-1975               | 16.6                         |
| Afghanistan       | Primary Teacher Education<br>Emergency Teacher Education<br>Secondary Teacher Education<br>English Language Education<br>Math/Science Lycee<br>Sub-Project<br>Primary Curriculum and<br>Textbook Sub-Project   | 1954-1977               | 14.2                         |
| Korea             | Elementary-Middle School<br>Pilot Project  | 1972-1980               | 7.4                          |
| Thailand          | Mobile Trade Training<br>Units   | 1966-1972               | 7.3                          |
| Paraguay          | Rural Education Development<br>Project   | 1970-1976               | 4.5                          |

Table 2. Education Projects and Programs Evaluated (cont.)

| Country                | Name of Project                             | Years of Implementation | Dollars Obligated (millions) |
|------------------------|---|-------------------------|------------------------------|
| Nigeria                | Northern Nigeria Teacher Education          | 1967-1969               | 2.7                          |
| Ecuador                | Community Education/<br>Nonformal Education | 1972-1976               | 1.1                          |
| Philippines            | Project IMPACT                              | 1974-1980               | .7**                         |
| Kenya                  | Radio Correspondence Education              | 1967-1971               | .7                           |
| Total                  |   |                         | <u>242.5</u>                 |
| Total Obligated by AID |   |                         | \$241.8                      |

\* Village development projects were not education projects per se but are included here because they contain major school building components which the project evaluations show to be among the critical components of the village development program in the Jordan Valley.

\*\* Amount provided by the (Canadian) International Development Research Center (IDRC).

Table 3. Type of Intervention in Evaluated Education Projects

| Country     | Construct./<br>Equipmt. | TA/Ed<br>Insti-<br>tution | <u>NFE/Formal</u><br>Innov-<br>ation | Curric.<br>Reform | Elemen-<br>tary Ed. | Profes-<br>sional<br>Training | Teacher<br>Training | Ag./Sci.<br>Technical<br>Education |
|-------------|-------------------------|---------------------------|--------------------------------------|-------------------|---------------------|-------------------------------|---------------------|------------------------------------|
| Brazil      | x                       | x                         | x                                    | x                 | x                   | x                             | x                   |                                    |
| Colombia    | x                       | x                         |                                      | x                 | x                   | x                             | x                   | x                                  |
| Jordan      | x                       | x                         |                                      | x                 | x                   | x                             | x                   | x                                  |
| Nepal       | x                       | x                         |                                      | x                 | x                   | x                             | x                   | x                                  |
| Afghanistan |                         | x                         |                                      | x                 | x                   | x                             | x                   | x                                  |
| Korea       | x                       | x                         |                                      | x                 |                     | x                             |                     |                                    |
| Thailand    | x                       | x                         |                                      |                   |                     |                               |                     | x                                  |
| Paraguay    | x                       | x                         |                                      | x                 | x                   | x                             | x                   |                                    |
| Nigeria     | x                       | x                         |                                      | x                 |                     | x                             | x                   |                                    |
| Ecuador     |                         |                           | x                                    |                   |                     |                               |                     |                                    |
| Philippines | x                       |                           | x                                    |                   | x                   |                               |                     |                                    |
| Kenya       |                         | x                         | x                                    |                   |                     |                               | x                   |                                    |

education programs, although the impact evaluation for Paraguay focused on more specific subprojects. The projects reviewed in Nigeria, Korea, Kenya, Thailand, Philippines, and Ecuador were more focused activities. Activities of the programs or projects studied included school construction; commodity support; institutional support; curriculum reform; teaching innovations; system expansion; nonformal education; vocational/technical/agricultural training; and training of teachers, professors, and administrators.

AID began educational assistance to Nepal in 1954, when its educational system was embryonic. AID projects focused on teacher training at various levels and curriculum development for primary and vocational secondary schools. AID supported a center for text production and distribution, and assisted in developing research and planning capacity within the Ministry of Education (MOE). AID assistance continued for 20 years.

In Afghanistan AID provided assistance between 1954 and 1977. This was primarily directed toward teacher training, both in teacher training schools and at the University of Kabul, where it helped to establish a Faculty of Education. AID also supported curriculum development and text book production, including the preparation of English language teaching materials.

Beginning in 1952 and lasting through the 1960s, U.S. assistance to education in Jordan stressed teacher training, agricultural education, vocational/technical training, and expansion of facilities in rural areas. AID also trained large numbers of educators, many of them in U.S. schools. From the early 1970s to the present, AID's activities have focused on administrative training and improving university faculty. Since Jordan remains strongly committed to system expansion, AID has also continued assistance to school construction, most recently in the Jordan Valley.

The Korea project (1972-1980) provided some assistance to an already planned Korean Educational Development Institute (KEDI) by supporting its first major project, a revision of the elementary and middle school curricula and reforms in teaching methodology that included self-instruction methods and use of different media in the classroom. AID provided commodities for studio construction, and equipment and training for media specialists.

In Kenya, AID provided support (1967-1971) for building a broadcasting studio and materials production center and funded training of media specialists for a radio/correspondence program aimed at upgrading the education of teachers, particularly in remote areas, who had not completed secondary school.

AID provided broad educational assistance to Thailand, but the evaluation team concentrated on a review of the Mobile Trade Training School (MTTS) project (1966-1972), which brought work-skills training to rural villages in Thailand. The program was conceived as a way of stabilizing the population of these areas both politically and economically. AID's main contribution was in commodities provision.

The Philippines project, Project IMPACT, was an initiative of the research and development branch of SEAMEO, which had received some AID assistance. The project itself was begun with Canadian donor funding in 1974. The project attempted to introduce programmed learning and self-instruction techniques in elementary schools in order to improve both the quality of instruction and its cost-effectiveness. Donor funding ended in 1980, and the project is still not fully accepted by recipient communities, although the present graduates appear to be well prepared for secondary school.

The Ecuador project (1972-76) brought a nonformal literacy/numeracy program to remote rural communities. The pilot project team engaged rural residents in a collaborative effort, training community members as teachers and leaders and taking a flexible approach to content and methods as the team's awareness of community needs grew. At the end of the project period, when the Government of Ecuador assumed responsibility for the activity, trained Ecuadorean educators with a much more traditional orientation took over much of the training, and community-based initiatives were no longer encouraged.

Paraguay also received broad support (1970-1976) for its educational program from AID, but the evaluation team concentrated on examining the Regional Education Centers (REC) and pilot rural schools built and equipped with AID funds. Both the RECs and the pilot schools were using revised curricula introduced under the Rural Education Development Project (REDP). Though not examined by the evaluation team, other components of the REDP included construction of the national Superior Institute of Education; extensive training for teachers, administrators, and community leaders in the revised curricula; and technical assistance for the MOE in preparing the revised curricula.

In Brazil, AID provided assistance (1969-1975) for school construction, equipment, books, and training for teachers and administrators.

In Colombia, AID provided assistance (1969-1975) for school and university construction, equipment, books, curriculum reform, and training of teachers, administrators, and government officials.

In Nigeria, the Northern Nigeria Teacher Education Project (NNTEP) (1967-1969) strengthened the Institute of Education at Ahmadu Bello University, provided tutors to work in Teacher Training Colleges in the North, and provided technical assistance to the MOE for Northern Nigeria. In connection with these activities, a number of Nigerian educators were sent to the University of Wisconsin to pursue degrees in education. The project was also supposed to prepare revised curricula and texts for the schools, an activity that suffered partly from the overambitiousness of the project as a whole and partly from disruptions that culminated in civil war in the North.

This selection covers a wide range of AID development activities over the last 30 years: the founding of institutions and institutional processes (for teaching, administration, planning, research, and textbook production); curriculum reform (primary, secondary, and post-secondary levels); distance teaching (radio and TV); vocational and nonformal education for out-of-school adults; teacher training; construction and equipping of facilities; and third-country training for professional educators. Their cost in dollars obligated by AID is estimated at \$241.8 million (see Table 2).

The impact evaluations and desk reviews of these activities represent a substantial investment of time and effort on the part of both AID personnel and contractors. Their findings and conclusions as summarized in this sector report provided one source of information for the joint PPC/Africa Bureau Education Conference held in February 1982. The conference provided a forum where professionals from within AID, other donors, and host country ministries could review and discuss these findings. As the proceedings report (see Appendix B) makes clear, conference participants were charged with the task of analyzing findings, then drawing lessons and implications for similar future projects as well as for donor policy concerning education sector assistance.

## II. IMPACT EVALUATIONS: FINDINGS AND ANALYSIS

This section discusses the findings of the eight education sector impact evaluations and the four desk reviews in terms of their effectiveness, their social and economic impact, and other issues pertinent to educational development. As indicated in the Introduction, effectiveness refers to the degree to which stated project objectives were achieved. These objectives, while varied, can be roughly categorized under three principal headings: curriculum reform, establishment of institutions and institutional practices, and increased access. These categories are not intended to be mutually exclusive, nor are they always singled out for specific analysis in this

section. They are used here merely to facilitate discussion. Social and economic impact refers to the effects projects have had on various types of beneficiaries and the socioeconomic consequences that projects and programs have had in the communities or areas in which they were implemented. Other key issues include questions of replicability of education projects, their spread effects, and their political repercussions.

The findings reported here are suggestive, not conclusive. The extremely small number of projects reviewed and the subjective nature of the evaluation methods used preclude definitive statements. Nevertheless, the results of these evaluations point to questions and issues that merit further, more careful investigation.

#### A. Who Benefited?

Without doubt, rural school-aged children compose the largest group of primary and secondary beneficiaries. Construction of thousands of classrooms in the rural, poorer regions of Paraguay, Brazil, and Colombia made schooling more accessible to rural children, and may have contributed to a significant increase in school attendance. The addition of other elements (teacher training, instructional materials, institution-building, etc.) may also have helped raise attendance levels, and may have contributed to qualitative improvements as well. We cannot more definitely attribute increased school attendance (or any other within-school changes) to AID project activities with any degree of assurance, given the involvement of other factors in the causal process. In a few instances, however, the claim of attribution is clearly more plausible than in others.

For example, AID was variously the only donor and the major donor in Nepal's education sector between 1954 and 1975. Given Nepal's small size, AID's \$19 million contribution during that period can only be described as massive, accounting for as much as two-thirds of the MOE budget. The quantitative gains are impressive indeed: The increase in the numbers of primary schools, primary school students, and primary teachers came close to 100 percent between 1951 and 1979. The primary student enrollment ratio was less than 1 percent in 1951. By 1979, it was 77 percent. There was a sharp increase in female enrollment as well. In 1951 it was not customary for girls to attend school, and no figures were collected for female enrollment; but the number was almost certainly close to zero. By 1979, the female enrollment ratio at the primary level had risen to 24 percent (see Table 4). As the major donor to Nepal's education sector during those years, AID can rightly claim some credit for having made these achievements possible.

Table 4. Numbers of Primary Schools, Primary School Students and Primary Teachers in Nepal, 1951 and 1979

|                         | 1951  | 1979    | Increase      |
|-------------------------|-------|---------|---------------|
| Primary Schools         | 321   | 9,404   | 9,083 (97%)   |
| Primary School Students | 8,505 | 875,494 | 866,989 (99%) |
| Primary Teachers        | 640   | 24,652  | 24,012 (97%)  |

Source: U.S. Aid to Nepal: A Twenty Year Beginning, AID project Impact Evaluation Report No. 19, Table 1.

Korea represents another case in which certain effects of an AID-funded project are relatively clear. The Elementary-Middle School Project, through the Korean Educational Development Institute (KEDI), initiated an effort that was to culminate in a total revamping of the Korean system of schooling. At the heart of this effort was the introduction of teaching/learning techniques that stressed problem-solving and critical thinking--notions alien to traditional Korean education. Data from text tryouts involving samples of experimental and control schools show that the curricular changes introduced by KEDI significantly raised achievement levels among Korean school children (see Table 5).

Table 5. Comparison of Elementary School Students' Average Achievement Scores by Subject, KEDI and Conventional Schooling (no. of students = 231,567)

| Subject        | Average Achievement Scores |              | Difference in Scores | Percentage Improvement |
|----------------|----------------------------|--------------|----------------------|------------------------|
|                | KEDI                       | Conventional |                      |                        |
| Math           | 81.0                       | 64.0         | 17.0                 | 27                     |
| Social Studies | 74.3                       | 62.2         | 12.1                 | 20                     |
| Science        | 83.2                       | 68.7         | 14.5                 | 21                     |

Source: Korea Elementary-Middle School Pilot Project, AID Evaluation Special Study No. 5, Appendix E.

Of particular interest was the surprising improvement in scores among students outside major urban centers. Urban students had traditionally outperformed their nonurban counterparts. The KEDI reforms enabled students from small towns and rural areas to more closely approximate achievement levels in urban areas (see Table 6).

Table 6. Comparison of Urban and Rural Elementary Students' Achievement Scores in All Subjects, KEDI and Conventional Schooling (no. of students = 231,567)

|            | Average Achievement Scores |              | Difference in Scores | Percentage Improvement |
|------------|----------------------------|--------------|----------------------|------------------------|
|            | KEDI                       | Conventional |                      |                        |
| Large City | 79.5                       | 70.2         | 9.3                  | 13                     |
| Small Town | 83.6                       | 67.9         | 15.7                 | 23                     |
| Rural      | 76.5                       | 64.9         | 11.6                 | 18                     |

Source: Korea Elementary-Middle School Pilot Project, AID Evaluation Special Study No. 5, Appendix E.

Anecdotal evidence from the Paraguay impact evaluation report suggests similar effects. Teachers noted to evaluation team members that the new curricula evoked greater student interest and led to better academic performance and school retention rates. Construction elements of REDP may also have contributed to improved student attendance and achievement. Before REDP, children who were expected to do farmwork, who did not have adequate clothing for inclement weather, or who could not afford the costs of transportation were often unable to travel the long distances to available schools, and thus attended irregularly or not at all. Local informants noted to evaluation team members that construction of rural schools under this project made schooling more accessible to such children.

In Nepal teachers tell of student attitudinal and behavioral changes resulting from the added emphasis on health and sanitation in the reformed curricula. As the evaluation team goes on to explain, this strong impact of schooling on attitude and behavior is a well-recognized universal phenomenon, and is not exclusive to Nepal. Research in many parts of the world clearly demonstrates that exposure to schooling is strongly related to such factors as greater farm productivity, improved sense of control over one's environment, reduced

fertility in women, and lower morbidity and mortality rates among children.

Elsewhere, rural adults also benefited. In Thailand, about 80,000 low-income rural adults with little formal schooling were trained in job-related skills under the MTTTS project between 1966 and 1972. Today, graduates of MTTTS programs are employed by the thousands. In a number of cases, former students have become successful entrepreneurs, owning small businesses and/or venturing into new consumer markets. When one considers the economic role of individuals within the extended Thai family, the importance of this employment is even more fully appreciated. Men and women acquired skills that permitted them to supplement family income through off-farm or at-home employment, and thus fulfill a strongly felt sense of obligation to promote the economic welfare of the family unit.

Under the Nonformal Education Project, poor rural Ecuadorians successfully mastered the communication and negotiation skills intended to bolster their self-help capabilities. In Paraguay, AID-constructed classrooms were being used nightly by rural adults learning to read and write. In Kenya, the Correspondence Course Unit (CCU), under its expanded programming, was able to provide additional schooling opportunities to rural adults who were otherwise too far away from mainly urban secondary school facilities.

In general, the evaluation reports concluded that some AID projects/programs provided a variety of learning opportunities for rural adults--in literacy, secondary schooling, vocational training, and self-help skills.

Participant trainees and other professionals benefited from the higher level training provided both outside and within the host countries. Based on impact evaluation report figures, we can conservatively estimate that the training provided under the 12 projects reviewed benefited at least 200,000 people directly and about two million indirectly. Thousands of teachers received pre- and in-service training to improve teaching skills and acquire additional qualifications. Besides the projects such as those in Nigeria and Kenya, whose focus was teacher training, projects in Paraguay, Nepal, Korea, Jordan, Brazil, Colombia, and Afghanistan provided extensive training opportunities throughout these countries for both teachers and administrators.

The Nigeria impact evaluation team argued that teacher training activities have a "multiplier or cascade effect," because the students involved go on to impart knowledge to other students. Their figures indicate that between 3,600-5,000 student-teachers were directly influenced by project staff. Extrapolating from their initial figures, they go on to

estimate that some 180,000 to 900,000 primary school students may have been indirectly affected by the project efforts in teacher training. In Brazil, about 60,000 teachers and administrators received additional professional training under AID projects dating from 1952 to 1972. In Afghanistan, an estimated 10,000 teachers received in-service training as a result of an outreach program (1955-1967) under an AID project.

Participants receiving graduate-level training in the United States or third countries returned home to positions of substantial managerial or technical responsibility. Many now wield considerable influence over policies and practices not only in the education sector but in other sectors as well.

In Jordan, for example, upper echelons of government agencies and the private sector are staffed with many professionals who received their degrees from the American University, Beirut, or in the United States. Out of 15 participants trained under the Nigeria NNTEP, four have become state permanent secretaries, while five are heads of MOE Inspectorates. Three others have positions in a northern university as director, dean, or department chairman, and three are principals of secondary or post-secondary schools. Of the 31 Thai professionals trained abroad under the MTTTS project, 30 remain employed in higher level managerial jobs in the MOE.

Based on the foregoing discussion and data from Table 7, several points become clear. First, benefits were distributed across a fairly wide spectrum of the educated and uneducated, including disadvantaged groups such as the rural poor and women. There also appears to be some correlation between the size (in funds obligated) of the project/program and the variety of groups who benefited. The Philippines Project IMPACT, one of the smallest projects to be implemented, may have had an impact on a single beneficiary group only--rural school children. Meanwhile, the largest programs reviewed (in Brazil, Colombia, Jordan, Afghanistan, and Nepal) appear to have had the greatest number of benefiting groups. Three of these (Jordan, Afghanistan, and Nepal) are also among the longest lived AID-assisted education programs, with histories extending over a 20- to 30-year period. Apparently, project/program size and years of operation can have an effect on the number of groups who benefit.

In addition to reported impact on students and education professionals, there is some anecdotal evidence of impact on host country communities. In Paraguay, the evaluation team noted a continuing commitment to schools built under the REDP. Originally, communities donated land and labor for the schools' construction. In every case, original buildings show evidence of regular maintenance and improvements (shrubbery, fences, electrical wiring, sidewalks, furniture, etc) provided by contributed local labor.

Table 7. Groups Benefiting from AID-Supported Education Projects/Programs

| Country     | Rural School Children | Rural Adults | Women | Teachers | Administrators | Participant Trainees |
|-------------|-----------------------|--------------|-------|----------|----------------|----------------------|
| Brazil      | x                     |              | x     | x        | x              | x                    |
| Colombia    | x                     |              | x     | x        | x              | x                    |
| Jordan      | x                     |              | x     | x        | x              | x                    |
| Afghanistan | x                     |              | x     | x        | x              | x                    |
| Nepal       | x                     |              | x     | x        | x              | x                    |
| Korea       | x                     |              |       | x        | x              | x                    |
| Thailand    |                       | x            | x     |          |                | x                    |
| Paraguay    | x                     | x            | x     | x        | x              | x                    |
| Nigeria     | x                     |              |       | x        | x              | x                    |
| Ecuador     |                       | x            |       |          |                |                      |
| Philippines | x                     |              |       |          |                |                      |
| Kenya       |                       | x            |       | x        |                | x                    |

Reactions to IMPACT schooling among concerned Filipino parents have been mixed. The more common reaction was that IMPACT served best the interests of the brightest youngsters, who could work on their own and who were most likely to have the self-assurance to teach their peers. IMPACT was viewed as serving less well the interests of the average student, who, it was felt, needed the regular guidance of an adult teacher within a conventional framework. Furthermore, whatever parental support existed initially appears to be eroding. There has been a precipitous decline in enrollment at the oldest experimental sites. Many parents have removed their children from the schools, sending them to private institutions. According to teachers, this has left only youngsters from the poorest families at the IMPACT schools. There is now increasing pressure from parents for a return to conventional schooling.

#### B. Impact on Institutions and Institutional Practices

In almost every case, projects/programs either established, or altered in a significant way, institutions and institutional practices. All evaluation teams reported that established institutions are still in operation, despite what appears in some cases to be considerable stress from surrounding circumstances.

In Korea, Brazil, Colombia, Paraguay, Nigeria, and Nepal, projects/programs helped create whole sections of government education bureaucracies at both local and national levels. Education planning, data collection and analysis, textbook production, research, and policy formulation became significant areas of government administration, in large part because of AID projects.

Until 1970, for example, Brazil had no formalized procedure for education planning at either federal or state levels. Between 1970 and 1974, under the auspices of AID assistance, federal and state education secretariats established their first planning units and submitted their first formal sector plans. Planning and planning units have since become well-established institutional mechanisms in all of Brazil's federal and state education secretariats.

One seemingly unqualified "success story" appears to be the firm establishment of KEDI, one of the world's largest research organizations. KEDI is Korea's official national agency for education policy and research. Following the Korean War, the entire education system underwent a series of systematic reforms intended to create the skilled manpower called for by the nation's blueprint for economic recovery. As a part of this continuing reform effort, KEDI developed a new instructional system for elementary grades, which was introduced nationwide in 1982. To assist its efforts, KEDI has the nation's largest repository for research information from international sources. In addition, KEDI produces instructional programs for both radio and TV, and assists the MOE in planning and determining policy. It is well supported by a large, highly trained staff, sophisticated facilities, and a generous budget. It may well exert more influence over the course of lower education in Korea than does any single educational institution within any other country.

In Paraguay, the Regional Education Centers are doing well, having indeed become the model teaching and administration centers originally planned by project designers. Their facilities are comprehensive. They incorporate not only primary and secondary schools, but also teacher training institutes and regional administration offices. They have the plant, equipment, and staff to offer a wide range of non-academic coursework, from vocational subjects to such enrichment subjects as photography, arts and crafts, and dancing.

In addition, they provide in-service training for teachers and administrators; serve as liaison between teachers' groups, research organizations, and government agencies; and provide an array of consultant expertise to assist local education offices in all regions. Constructed schools are being fully utilized by two shifts of students (average class size: 40) during the

day, and adult literacy classes at night. Staff and communities have made improvements in all the schools, from adding furniture and playground equipment, to building on to an existing plant and installing a water pump.

Elsewhere, established institutions continue to function, despite very limited resources and other related sector problems. In Nepal, the Educational Materials Organization, established under the Education Development Project to produce instructional materials, is now the Curriculum, Textbook, and Supervision Development Center of the MOE. This Center and another successor organization, Janak Education Materials Center, are responsible for preparing and distributing instructional materials for Nepal's schools. Together, they have successfully established a functioning system for textbook writing, production, and distribution. Part of the success, however, is due to continuing support from UNICEF, which provides the paper necessary for printing texts in sufficient numbers. Without that support, it is doubtful that either organization could afford to produce books in such quantities and/or to continue distributing them free of charge to younger students.

In some countries, education system infrastructures were also strengthened by the creation of semi-autonomous, university-affiliated, and/or wholly private agencies that do research, recommend policy, teach, and produce a wide range of teaching/learning materials.

In Nigeria the semi-autonomous Institute of Education was established to develop curricula, teaching materials, and teaching techniques and to do research. After the Civil War and the division of the North into six states, the Institute assumed the added responsibility of forging a regional consensus on examinations and curricula in teacher training. It has done this job remarkably well, despite the strong centrifugal forces of its social milieu.

One objective of the Institute was to improve the quality of teacher education and, ultimately, the quality of teachers' classroom performance. Since the adoption of universal primary education in 1976 and the inevitable pressures to turn out more teachers, this emphasis on quality has been replaced by one on quantity. Increases in the numbers of teacher training college graduates have been followed by a decline in certification examination pass rates. Other factors, such as automatic promotions, the lack of incentives, and low salaries, also detract from the emphasis on quality. Despite these problems, the Institute has continued the curriculum reform effort begun under the NNTEP, and is about to publish revised teaching materials first written under project auspices 12 years ago.

The Institute of Education is today a major influential force in teacher education. As teacher training colleges grow in numbers, they continue to reflect a philosophy of education first introduced through the NNTEP and now disseminated by the Institute.

In Thailand, MTTs programs are in great demand and provide skills training for 30,000 students a year. Unfortunately, current financial support is barely enough to maintain operations for so large a number. Budgetary constraints preclude replacing aging plant and equipment, much of which has been in constant use since 1966. Maintenance has therefore become a chronic problem. Meanwhile, students often get insufficient practice because costly tools and expendable materials are either in short supply or unavailable, and classroom exposure time has been reduced.

The Kenya CCU, while an established institution, is not the thriving institution it was during the project. At one time, the MOE automatically promoted any primary school teacher who satisfactorily completed certification requirements, thus encouraging large numbers of uncertified and minimally certified teachers to enroll in radio correspondence courses. When the MOE rescinded this policy, enrollment plummeted from a high of 10,000 in 1969 to 476 in 1980. Denied financial support from tuition payments and the sale of course materials, CCU operations deteriorated badly. Enrolled students now complain that requests for information are not answered, lessons are not corrected and returned promptly, and tutors no longer make visits. The impact evaluation team reported that many respondents spoke of CCU as though it were defunct, not realizing that it was still functioning.

Nevertheless, CCU has shown remarkable resiliency and an adaptability that probably ensures its continued survival. It has introduced courses leading toward the secondary school certificate, prepared radio lessons and correspondence courses for teachers of illiterate adults, and is preparing a training program to improve teachers' classroom effectiveness and command of academic subjects. Furthermore, officials and educators alike argue that distance teaching by radio can satisfy rising public demand for access at a time when Kenya's troubled economy precludes increasing allocations to the education budget.

In the Philippines, Project IMPACT successfully demonstrated that the number of teachers and the salary costs could be substantially reduced without loss of quality by using programmed learning materials which students could follow independently of direct supervision. By the time of the impact evaluation (September 1981), there had been a 60 percent reduction in the number of teachers at IMPACT schools and a 50

percent reduction in per-student costs. Research studies and nationally administered achievement tests show that these savings were achieved without loss in academic quality. The system appears to have had the additional benefit of producing a more self-motivated and self-assured student than would normally be produced by traditional system.

Realized savings, however, accrue to the national Ministry of Education and Culture (MEC), not to the local IMPACT schools. Since the withdrawal of donor support in 1979, the schools have had no regular source of funding and have been hard pressed to maintain the IMPACT Program. The result has been a serious depletion in supplies and a deterioration in the facilities, which are an integral part of the IMPACT approach. This has led in turn to declining support for IMPACT schooling among professional educators at the oldest experimental sites. Local area teachers and administrators argue that while the IMPACT approach has merit, it cannot be sustained without an adequate supply of the necessary support items that distinguish it from more conventional approaches. As long as these schools fail to obtain more sustained financial support from the MEC, their ability to maintain the IMPACT system will be in doubt.

Meanwhile, a plan to expand IMPACT to other schools is temporarily stalled due to the unavailability of funds to cover conversion costs. This current situation, however, may well change with the infusion of a \$100 million World Bank loan intended to improve primary education throughout the Philippines. According to MEC officials, an unspecified amount will go to IMPACT schools.

### C. Curriculum Reform

The one major area where some of the country projects/ programs proved less effective was curriculum reform. In Paraguay, Nigeria, Nepal, and Afghanistan, project advisors and counterparts introduced new teaching materials; wrote student texts and teacher guides; created primary, secondary, and teacher training curricula in a wide range of subjects; and provided the structure and substance for training teachers in the use of nontraditional teaching techniques. In every case, one purpose for the curricula reform was to promote a system of learning that would be more practical, more efficient, and more effective than the traditional system.

In Paraguay, about 10 percent of primary schools and 10 percent of secondary schools actually use their new curricula. Elsewhere, the evidence suggests little or no utilization either of the new curricula or the new teaching techniques. In Nepal and Nigeria, the rote memorization so characteristic of

traditional formal schooling continues to prevail; and in Nepal, particularly, the quality of instruction remains very poor. In Afghanistan, indications are that Soviet advisors have now introduced their own pedagogical notions to curriculum development, which, in all likelihood, do not use either the approaches or the professional expertise associated with the U.S. project.

#### D. Spread Effects

In general, spread effects appear to be modest and, in some instances, somewhat tentative. The techniques used in the Ecuador Nonformal Education Project to teach communication skills have spread to areas beyond the original sites within Ecuador. Similar techniques are also being applied in Ghana, Guatemala, Swaziland, Thailand, and Indonesia, in part because of their success in Ecuador.

The Korean Educational Development Institute has become a model research and data bank institute, and is visited by professional educators from all over the world.

The Kenya CCU model of distance teaching has been adopted by a number of countries in Africa and Asia and CCU staff members regularly serve as consultants or trainers in similar efforts in other parts of the world.

Ideas originating in Project IMPACT in the Philippines are now being tested in Jamaica and Liberia, and may be tested in Bangladesh.

In Thailand, the MTTs system has been incorporated into a much larger, more inclusive Life-long Education Center (LEC) system that goes beyond teaching employable skills to include instruction for those wanting to pursue purely avocational or personal enrichment interests. Together, these systems provide training to 50,000 adult Thais each year.

Occasionally, project activities appeared at first to have little potential for replication, only to become widely accepted over a longer period of time. Home economics instruction, for example, was not readily accepted when introduced to Jordanian schools by AID in the 1950s, yet it is now a regular feature of school curricula for both boys and girls.

Other innovations have had little or no spread effect. The community college, parent-teacher associations, and (lower school) agricultural and vocational education have either disappeared or do not appear to be widely accepted. As discussed elsewhere, curriculum reform also falls in this category.

Impact evaluation reports discuss three possible explanations for the failure of innovative ideas to spread. 1) Some ideas were inconsistent with prevailing cultural perceptions. In Jordan, for example, there was no tradition of parent participation in decision-making processes regarding school matters. In Nepal, the lower status of vocational education and the close identification of academic schooling with coveted white collar employment discourage any avid pursuit of skills training among primary and secondary students. 2) In Nepal, the vocational education curricula introduced by U.S. technical advisors required equipment and materials far beyond the financial means of a poor country to support on a regular basis. The same explanation applies to the limited spread effect of the Paraguay and Nigeria curriculum reform efforts. While the curricula improved efficiency, they also required an investment in equipment, materials, and training which neither country was willing to sustain. 3) The relatively low priority that the national government in Jordan placed on agriculture contributed to the failure to successfully replicate agriculture education programs.

#### E. Unanticipated Impact

Impact evaluation reports mention few, but significant, cases of unanticipated impact. The Faculty of Education established at Kabul University under the Elementary and Secondary Education Project was not well-accepted by other faculties. Its students did not enjoy the same high status and favored access to government positions accorded to students of other faculties. Isolated from the rest of the University and beset by student unrest, the Faculty of Education was abolished following the termination of U.S. technical and financial assistance.

As previously discussed, CCU courses in Kenya enabled large numbers of teachers to increase their qualifications, and precipitated a financial crisis that forced the MOE to stop rewarding upgraded teachers with automatic salary increases. This abrupt change caused CCU enrollment to decline drastically, and greatly reduced the amount it collected in fees, thereby crippling distance teaching operations.

#### F. What Factors Explain Effectiveness and Impact

In most cases, relative impact appears to have been more frequently a function of conditions internal to the host country rather than a function of AID or contractor performance. Some of these conditions are discussed below.

## 1. Political and Social Strife

In Nigeria, civil war and the subsequent creation of six states in the North drastically delayed implementation and led first to a reduction in scope and then to complete termination of all project activities. MOE staff members were disbursed over six state MOEs, while the Institute of Education was forced to take on the role of a regional service organization. The process of selecting U.S. technicians was upset, and the number of contract staff was sharply reduced. The number of teacher training colleges to be assisted was reduced from seven to four. The number of U.S. teachers recruited was reduced from 30 to 19. Since the number of U.S. technicians was reduced, the curriculum reform effort also had to be reduced. The civil war also led AID to shift its support away from local institutions (such as teacher training colleges) that might undermine the growth of national integration, thus bringing the project to a premature ending.

The Soviet invasion of Afghanistan almost certainly cut short any actual or potential impact the Elementary and Secondary Education Project might have had. A good many AID interventions were in operation at the time of the invasion. While this is speculation, it is entirely possible that given time and less political turmoil, these interventions might have had significant social, economic, and institutional impact.

## 2. Culture and Commitment

In one instance (Ecuador), the project was highly effective as long as it remained a relatively small, experimental effort sustained by a capable, dedicated Ecuadorean and University of Massachusetts staff. Once the experiment became an expanded effort under control of the MEC, a qualitative difference occurred in the nature of the project. Original implementors had made a deliberate effort to involve rural Ecuadoreans (the intended beneficiaries) in all operations. Later, under pressure from certified adult education teachers, provincial directors of education, and procedural requirements of the formal system, rural Ecuadoreans lost their participatory functions, and the project gradually ceased to be one in which intended beneficiaries took part in planning and implementation. Certified teachers were outsiders to the rural communities to which they were assigned, and had neither the personal interest nor the commitment of the local people they had replaced. Meanwhile, control over operations passed from the communities to provincial directors who were unfamiliar with local conditions. Together these developments contributed to a decline in the former high levels of enthusiasm and performance.

In addition, there was a chronic shortage of teaching materials. While lack of resources and technical know-how were partly to blame, inertia, poor organization, and the lower status of nonformal education with the MEC also seriously impaired materials production and lowered project effectiveness. Recent inquiry, however, suggests that the Government of Ecuador remains committed to project goals and is currently using an alternative organizational approach to solve these problems. With AID support, an autonomous National Institute for Campesino Training has been formed to improve the nonformal education offerings of ministries and private organizations.

In Korea, successful implementation and impact were in part due to the traditional respect with which Koreans regard education, along with the strong, widely held belief that economic recovery from the Korean War depended on a well-educated and well-trained workforce. Reconstruction of an education system severely crippled by war became a national priority during the 1950s as the Republic of Korea Government set about the task of building schools, establishing institutions, training teachers, and producing teaching materials. At the same time, the country entered a period of extraordinary economic growth which, many Korean leaders believed, could be sustained only by effecting fundamental reforms in the way young people were being educated. Such reforms would, if successful, ensure a supply of the kinds of skilled manpower necessary to fuel an expanding and increasingly complex non-agricultural economy. The commitment to instituted reforms has been and continues to be impressive. Throughout the 1960s and 1970s the amount spent on education varied between 18 percent and 19 percent of the national budget. That figure is expected to rise to 22-25 percent by 1986.

In Jordan, a strong commitment to education, reinforced by recent historical experience, is believed to have contributed to the successful implementation and impact of the AID program. The Palestinians of Jordan's West Bank, long known for their strong belief in and respect for education, were reduced to the status of homeless refugees by the 1948 war. Faced with the need to meet strong, politicized demands from both East and West Bank populations, the Government of Jordan shortly thereafter established a unified system of education intended to serve the entire Kingdom. Through intervening years of political strife, war, and social dislocation, demand and commitment have remained high. According to some respondents interviewed by the evaluation team, demand for education remains high in part because of the traumatic loss of land and property through years of conflict. Palestinians look on education as a portable tool that cannot be taken away and that can ensure survival when all else has been lost.

Education is highly prized in the Philippines as well. However, evaluation team members discovered that Filipino parents had definite expectations about how the education system ought to teach their young. The failure of the IMPACT system to take firm root suggests that there is a limitation on the degree to which a novel pedagogy can violate these expectations. Central to these expectations was the belief in a structured system of successive classes and grades, each associated with corresponding levels of increasingly difficult curricula. Also central to these expectations was the belief that such a structured system required the presence of a professionally trained teacher in the classroom, to provide sustained guidance to the young as they progressed from one grade to the next. The IMPACT approach, with its emphasis on peer group teaching, independent study, and ungraded classes, violated these expectations and aroused some feelings of anxiety among parents about the adequacy of the education their children were receiving.

### 3. Economic Conditions

In Brazil, inflation so undermined construction elements of the Northeast Elementary Education Project that only 20 percent of originally planned classrooms, normal schools, and teacher training centers were ever constructed.

In Korea, the project did not realize its objective of demonstrated cost-effectiveness. Unforeseen increases in the GNP allowed the Korean Government to devote more funds to education and to pay less attention to cost factors. Gradually, cost-effectiveness receded in importance until it ceased to be a working objective.

In Colombia, disbursement of project funds was sharply curtailed as part of a government effort to curb inflation. This slowed implementation to the point that schedules could no longer be met and an entire vocational education element of the project had to be eliminated.

### 4. Financial, Structural, and Organizational Constraints

In Nepal, Nigeria, and Paraguay, the relative ineffectiveness of curriculum reform can be traced to a number of causes, one of which was simply the fact that necessary materials and equipment were never available in sufficient quantities. Inevitably, curriculum reform involved increased and improved teaching aids, which neither the projects nor the host governments were prepared to supply in the amounts or for the lengths of time required.

In all three countries, teachers were very poorly paid and were offered no incentives for the additional skill, imagination, and work required by the new curricula and teaching techniques. In Paraguay, teacher salaries are below those of unskilled laborers. The evaluation team discovered that Paraguayan communities often supplement their teachers' salaries to provide them with a living wage. The team strongly argues in its report that unless the Government of Paraguay raises teachers' salaries, the country will experience a continuing severe shortage of education professionals, as increasing numbers of them move out of the teaching profession.

In Nepal and Nigeria, automatic promotions, heavy pressure to pass students, widespread cheating on examinations, and the practice of patronage probably also undermined any teacher motivation to change classroom behavior.

#### 5. Agency/Contractor Performance and Cultural Knowledge

In Afghanistan, AID and contractor performance (along with internal conditions) lowered the effectiveness of some subprojects. Deteriorating relations between AID and the contractor (Teacher's College, Columbia University) led AID/Washington to reduce project funding. Budget cuts were so severe as to force a premature end to some activities (Math/Science Lycee Subproject) and a slow-down of operations in others (Primary Curriculum and Textbook Subproject). Furthermore, though advisors made strenuous efforts to implement activities in a timely fashion, their numbers were often too few and their comprehension of the cultural setting too meager for so complex and difficult a task.

### III. CONCLUSIONS

The impact of AID education projects and programs over the past 30 years has been profound and widespread. Institutions established with help from AID have proved remarkably durable. Most continue to function; a few have become influential sources of leadership in the field of education. AID's education sector activities have provided higher education to thousands, many of whom are now policy-makers at national and regional levels, both in education and in other fields. AID has also been instrumental in extending access to education to areas whose remoteness and poverty would otherwise have been a barrier to participation in national development.

The general research literature on educational development indicates that improved educational services contribute to

reducing the birthrate, improving health practices, increasing agricultural productivity, and changing individual and group attitudes about self-direction.

This series of studies has provided illustrations of these accomplishments. While these 12 studies do not provide a balanced picture of AID's contribution to world educational development, they are suggestive of the wide variety in the forms of assistance AID has provided to help solve education problems.

This section of the review of education sector impact evaluations discusses the broader lessons learned from the series of studies. Some of these lessons are mentioned repeatedly in the evaluation team reports. They are supported by the observations on limitations to project effectiveness and on the nature of project impacts reviewed in Section II. This section also identifies unresolved issues on which the studies offer suggestive evidence but no clear conclusions.

#### A. Lessons Learned

1. The enduring effects of an education project cannot be determined until a number of years have elapsed after the project has been launched.

Development of a country's human resources is a process that takes a number of years from the time resources are made available to the time trained people are ready to use their knowledge and skills. Education projects often involve building buildings, providing commodities, or supplying technical assistance for educational innovations. A number of the projects studied demonstrate that there is no simple relationship between the numbers of buildings or technicians provided and the durability of the educational programs that receive assistance. Not meeting initial goals is not a measure of failure, although it may appear to be during the project's lifetime. These studies show that certain elements of a project may continue long after donor withdrawal and appear--in retrospect--to be well-established, despite apparent shortcomings in project execution.

2. AID education programs and projects made an important contribution to increasing and equalizing access to educational services.

AID has contributed substantially to building and supplying schools in rural areas and to increasing educational services for adults and young people in remote localities. AID education projects increased opportunities for girls and women to enter school or to make up for limited schooling through

nonformal programs. Some of these projects made up for the present population's educational deficits through nonformal education programs. Others assured more equitable education for future generations by extending the formal school system into isolated areas and opening it to women.

3. AID has had considerable success in training educational professionals and supporting educational institutions in developing countries. Its contributions to teacher training have been most successful in places where job and career advancement opportunities and salary incentives supported training efforts.

Teachers and professional educators are most likely to take appropriate positions in the field of education when the salary structure and career ladder offer good incentives, compared to those in other sectors.

In countries where salary and working conditions for teachers are poor, on the other hand, it is impossible to guarantee an adequate supply of trained teachers, no matter how good the training program. These studies demonstrate the need to consider working conditions and incentives, as well as the quality of training provided, in planning training programs to increase the number of qualified teachers.

4. Careful prefeasibility studies and serious collaborative planning with recipient communities are essential to the success of projects that introduce innovative teaching methods and curricula, especially in remote areas.

Curriculum reform, innovative teaching techniques that promise cost savings per student, or expansion of services to remote areas sometimes hold far more appeal for central government officials than they do for the prospective beneficiaries, yet their success depends on local communities' acceptance and willing involvement. Prefeasibility studies need to address the following issues:

- Local attitudes toward schools and schooling, and the potential sources of local support for a proposed project
- Cultural concepts of the teacher's and student's roles in the classroom
- The preparation time teachers need for using the current program and for the proposed innovations
- Logistic problems in ensuring a reliable supply of required texts and educational support materials

Several reports point out the importance of "selling" the project to the various groups, from government officials to local recipients whose support is required, and the need for interactive collaboration at all levels during project execution. Continuity of staff and management on the donor side, from planning and design through the implementation period, contributes to the effectiveness of this process.

5. To ensure continuity of education programs AID must not only introduce cost-effective reforms but must determine how current costs are apportioned between central and regional governments and local entities who will bear recurrent costs, whether these costs are reasonable in light of the resources available, and what will motivate payment of maintenance expenses.

AID has proved it can design appropriate cost-effective educational programs for developing nations, but these often involve trade-offs in spending. Savings on teachers' salaries, for example, may need to be redirected toward production of self-instructional materials to achieve the planned results.

Recurrent costs sometimes fall on local communities, not on the central education budget. If savings go to one account and maintenance is paid from another, there is increased risk that the program will deteriorate after project support ceases. If maintenance costs are usually paid by localities rather than by the central government, official assurances that the host country will pick up recurrent costs should be weighed against the incentives communities will have to continue this support. Even if the central government assumes replacement and maintenance costs, AID should consider what the pressures will be to sustain or to abandon on-going support.

6. Education planners need to examine the wider economic context into which a project fits to determine how it will respond to workforce needs and how it will advance economic growth of the area.

The capacity of the host country to absorb the products of an education program--school graduates, newly trained professionals, teachers, craftspeople, or the like--into the national or regional economy is a crucial factor in determining whether that program will contribute to economic growth and development. Employment opportunities for graduates, in turn, depend on the present and projected economic development of public and private sectors within the country and the workforce needs and economic growth of the wider region, as well. Educational planning thus needs to be tied to broader economic analysis.

7. Good coordination among the host country officials, the AID mission, the host country sponsoring institutions, and the AID contractor is an important factor in project success.

This observation is not unique to education sector projects. Nevertheless, several evaluation reports point out problems that arose because of conflicting task assignments and poor communication between the various parties involved in an education project.

This series of evaluations also raises some important issues that cannot be resolved on the basis of these studies alone. The evidence from such a small sample is sometimes mixed, sometimes lacking, and not unbiased. The examples these studies furnish suggest that further investigation of the following issues is needed.

1. There is often pressure to expand the school system in developing countries, even if it means providing education of poorer quality. The question of how to balance such demands with maintenance of acceptable quality in education is unresolved. AID has attempted to meet the problem by supporting teacher training and by advocating curriculum reform and the use of innovative or technologically advanced teaching methods. According to the findings of these studies, none of these approaches has had unblemished success. These evaluations give no clear indication of how or to what extent quality education can be promoted in an expanding system.

2. This series of evaluations included only two examples of nonformal education projects. Both were judged remarkably successful, but in fact only one was actually designed by AID. A more representative study of AID's record in nonformal education projects is needed to supplement the observations of these reports concerning the impact of AID efforts in nonformal education.

3. These studies show a generally poor performance in vocational, technical, and agricultural education projects, with one notable exception. Much of this was due to the fact that most of the programs examined gave inadequate training for job preparation and usually offered it to students who aspired to other types of careers. Further studies of work-oriented education programs should be made to see if this is a general pattern or not, to examine other successful and unsuccessful programs, and to identify variables that bear on the effectiveness of work-oriented education projects.

4. The evaluations, by their scope and nature, only examined the effects of AID programs on educational institutions in the host countries that received some direct assistance; they did not study other already-established educational institutions in those countries that were not recipients of AID support. The indirect impact of AID education assistance on the entire range of educational institutions and on educational planning in developing nations is a matter for further investigation.

5. Although all of the projects evaluated were at least partially successful, it can be argued that the sample was biased in favor of successful projects. There is a positive aspect to such a bias--the studies offer models on which to base future planning--but they cannot be considered representative. General assessment of the degree of AID's success in educational interventions in developing nations is a topic for further study.

#### B. Policy Implications and Recommendations for AID

1. Education interventions take a long time to produce results in comparison with other types of development projects. To achieve enduring and pervasive impact they require a substantial commitment of resources over a long period of time. This suggests that AID should be prepared to make a long-term commitment of resources in areas in which it hopes to have serious impact. It should anticipate having only limited impact in countries in which its efforts are more restricted. As a first step, AID should formulate a long-range plan to serve as a blueprint for its continued involvement in the sector.

2. Education projects operate on the social and human resources of a country or locality--the changes they bring are ultimately social changes. Because of this, careful consideration must be given to host country policy and institutional, cultural, and socioeconomic constraints during the initial phases of project identification and design. Intended interventions must be designed to circumvent the limitations of host country financial and political resources and to accommodate its cultural realities.

3. This sector review, based on a small set of impact evaluations, provides illustrative examples of AID's performance in education and insights about the reasons for persistence or dissipation of project accomplishments. A comprehensive and systematic examination of AID involvement in education would provide a more representative review of the Agency's record in the sector and would be a valuable tool for determining policy.

APPENDIX A  
PROJECT DATA SHEETS

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1. Country: Brazil
2. Project Titles: Education Sector Loan I (ESL I); Education Sector Loan II (ESL II)
3. Project Numbers: 512-L-078 (ESL I); 512-L-081 (ESL II)
4. Project Purpose:  
To expand facilities for and introduce qualitative improvements in Brazil's entire secondary education system (ESL I); to continue efforts begun under ESL I (ESL II)
5. Project Implementation:  
1969-1974 (ESL I); 1971-1975 (ESL II)
6. Project Funding:  
\$32 million (ESL I); \$50 million (ESL II)
7. Accomplishments:  
ESL I: 8,633 teachers and administrators trained in Brazil and the United States; 204 secondary schools constructed and equipped, providing places for 163,200 students  
ESL II: 47,226 teachers and administrators trained in Brazil and the United States; 64 multipurpose schools constructed and equipped; 12 regional administrative offices established; over 700,000 books and manuals printed

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Brazil (continued)

Project Summary

U.S. involvement in Brazil's education sector was a large (\$ 132.5 million) and wide-ranging effort that began in the mid-1950s and lasted for 20 years. Despite very rapid economic growth during that period, the education sector remained undeveloped, with educational services concentrated largely in urban areas and in the wealthier southeast region of the country. The regional disparities were particularly striking: In 1962, the primary school enrollment ratio was 42 percent in the northeast and 76 percent in the southeast; the 4th grade completion rate was 3 per 1,000 in the northeast and 35 per 1,000 in the southeast. Rural schools were in such short supply throughout Brazil that children wanting to continue beyond primary grades had to travel to urban areas. Schools were run in two or more shifts, and were poorly equipped and staffed. Following the typical classical emphasis on arts/humanities, the curricula were often divorced from the needs of the 75 percent of rural youngsters who would not go beyond the fourth grade. Alongside the widespread shortage of trained teachers was a shortage across the entire range of skills (administration, planning, curriculum testing/revision) necessary for a well-structured education system.

The U.S. program was designed to assist Brazilian states to correct these problems. Major projects were the Program of American Assistance in Elementary Education, Northeast Elementary Education Project, Educational Administration and Planning at the Primary Level, Secondary Educational Planning and Administration, Education Sector Loans I and II, and Program for the Expansion and Improvement of Secondary Education. Activities included school construction, training in planning and administration at national and state levels, establishment of planning units in state secretariats, establishment of teacher training institutions, materials production for classroom use and teacher training, revision of elementary and secondary curricula, production of radio and TV programs, and the publication and printing of school texts.

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1. Country: Colombia

2. Project Titles:

Education Sector Loans (ESL) I, II, III, IV, V

3. Project Numbers:

514-L-054 (ESL I)  
514-L-059 (ESL II)  
514-L-065 (ESL III)  
514-L-066 (ESL IV)  
514-L-073 (ESL V)

4. Project Purpose:

Expand capability through participant training; provide individual financial credit; expand and improve post-secondary technical education facilities; improve teacher education programs; expand and improve a system of secondary education; expand and improve primary education, particularly in rural areas; strengthen administration, planning, management, and research capabilities at all levels of the sector

5. Project Implementation: 1969-1976

6. Project Funding: \$75.5 million

7. Accomplishments:

7,000 classrooms constructed; 10 secondary schools equipped; other schools repaired and updated; 30 secondary schools outfitted with laboratories and libraries; 5 industrial schools equipped with workshops; 15 service centers constructed; facilities of 30 normal schools upgraded; 400 ETV sets and 360,000 workbooks provided for primary schools; almost 90,000 teachers, professors, and officials trained; facilities and services at faculties of education improved; MOE offices equipped and provided with technical assistance; reform plan developed for administering secondary education; new curricula established for secondary education; plan initiated for technical education, research on innovations; National University development plan implemented; training capability at M.A. and Ph.D levels expanded; loans provided for 2,324 students in faculties of education; financing provided for graduates doing research in education projects

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Colombia (continued)

Project Summary

While the United States had been contributing funds and technical expertise to Colombia's education sector since the early 1960s, its first major aid program began in 1969 with the start of the first of five sector loans worth \$75.5 million. These loans were designed to assist the Colombian Government in its concerted, large-scale effort to improve access, efficiency, quality, and management at all levels of the formal education system. These loans made possible many wide-ranging activities, including a school construction program for rural areas; pre- and in-service teacher training programs; improved comprehensive facilities and service at the university level; an expanded student loan program; improved institutional capabilities in administration, planning, and research; improved curricula and supplies of texts and equipment at the secondary level; an expanded textbook distribution system; construction and/or repair of secondary schools, libraries, and junior colleges; and improved plans and equipment for polytechnical institutions, laboratories, and industrial school workshops.

1. Country: Jordan
2. AID-supported Education Projects, 1952-1982:

| <u>Project Title</u>                          | <u>Project Number</u> |
|---|-----------------------|
| Technical Assistance Supporting Activity      | 2780000               |
| Agricultural Education                        | 2780001               |
| Field Project Assistance                      | 2780004               |
| Commercial Departments                        | 2780010               |
| Supplemental English Library                  | 2780026               |
| Teacher Education                             | 2780051               |
| Industrial Education                          | 2780057               |
| Khadcuri Agricultural School                  | 2780063               |
| Bedouin Education                             | 2780074               |
| Expanded Educational Facilities               | 2780092               |
| Human Research and Development Education      | 2780111               |
| Bir Zeit College                              | 2780122               |
| Arab Development Society                      | 2780900               |
| Construction and Equipment, Schools           | 2780905               |
| Construction and Equipment, Teachers Colleges | 2780906               |
| Rural Training Centers                        | 2780907               |
| Agricultural Education                        | 2780040               |
| Demonstration Laboratory Facilities           | 2780041               |
| Agricultural Extension Department             | 2780042               |
| Agricultural Research and Development         | 2780081               |
| Agricultural Research Facilities              | 2780089               |
| Vocational Secondary Schools                  | 2780142               |
| Development Administrative Training           | 2780146               |
| Faculty of Agriculture (University of Jordan) | 2780178               |
| School Construction I                         | 2780190               |
| Development Administration Training II        | 2780214               |
| School Construction II                        | 2780232               |
| Vocational Training                           | 2780238               |
| Village Development I*                        | 2780183               |
| Village Development II*                       | 2780205               |
| Village Development III*                      | 2780221               |

3. Sector Areas of Emphasis:

Teacher training, agriculture education, vocational training, participant training, school construction

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\* Village development projects were not education projects per se but are included here because they contain major school building components which the project evaluations showed to be among the critical components of the village development program in the Jordan Valley.

Jordan (continued)

4. Project Funding:

Approximately \$25-30 million (for all above projects)

5. Accomplishments:

- a. Teacher training: Five teacher training institutes built and/or equipped; technical assistance provided for teacher training programs
- b. School construction: Three demonstration schools built and/or equipped and provided with technical assistance; over 1,400 classrooms constructed
- c. Vocational training: Two trade schools constructed and equipped; 32 secondary schools equipped and provided with technical assistance and/or equipment
- d. Agriculture training: Four agriculture schools constructed, equipped, and provided with technical assistance; training in research, teaching, and extension provided; technical assistance and commodities provided for the Faculty of Agriculture, University of Jordan
- e. Participant training: Participant training provided in U.S. and third countries for participants

6. Host Country Exchange Rate:

U.S.\$2.80 = 1 Jordanian Dinar (for 1950-1972)

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Jordan (continued)

Project Summary

When Jordan became independent of Great Britain in 1946, its education system was relatively small and underdeveloped. During the following decades of social upheaval, war, and repeated inflows of refugees, there was a rapid increase in the demand for social services of all kinds, including education. Following the 1949 war with Israel, the West Bank area of Palestine was joined with the East Bank area of Trans-Jordan, and the flow of refugees from the occupied areas increased the population of Jordan threefold.

At that time, Jordan had no system of higher education, no teacher training institute, only a few small trade training schools, and very limited educational opportunities for girls beyond the primary grades. The Ministry of Education had little administrative and planning capacity, few education specialists, too few qualified teachers, and too few schools at all levels. Jordan's economy was clearly inadequate for the burdens placed upon it, and it was obvious to all that external resources were required to support the existing system to meet the growing demand for services and to provide for expansion and upgrading at all levels--particularly for higher level vocational, technical, and teacher training.

By 1952, AID and its predecessor agencies had become Jordan's main bilateral source of assistance to education. Since that time, AID has funded more than 30 projects directly related to education, including technical advice, support for school construction, training opportunities in the United States and other countries, and equipment.

In the early years, U.S. bilateral aid support for Jordanian education stressed five themes: (1) teacher training, (2) agricultural education, (3) vocational/technical training, (4) preparation of national leadership, and (5) the expansion of education facilities in rural areas. AID also sought to encourage audiovisual techniques, home economics, radio and TV education, and school-community relations. Since the early 1970s, AID's activities have focused primarily on developing administrative training, improving university faculty, and supporting school construction.

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1. Country: Nepal
2. USAID Primary Education Projects (or Projects Which Had Primary Education Components) and Project Numbers:

| <u>Project Title</u>                               | <u>Project Number</u> |
|--|-----------------------|
| Educational Activities                             | 67-67-907             |
| Teacher Training and Related Activities            | 67-66-908             |
| Education Development                              | 367-67-013            |
| Education and Training                             | 367-67-018            |
| Primary Education                                  | 11-640-059            |
| Teacher Training/Higher Education                  | 11-660-061            |
| Education Materials Development                    | 11-690-063            |
| Primary and Teacher Training                       | 11-640-093            |
| Teacher and Technical Education                    | 11-650-060            |
| Teachers and Materials Utilization and Development | 11-690-228            |

3. Goal of Projects: Develop a system of primary education

4. First Project Began: March 1954

5. Last Project Began: June 1975

6. Amount:

\$9,112,600 (for primary education only out of a total of \$16,617,000 for above projects)

7. Government Sponsor: Ministry of Education

8. Achievements:

|  | <u>1951</u> | <u>1975</u> |
|--|-------------|-------------|
| Number of Schools                            | 321         | 8,708       |
| Number of Students                           | 8,505       | 401,035     |
| Percentage of Female Students                | 1           | 17.3        |
| Students as Percentage of Relevant Age Group | 0.9         | 59.0        |
| Number of Teachers                           | 640         | 17,728      |
| Number of Trained Teachers                   | 20 (est.)   | 7,287       |
| Literacy Rate                                | 2%          | 17%         |

9. Estimated Number of Beneficiaries:

2,151,240 (primary level students who attended school between 1954-1975)

10. Cost to AID per Beneficiary:

\$4.24 = Amount (\$9,112,500) ÷ Number of Beneficiaries (2,151,240)

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Nepal (continued)

11. Host Country Exchange Rate at Time of Project:

U.S.\$1 = RS11.95

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## Nepal (continued)

Project Summary

Until 1951, Nepal had no formal education system to speak of. In 1954, following government publication of a policy report for establishing a comprehensive education system, AID began initiation of sector-wide programs that, by 1975, encompassed teacher training for primary, secondary, and vocational education. Projects included educational activities; teacher training and related activities; education development; education and training; primary education; teacher training/higher education; educational materials development; primary and teacher training; teacher and technical education; and teachers and materials utilization and development. Under contracts mainly with the University of Oregon and Southern Illinois University, new curricula were developed for primary and vocational secondary schools; teacher training facilities, the College of Education, and the National Vocational Training Center were constructed and equipped; and training programs were begun for teachers in primary, secondary, and vocational schools. Finally, an institutional capability to prepare, write, produce, and distribute instructional materials for all levels of education was established within the MOE.

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1. Country: Afghanistan
2. Project Title:  
Elementary and Secondary Education Project
3. Project Number: 306-11-690-091
4. Project Dates: 1954-1977
5. Major Subprojects and Dates:

| <u>Subproject Title</u>                    | <u>Date</u> |
|--|-------------|
| Primary Teacher Education                  | 1954-1967   |
| Emergency Teacher Education                | 1962-1967   |
| Secondary Teacher Education                | 1962-1971   |
| English Language Program                   | 1956-1971   |
| Math/Science Lycee Subproject              | 1964-1968   |
| Primary Curriculum and Textbook Subproject | 1966-1977   |

6. AID Project Funding: \$14,173,792

7. Contractor:

Teachers College, Columbia University, New York, New York

## Afghanistan (continued)

Project Summary

The Elementary and Secondary Education Project was initiated in 1954 under a contract with Teachers College, Columbia University (TCCU) at the request of the government following a UNESCO study emphasizing the need for teacher training to improve the country's education system. Up to that time, the government had made little effort to establish continuous, country-wide schooling for Afghan children. The education system as a whole was rudimentary and poorly differentiated; there was little expertise in planning or management. Facilities, teachers, and texts were few and far between. Primary school enrollment and literacy were less than 10 percent, and girls typically did not attend school at all. In keeping with the original emphasis on teacher training, the project first established the Institute of Education to coordinate teacher education activities, and to strengthen the institutional capability of teacher training facilities throughout the country. Over time, however, this emphasis was considerably diminished, as the project grew to incorporate quite distinct subprojects, proposed by USAID/Kabul or Afghan officials to meet other sector needs.

Lasting from 1954 to 1977, the project included Primary Teacher Education, Emergency Teacher Education, Secondary Teacher Education, English Language Program, Math/Science Lycee Subprojects, and Primary Curriculum and Textbook Subproject. Besides establishing the Institute of Education, TCCU staff developed curricula, compiled and translated professional texts, established laboratory schools, and provided in-service training at teacher training institutes throughout Afghanistan. TCCU also conducted crash training programs to meet the immediate shortage of primary school teachers; helped establish the Faculty of Education, University of Kabul; and provided training, equipped laboratories, and prepared texts for secondary school teachers of English, mathematics, and science. Finally, TCCU developed a primary school curriculum structure--a huge task that involved producing and printing texts and teacher guides, writing curricula, establishing an MOE agency to oversee textbook development, conducting workshops to teach utilization of the new materials, and instituting a process for distributing texts throughout the country.

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1. Country: Korea
2. Project Title: Elementary-Middle School Pilot Project
3. Project Number: 489-H-085
4. Project Implementation:
  - a. Project Authorized - 4/13/72
  - b. Final Obligation - 9/13/72
  - c. Final Input Delivery - 8/31/77
5. Project Completion-Final Disbursement: FY 1980
6. Project Funding:

|                 |                     |
|-----------------|---------------------|
| a. AID Total    | \$ 7.4 million      |
| b. Other Donor  | .4 million          |
| c. Host Country | <u>13.3</u> million |
| Total           | \$21.1 million      |
7. Mode of Implementation:
  - a. A Loan Agreement between AID and the Korean Government's Economic Planning Board; implementation by the Korean Educational Development Institute
  - b. AID-financed host country contracts
8. Evaluations:
  - a. Periodic regular evaluations. (Only the final evaluation could be located; however, it suggests that at least one previous evaluation was conducted.)
  - b. A comprehensive evaluation in 1979
9. Host Country Exchange Rate:
  - a. Name of Currency: Won (W)
  - b. Exchange Rate at Time of Project: U.S.\$1.00 = 484W

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Korea (continued)

Project Summary

At the end of the Korean War (1953), rebuilding the country's education system became a national priority.

Tremendous efforts were made to rebuild schools and training institutions, to train teachers, to produce teaching materials, and to increase enrollment. In order to find solutions to the discontinuities that subsequently emerged, the Korean Government and AID agreed in 1970 to have Florida State University study the country's education system and make recommendations for improvement.

One result of that study was the creation of a new elementary/middle school system that emphasized a more rigorous orientation to the world of work. A second result of that study was the creation of the Korean Educational Development Institute (KEDI) to plan and orchestrate a total reform program for Korea's formal education system. The objective was to institute reforms that would engender greater efficiency and more responsiveness to manpower needs of an increasingly complex economy. The reforms focused on a new instructional system designed to take into consideration individual needs and abilities, a comprehensive school management system, incorporation of instructional radio/TV into the curricula, and regular evaluation of student progress and the effectiveness of the instructional system. Through application of the reforms at first to a limited number of schools, and later to Korea's entire education system, KEDI became a strongly established institution in its own right.

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1. Country: Thailand
2. Project Title: Mobile Trade Training Schools (MTTS)
3. Project Number: 493-11-640-162
4. Project Implementation:

Start: 1966  
Completion: 1972

5. Project Funding:

AID: \$7,296,000

6. Project Purpose:

To provide short-term occupational skills training to people with a minimum of four years of formal education, and little or no opportunity to continue in formal education.

7. Accomplishments:

54 mobile trade training units started; 5 regional polytechnic schools started; 80,000 students enrolled during life of project; MTTTS system has evolved to a more comprehensive nonformal education system now serving approximately 45,000 students annually in all major geographic regions of Thailand, with over 50 percent of facilities located in the North and Northeast, where the highest concentrations of the rural poor live

Thailand (continued)

Project Summary

During the 1960s, the rural population was about 90 percent of the total population. Most rural people attended primary school, but very few actually completed the primary cycle. Formal education services were concentrated in urban areas and in the South, particularly around Bangkok. Education was heavily academic to meet the needs of an urban population intent on pursuing higher level training or white-collar employment. The Royal Thai Government (RTG) was acutely sensitive to the need to broaden access--at a time of fast economic growth--to meet the practical needs of a large rural, untrained, out-of-school population. The RTG was also sensitive to the need to correct the regional imbalance in access between the South on the one hand, and the North and Northeast on the other. Under a new policy to extend opportunities for practical skills training to rural people seeking gainful employment, the RTG and AID launched an ambitious program, one component of which was the MTTTS Project.

Mobile Trade Training Schools consisting of both fixed and mobile vocational training facilities were established in rural areas throughout Thailand, though concentrated in the relatively poorer North and Northeast regions. Dressmaking, TV/radio repair, welding, electrical wiring/installations, bookkeeping, automechanics, and hair dressing were some of the many courses these schools offered. Regional polytechnics trained MTTTS instructors and provided maintenance and repair services for MTTTS equipment.

1. Country: Paraguay

2. Project Title and Number:

Rural Education Development Project (5260(95))

3. Project Purpose:

Improve quality and access of the Paraguayan public school system at both primary and secondary levels; improve quality of teacher training; provide training for other educators; assist in reorganization of the MOE

4. Project Implementation: 1970-1976

5. Project Funding: \$4.5 million

6. Accomplishments:

Two Regional Education Centers built and equipped; 32 primary schools built and equipped; Superior Institute of Education built and equipped; technical assistance provided to the MOE for revision of curricula at primary and secondary levels; 2,250 teachers and administrators trained in using the new curricula; 3-day orientation course in new curricula provided for 4,500 teachers and administrators and 1,200 community leaders; 470,000 books printed, based on the new curricula

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Paraguay (continued)

Project Summary

The Rural Education Development Project (REDP) of 1970-1975 was a continuation of a long tradition of AID assistance to Paraguay's education sector that began in 1945. Despite impressive quantitative gains, many disturbing problems had continued unsolved. In 1970 less than 25 percent of those who entered, finished primary school.

Even today, the majority of primary school students do not go beyond the third grade. The curricula emphasize the humanities, in preparation for university entrance, despite the fact that only 1.6 percent of the country's student population completes education to that point. Rote learning remains the prevailing learning technique. The higher concentration of schools in urban areas and the long distances between rural schools make for inequitable access. Teachers are poorly trained, poorly paid, and in very short supply. Classrooms are often overcrowded, underequipped, and lacking in basic texts and instructional materials. In an effort to make schooling more available and more efficient for the rural student, the REDP initiated a number of activities. Schools were constructed in rural areas. Curricula were revised to make them more responsive to the learning needs of rural youngsters, while a related effort to institute a textbook production/distribution system was begun within the MOE. With technical assistance from the University of New Mexico, the MOE also restructured its educational administration system, devolving responsibilities to Regional Education Centers and established an Educational Planning Office with legal responsibility for the administrative reorganization. Finally, Regional Education Centers were increased in number, equipped, and staffed to take on decentralized administrative functions from the MOE to provide pre- and in-service teacher training, and to teach the new curricula within their own primary and secondary schools.

1. Country: Nigeria
2. Project Title:  
Northern Nigeria Teacher Education Project
3. Project Number: 620-51-640-710
4. Project Starting Date: January 1, 1967
5. Project Completion Date: December 31, 1969
6. Project Expenditures: (Final Audit Report, March 13, 1972)

|                            | <u>Dollars</u> | <u>Percentage</u> |
|----------------------------|----------------|-------------------|
| a. U.S. Personnel Costs    | 1,861,000      | 68                |
| b. Local and Third Country |                |                   |
| Nationals Personnel Costs  | 88,000         | 3                 |
| c. Participants            | 91,000         | 3                 |
| d. Commodities             | 197,000        | 7                 |
| e. Other Costs             |                |                   |
| Direct AID                 | 130,000        |                   |
| Contracts                  | 356,000        |                   |
|                            | <u>486,000</u> | <u>18</u>         |
|                            | 2,723,000      | 99                |

An additional \$18,479 from the local currency trust fund to cover publication costs (equal to about \$52,000)

Combined AID-Ford Foundation dollar expenditures of \$5,358,000, 51 percent by AID, 49 percent by Ford

7. U.S. Contractor: University of Wisconsin
8. Project History:

1962           Contract with University of Wisconsin to review and make recommendations on the expansion of primary education in Northern Nigeria, with special emphasis on physical facilities

1962           Second contract with the University of Wisconsin to prepare a proposal for further development of primary and teacher education in the North

1965-1966      First two calendar years of NNTEP supported by the Ford Foundation

1965           Contract with University of Wisconsin to prepare a proposal for continuation of NNTEP under AID auspices

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- 1967-1968      Second two calendar years of NNTEP supported by  
AID, with supplementary funding from the Ford  
Foundation
- 1969            One-year extension of project support by AID;  
Project further extended to February 23, 1970  
for administrative reasons only



## Nigeria (continued)

Project Summary

Nigeria is characterized by sharp regional, linguistic, religious, political, and economic differences. These differences were further sharpened by differing colonial experiences under British rule. Unlike the South, Northern Nigeria was indirectly administered through Muslim emirs, with little interference from British authorities. While increasing numbers of Nigerians in the South were being exposed to Western influences through Western education, conservative Islamic forces continued strongly resistant to similar influences in the North. By the time Nigeria became independent in 1960, a severe regional imbalance had developed within the education sector. The North had one-half the nation's total population, but only one-tenth its student population, and had a primary school enrollment ratio of 10 percent (while the South's ratio was 75 percent). Both the Federal Government and the Northern Nigeria provincial government recognized the pressing need to expand access to formal education in the North. Successful expansion, however, depended in part on the utilization of existing teachers, and increasing the availability of satisfactory teacher training programs.

NNTEP was designed to help the provincial MOE improve the efficiency and quality of primary school teachers, and to strengthen those institutions responsible for teacher training. MOE modified teacher training colleges' (TTC) course content and instructional materials, building into them major innovations (such as team teaching and curriculum evaluation). Technical advisors also assisted the MOE and the Institute of Education to improve upon existing capabilities for inspection, research, in-service training, and the development of teaching materials. Additional TTCs were either constructed or expanded and their teaching staffs strengthened by technical advisors and training.

1. Country: Ecuador
2. Project Title: Community Education/Nonformal Education
3. Initial Contract: January 1, 1972
4. Closing Date: June 30, 1976
5. Grant Numbers:
  - a. 518-11-690-075.2 (until June 30, 1974)
  - b. 518-11-690-075.4 (July 1974 through June 1976)

6. Contracting Party:

Center For International Education  
University of Massachusetts, Amherst

USAID/Ecuador

7. Grant Amount:

- |                          |             |
|--------------------------|-------------|
| a. Through June 30, 1973 | \$417,000   |
| b. Through FY 1973       | \$736,000   |
| c. Life of Project       | \$1,143,000 |

8. Goals and Targets:

Goal A: Increase educational opportunities for those who do not have adequate access to the formal system of schooling

Output Target 1: Teachers and local leaders prepared and motivated to provide basic education to community members in such areas as agriculture, health, nutrition, literacy, home arts, and other related fields

Output Target 2: Individuals who are motivated to learn through self-initiated study after a period of training is completed

Goal B: More effective methods and materials for aiding individuals outside the regular school system

Output Target 1: Develop and implement technical and experimental education demonstrations with the assistance of teachers and other community groups

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Ecuador (continued)

Output  
Target 2: Test and evaluate the technical and educational materials and methods developed under Target 1

Output  
Target 3: Make available to the Ministry of Education and other institutions full information on the most efficient and effective systems developed and evaluated under this project

Output  
Target 4: Dissemination of the more successful systems

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Ecuador (continued)

Project Summary

The Nonformal Education Project began as an experiment run by the University of Massachusetts Center for International Education (UMass/CIE) to effect behavioral and attitudinal changes among rural Ecuadoreans. The provinces in which the project was implemented were among the most backward in Ecuador, characterized by widespread illiteracy, extreme poverty, and feudalistic socioeconomic relationships between landed and landless. The UMass staff, headed and almost entirely staffed by Ecuadoreans, used a variety of techniques and approaches to teach self-help skills such as community organization, critical thinking, problem-solving, communication, decision-making, and group action, as well as basic literacy and numeracy. Those who received training ("facilitators") then returned to their respective communities and organized nightly meetings which linked individual skills acquisition with group actions to address community problems such as transportation and the need for electricity and water.

Teaching techniques included drills (in math, spelling, etc.); game simulations of rural conditions and social arrangements; and fotonovelas, a form of popular literature. In addition to facilitators, linkages were formed with a number of organizations to try out new materials and techniques for improving the effectiveness of their programs.

After the UMass contract ended in 1976, activities continued in the four provinces where the facilitator project had begun, even though the MOE at the national level did not succeed in institutionalizing the backstopping and materials development services which had been subsidized by AID.

In 1980 significant elements of the project were adopted by the Government of Ecuador for its new Campesino Training Institute. Operating as an autonomous unit under the Ministry of Agriculture, the Institute (with AID funding) is responsible for all human resource development activities under Ecuador's new national Integrated Rural Development Program.

1. Country: Republic of the Philippines
2. Project Title: IMPACT
3. Purpose:  
To develop an effective and economical delivery system of mass primary education
4. Project Implementation:
  - a. Implementing Agency: INNOTECH
  - b. Started: Phase I - January 1974  
Phase II - 1977
  - c. Completed: March, 1980
  - d. Mode: IDRC grant to SEAMEO
5. Project Funding:
  - a. IDRC: \$700,000\*
  - b. Host Country: Teacher salaries, office facilities
6. Evaluations:
  - a. Numerous INNOTECH Reports
  - b. Cost-Effectiveness Analyses, 1973
  - c. Followup on IMPACT Graduates, 1981
  - d. Numerous Evaluative Reports by External Visitors
7. Host Country Exchange Rate:
  - a. Currency: Peso (P)
  - b. Exchange Rate at Time of Project: U.S.\$1.00 = 7.6P

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\* IDRC grant supported IMPACT and a related project in Indonesia.

## Philippines (continued)

Project Summary

The Philippines has had a relatively long history of mass education, going back to the beginning of U.S. rule at the turn of the century. As a result, it enjoys unusually high enrollment and literacy rates. At the same time, a high population growth rate (2.6 percent) continues to put severe strain on the formal education system, making qualitative improvements difficult to achieve. Thus, while schools are readily available, they are overcrowded and poorly equipped. Some 95 percent of the Ministry of Education and Culture budget is allocated for teachers' salaries, leaving very little for books or teaching aids. Project IMPACT, funded by the International Development Research Centre and implemented by the Southeast Asian Regional Center for Education Innovation and Technology, was an experiment to test a lower cost alternative for mass education. Under this experiment, the traditional classroom teacher became an instructional supervisor. Rather than teaching a single self-contained class of youngsters of a single grade, the instructional supervisor "managed" up to 100 children whose ages spanned all elementary grades and who did not belong to any one particular class. Each child proceeded in his studies at his own pace, mastering lessons pre-arranged in a logical progression of increasing difficulty. The children themselves do most of the teaching, in small fluid groups composed of their peers or younger children, all of whom are at the same approximate point in their progression. The main function of the instructional supervisor is to monitor children's individual progress and the small group teaching. This system of education thus radically alters the teacher's function and sharply reduces the need for professional teaching staff.

The potential savings in salary costs to national education budgets would be enormous, and could be reallocated for other desperately needed improvements.

1. Country: Kenya
2. Project Title: Radio Correspondence Education
3. Project Number: 615-11-650-129
4. Project Implementation:
  - a. First Project Agreement: fiscal year 1967
  - b. Final Obligation: fiscal year 1970
  - c. Final input delivery: fiscal year 1971
5. Project Completion-Final Disbursement: fiscal year 1971
6. Project Funding:
 

|                       |                  |
|-----------------------|------------------|
| a. AID Total (grant)  | \$ 667,000       |
| b. Other Donor--None* |                  |
| c. Host Country       | <u>1,456,000</u> |
| Total                 | \$2,123,000      |
7. Mode of Implementation:
  - a. Project agreement between USAID/Kenya and Ministry of Education
  - b. Contract AID/afr-482 with University of Wisconsin, dated April 1, 1967
8. Evaluations:
  - a. Regular PAR/PES evaluations
  - b. East Africa Regional Audit Office Report No. 56/69 (March 13, 1969)
9. Host Country Exchange Rate:
  - a. Name of currency: Shillings
  - b. Exchange rate at time of project: U.S.\$1.00 = sh.7

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\* Although outside of and subsequent to the USAID/GOK project agreement, the Government of Denmark made a significant contribution to the institutionalization of the Correspondence Course Unit (CCU) by agreeing to fund the construction of two large office blocks and six staff houses on the grounds of the Institute of Adult Studies at Kikuyu (approximately 14 kilometers outside of Nairobi). Construction began in June 1969, and the CCU was able to begin occupying space in the new buildings in April 1970. These buildings continue to be used primarily by the staff in 1980.

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Kenya (continued)

Project Summary

Following independence in 1963, there was a surge in enrollment at all levels of the formal education system. This surge was in part a response to Black Africans' political demands for expanded access to education--demands that had been voiced long before Kenya became independent, and which became intense in the 1960s. The Government of Kenya was unable to adequately support the education system's sharply increasing enrollment rates. Inevitable deficiencies became quickly apparent, one of which was the lack of trained teachers. AID's Radio Correspondence Education Project established a radio correspondence instruction unit to provide in-service training for untrained and minimally trained primary school teachers. Enrolled teachers regularly received study materials through the mail, and could (if they so chose) supplement each lesson with instruction from Voice of Kenya radio broadcasts prepared by the Correspondence Course Unit (CCU). Completed lessons were then returned to CCU tutors, who would arrange for their correction by university teachers in the Nairobi area. CCU staff, in cooperation with University of Wisconsin advisors, recruited the teachers, prepared and distributed study materials, wrote the course content and radio scripts, arranged for the marking and return of completed lessons, and made regular field trips to talk with enrolled teachers.

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APPENDIX B

PROCEEDINGS OF THE EDUCATION SECTOR  
IMPACT EVALUATION CONFERENCE

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**PROCEEDINGS**

**EDUCATION SECTOR**

**IMPACT EVALUATION CONFERENCE**

**Marriottsville, Maryland  
February 15-17, 1982**

**prepared by  
Joyce Leader  
The Pragma Corporation**

**for the  
Office of Evaluation**

**Bureau for Program and Policy Coordination**

**U.S. Agency for International Development**

**April 1982**

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## ACKNOWLEDGEMENTS

Many people have contributed to the success of the Education Sector Impact Evaluation Conference. Most significant among them is Marion Kohashi Warren, Education Sector Coordinator in the Studies Division of the Office of Evaluation, Bureau of Policy and Program Coordination, at A.I.D. She was instrumental in organizing and managing the impact evaluation studies and the desk reviews of projects that became the basic data for examination during the conference. She also coordinated planning within A.I.D for the conference itself including chairing an intra-agency working group, preparing the conference agenda, and identifying and collecting the numerous documents available as background material at the conference. Robert J. Berg, Associate Assistant Administrator for Evaluation, is to be commended for his key role in instituting the impact evaluations and for the leadership and direction he provided in the conference planning.

Many others, too numerous to mention by name, some in the Office of Evaluation and others engaged in education sector activities throughout the Agency had a hand in making the conference a success. However, deserving of special mention are those who served as Group Leaders during the conference and shouldered the responsibility for having their groups actually produce a paper within a 2-day time frame. Especially worthy of note are those who travelled from overseas A.I.D. missions over the weekend and plunged into the conference with this responsibility on Monday morning. Group Leaders were: Group I--Howard Steverson and Frank Method; Group II--David Sprague and Norman Rifkin; Group III--Graham Kerr and Stanley Handleman; Group IV--Twig Johnson and Janet Poley; Group V--Raga Elim and William L. Eilers. (See Participant List in Appendix A for titles.)

We would also like to thank the host government participants for their presence and contributions. Throughout the conference they were open and candid about their experiences, both positive and negative, with A.I.D. assistance. Their comments helped participants keep in focus the ultimate purpose of education assistance, namely the people of developing countries.

The Pragma Corporation, with its special interest in educational development, has been pleased to have facilitated this conference and to have had a role in bringing together this distinguished group of professionals to discuss and debate such important issues for the future of A.I.D.'s education sector assistance.

The Pragma Corporation  
Falls Church, VA  
April 1982

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## I. EXECUTIVE SUMMARY AND RECOMMENDATIONS

The Education Sector Impact Evaluation Conference, sponsored by the A.I.D. Bureau for Policy and Planning Coordination, Office of Evaluation (PPC/E), marked the culmination of 18 months of research into the effectiveness of A.I.D.'s assistance to education. The research data — findings from impact evaluations of projects in eight countries and from desk reviews of projects in four others — formed the basis for discussion at the Conference. The more than 60 Conference participants spent three days analyzing these evaluation findings to determine which A.I.D. education interventions had been effective, under what conditions, and why. The studies, conducted by PPC/E, examined the impact of projects with a primary, secondary, or nonformal education focus. The projects, some begun as long as 30 years ago, included experiences in Asia, Latin America, Africa, and the Near East. To this body of knowledge, participants added findings from their own experiences in the field.

What emerged from the discussions was a much clearer picture of what A.I.D.'s experience in the education sector has been and a much better understanding of what types of interventions have succeeded and why. The collective judgement of Conference participants was that A.I.D.'s early education interventions had been effective in achieving stated project goals and had had a positive impact on educational and socio-economic development in the countries and communities where implemented. Especially effective had been A.I.D.'s impact on the development of host country institutional capacity and on the training

of host country education officials. This decidedly positive pattern of the impact study findings challenges previous assumptions that A.I.D.'s assistance to education has had limited impact and has been replete with problems and failures.

The analysis of the impact evaluation findings focused primarily on specific programmatic aspects of the A.I.D. assistance process, aspects linked by the evidence to positive program impact. Some recurring themes did emerge from these discussions of the data and their implications. These themes, while still very much under discussion in the Agency, suggest possible future directions for education assistance.

#### A systems approach to education assistance

It is important to begin to view the education process in a developing country as a total system. Impact evaluation evidence suggests that projects targeting a single aspect of the education system for change were not as effective as projects targeting interrelated aspects of the system. Education encompasses not only formal schooling at the primary, secondary and higher levels, but also nonformal education for out-of-school youth and adults. It includes training for organizational development and training for management. The message of the participants was that interventions which are a part of an ~~integrated~~ approach to improving the delivery of educational services in the host country may produce results with a greater impact on change than those narrowly focused on specific objectives.

### The importance of basic education

Basic education is still very much a need in the developing countries. Many countries still consider universal education a worthy goal and a high priority. Recent studies by the World Bank and other development agencies support this position. They link increases in agricultural productivity with increases in literacy rates among farmers; they show high rates of economic return from investments in primary education; they demonstrate greater receptivity to changes in behaviors, such as health practices and fertility, among literate persons.

The A.I.D. impact evaluation findings show that A.I.D.'s interventions in primary and secondary schooling in the 1960's have had a positive impact on socio-economic changes in communities. However, A.I.D.'s assistance to basic education has dropped off sharply since 1977. The sense of the Conference participants was that consideration should be given to increasing A.I.D.'s interventions in basic education -- primary education and adult literacy -- especially in light of A.I.D.'s past successes and in light of evidence linking basic education with productivity increases, a current administration development goal.

### Host country participation

Host country participation in the process of project development and implementation is critical to project success and impact. It enhances the chances that the project will be compatible with host

country culture, economy, political realities, and technological capabilities. It increases chances for continuation of the project once A.I.D.'s intervention is ended. It will increase the possibility that the country will feel 'ownership' of the project. In short, participation is crucial to establishing host country commitment to the assistance being supplied.

#### Project time frames

Conference participants urged the Agency to consider longer time frames for projects and to incorporate flexibility into the project design process to allow for adjustments during implementation. The analysis of A.I.D.'s experience showed that the length of time A.I.D. committed resources to a project was closely linked with the project's impact on institutional development, socio-economic change, and the likelihood that the project would continue following A.I.D.'s phase-out. The longer the commitment by A.I.D., the more likely the projects reviewed were to achieve stated goals. Adequate time is also necessary to ensure that innovative activities are appropriately phased into project plans in accordance with host country absorptive capacity.

#### Efficient use of resources

Participants were very conscious of the limited and shrinking financial resources available to support educational development activities. Project recurrent costs, and the difficulty of many host governments have assuming responsibility for them following A.I.D.'s

phase-out, surfaced as an issue again and again. What has to happen for this situation to be reversed? Should donors continue to pick up recurrent costs? What can be done to help local systems become more efficient so that funds will be available to initiate or absorb new activities? More questions than answers were raised. But there was a sense that education project planners would have to pay more attention to cost-effectiveness issues during the design process.

#### Learning from experience

A consensus developed among Conference participants that A.I.D. has the expertise to address complex education assistance problems and that A.I.D. possesses a comparative advantage in the education sector by virtue of its broad experience and knowledge of education in a wide range of development contexts. What is needed is an efficient system within the Agency for identifying and disseminating information about past projects or components of projects worthy of consideration for adaptation in other settings. While the sense was that A.I.D. should capitalize on its comparative advantage in education assistance, participants expressed a need to have more information about what works and why. The impact evaluation studies were viewed as a positive beginning but not as the end of A.I.D.'s self-education process.

\* \* \*

These themes emerged during three days of intense exchange among the more than 60 conference participants, both in plenary sessions and in workgroups. Each of the five workgroups examined one issue in education assistance in relation to A.I.D.'s past experience in at

least a dozen countries. The issues for group focus were:

1. Host country institutional capability and commitment
2. Sustainability of projects and programs
3. Appropriate fit between host country socio-economic, cultural, political, and technological needs and realities, and planned project/program interventions
4. Replicability
5. Design, implementation, evaluation, and feedback

The product resulting from each group's deliberations was a written report that included policy recommendations for Agency consideration. The full report of each group can be found in Appendix

D. An abbreviated version of the recommendations follows.

#### Institutional Development

1. Consider local institutional capacities in project design
2. Focus interventions on planning, administration and management, leadership training, research and development and materials production
3. Cooperate with other donors, especially toward providing assistance for basic education
4. Develop, with the host government, support for private sector institutions

#### Host Government Commitment

1. Examine implications of A.I.D. budget cycle incompatibility with host government budgeting process
2. Ensure host county 'ownership' of projects

### Sustainability

1. Ensure adequate project time frames and design flexibility
2. Consider assisting recurrent cost financing for some projects following A.I.D. phase-out
3. Ensure training for a sufficient number of project personnel
4. Include institutionalization as a project start-up goal
5. Consider offering non-financial incentives to project personnel
6. Ensure adequate resources during phase-out

### Appropriate fit between project and host country realities

1. Ensure host country participation in all phases of project development
2. Consider funding only projects that incorporate host country participation

### Replicability

1. Charge one A.I.D. unit with responsibility for reviewing projects for potential replicability
2. Develop a better understanding of what worked and why
3. Improve information dissemination within the Agency
4. Conduct more research on cost-effective interventions, especially in basic education
5. Require review of past experience as part of project design

### Design, implementation, evaluation and feedback

1. Analyze and address project constraints during project design

2. Develop long-term intervention strategies focused on host government priority areas in which A.I.D. has a comparative advantage
3. Ensure an adequate project time frame
4. Include plans for host government to assume recurrent costs in project designs
5. Design projects integral to host government education sector strategy
6. Ensure true participation of host country persons

These recommendations are necessarily limited in scope by the structure and focus of the conference and by the narrow range of intervention strategies considered in the impact evaluations. Nevertheless, these suggestions represent some of the most striking lessons to be learned from a close examination of available data on A.I.D.'s past experience in education assistance.

## II. INTRODUCTION

### A. Background to the Conference

The Education Sector Impact Evaluation Conference marked the culmination of 18 months of research into the effectiveness of A.I.D.'s assistance to education. During the year and a half preceeding the conference, A.I.D.'s Evaluation Office, Bureau for Program and Policy Coordination (PPC/E), conducted impact evaluations of eight education projects. The intent of these quick but probing in-country studies was to determine whether the projects had been successful and whether they had had any lasting social, economic, or institutional impact in the countries where they were implemented.

Projects, selected for study according to their geographic diversity, diversity of components, time lapsed since completion, and content focus, included:

- a rural nonformal vocational training project in Thailand
- a middle school project in Korea
- a retrospective of A.I.D.'s education assistance to Nepal
- a primary level programmed learning project in the Philippines
- a rural education program in Paraguay
- a radio correspondence teacher training project in Kenya
- a teacher training project in Nigeria
- a retrospective analysis of 30 years of A.I.D.'s education assistance to Jordan

The impact evaluation teams, consisting of A.I.D. personnel, host country personnel, and outside consultants, structured their three to four week investigations around the following questions:

- (1) Was the project/program effective? Did it achieve its stated objectives?
- (2) Who benefitted?
- (3) What was the social impact on the surrounding community?
- (4) What was the economic impact on the surrounding community?
- (5) What was the impact on host government institutional practices and procedures?
- (6) Are there lessons to be learned for application to future Agency projects?

Data collection techniques varied but generally included review of project documentation, discussions with host government officials, structured and unstructured interviews with project beneficiaries and if possible with project implementors. Qualitative judgement based on brief observations rather than quantitative analysis of statistics was the impact evaluation team's goal.

Acknowledged limitations to the impact evaluation methodology include both the speed with which the data were collected and the lack of scientific data collection techniques. Nevertheless, the findings represent considered judgements by knowledgeable people who asked basic questions about what worked, what did not work, and why.

In addition to the eight field-based impact evaluations, four

education projects were reviewed using archival material available in Washington. These desk reviews included:

- a rural nonformal education project in Ecuador
- a retrospective of A.I.D.'s education assistance to Colombia
- a retrospective of A.I.D.'s education assistance to Brazil
- an elementary and secondary education project in Afghanistan

**B. Conference Purpose**

Having gathered data on the impact of education assistance in 12 countries, A.I.D.'s Office of Evaluation in the Bureau for Program and Policy Coordination convened the three-day Impact Evaluation Conference on February 15-17, 1982. The purpose of this conference was to have the findings discussed and debated by development professionals. The task of the participants was to review the findings, validate or reject the data in light of their own experiences, enter new evidence into the record from their own experiences and, finally, to make policy recommendations based on conclusions drawn from this examination of past experience. Conference participants included A.I.D. personnel, both from Washington and from field missions, host government officials, international organization officials, and representatives of universities and consulting firms involved in education sector development assistance. (See Appendix A for a list of participants.)

As stated by conference organizers, the conference objectives were:

- A. To analyze A.I.D.'s past experience in the education sector.  
Expand this data base with field experiences and research

knowledge of Conference participants, so that the focus is on how to improve the design and impact of education projects.

- B. To recommend to A.I.D., policy options and strategies for implementing policy options based on knowledge of A.I.D.'s past experience, field experiences of Conference participants, and the research literature.

Because the studies reviewed at the Conference examined a narrow range of intervention strategies, the recommendations for policy options were necessarily limited in scope. Likewise, the studies were confined to education sector interventions per se as opposed to education interventions in other sectors such as health and agriculture. Thus, the Conference did not attempt to address this large and growing area of A.I.D.'s education assistance activities.

### C. Conference Organization and Process

To accomplish the conference objectives, the more than sixty conference participants were divided into five workgroups that discussed and debated issues throughout the three-day conference and produced a final product containing policy recommendations. Each workgroup was assigned a topic that established a framework for its examination of the data. The cross-cutting issues that formed the focus for workgroup discussions are as follows:

Group 1:                    Host country institutional capability and commitment: What are the structural and procedural factors within host country

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institutions that bear on project/program implementation? In what ways should these factors determine the extent and character of AID involvement in education projects? Is there a role here for the private sector?\*

Group 2:

Sustainability of projects and programs: In what ways should actual experiences of sustainability determine the extent and character of future AID involvement in education projects? What are the implications for financing, training, and maintenance? Is there a role here for the private sector?

Group 3:

Appropriate fit between host country socioeconomic, cultural, political, and technological needs and realities, and planned project/program interventions: Is participation a key factor in design and implementation? What can we do to strengthen social and economic impacts? Do actual impact results justify education investments as a prime development strategy?

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\* The questions presented with each topic were intended to stimulate but not to limit group discussion.

Group 4:

Replicability: What are the conditions which encourage (discourage) spread effects of projects/programs? Is there a realistic chance for expansion given world and national economic difficulties?

Group 5:

Design, implementation, evaluation, and feedback: What are the donor constraints which encourage (discourage) project/program effectiveness and impact? What should the purposes and goals of AID education projects be? By what criteria should these purposes and goals be identified? By what mechanisms can evaluation become a more useful tool in the design process?

While the workgroup activity served as the central focus of the Conference, there were several plenary sessions that provided common stimulation for the groups as well as informal peer presentations of current projects to small groups in the evenings. (See Appendix B for Conference Agenda.)

The workgroup products were short papers discussing the issues drawn from the case evidence relevant to the group's assigned topic and outlining the group's recommendations for future policy in the education sector. The draft product of each group was reviewed and critiqued by two other groups. Resulting comments were incorporated into the group product which was then presented in summary to the final plenary attended by top-level Agency officials. (See Appendix D for final workgroup reports.)

Each workgroup met for five sessions (or about 10 hours) to:

- (1) Discuss impact evaluation findings and field experiences bearing on the assigned topic;
- (2) Identify issues and develop a work plan, including assigning individual responsibilities for matching findings against issues;
- (3) Match findings against issues and begin workgroup reports;
- (4) Continue drafting reports; and
- (5) Complete draft reports.

The groups had a short concluding session to incorporate comments from two other groups into their final product and to prepare a presentation for the closing plenary.

### III. THE EVIDENCE

#### A. Impact Evaluation Findings and Issues

Marion Kohashi Warren, Sector Coordinator for Education in the Office of Evaluation, presented a summary of the impact evaluation findings<sup>1</sup> to the initial plenary session. She reported the findings demonstrated that education sector activities had had a substantial impact especially in the areas of institutional development and participant training (training for host country persons outside their own country). Study results showed, she noted, that large and sustained programs had the most discernible and favorable socio-economic impacts. But, she said, the studies underlined the difficulty of isolating education sector activity impact and of modifying host country education activities without host country commitment to education policy changes. She said that given these findings the problem is not whether education projects have an impact, but how scarce resources for education assistance can best be allocated among diverse and competing demands within the education sector. In conclusion she called for a more systematic study of A.I.D.'s

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<sup>1</sup> A paper entitled "PPC/E Education Sector Report: A Summary of Impact Evaluation Findings" by Marion Kohashi Warren is in draft form at this writing and should be available from A.I.D. soon.

education sector activities as a follow-up to the initial "probing" of the impact evaluations.

Ms. Warren detailed the following findings from the eight impact evaluations.

1. Effectiveness: All of the projects examined were effective in reaching the objectives outlined for them. Construction did take place and/or equipment was provided in all cases; technical expertise was provided to strengthen or train local personnel; local institutions were developed; curriculum reform was instituted in some cases; and increased efficiencies in the delivery of education were demonstrated.
2. Beneficiaries: The largest groups of beneficiaries of the projects examined were rural school children. Rural adults, teachers and administrators, and persons who received training outside their countries also benefitted. Overall, the projects increased access to education, especially for girls, and improved the quality of education through interventions in teacher training, curriculum reform, and materials development.
3. Socio-economic impact: Impact on the economic and social fabric of the country resulted from each of each of the projects. Education projects increased the attractiveness of target agricultural areas, improved the employability of youth and adults, and produced behavioral and attitudinal changes in project participants.
4. Institutional development: All projects examined left lasting institutions behind, most notably Korea's Educational Development Institute that has spearheaded educational reform in that country.

5. Spread effects: Ms. Warren judged as "modest" findings regarding project spread effects, citing cultural, political, and technical obstacles to adoption of innovation, particularly curriculum innovation.

6. Explanatory factors: As factors explaining the success or failure of education projects, Ms. Warren cited government stability or conversely civil strife, culture and commitment, economic conditions, and the financial, structural, and organizational constraints in the host country.

In discussion following Ms. Warren's presentation, a host government official cautioned A.I.D. to take into consideration host country technological absorptive capacity before recommending sophisticated technological equipment for a project. He also commented that the findings seemed to argue for expansion of educational opportunity as a goal of assistance over the goal of improved educational quality. He noted that the studies showed whole communities benefitting from educational expansion despite the lack of improved quality.

#### B. Policy Perspectives

Frank Method, Advisor on Education Policy in the Office of Program Development and Policy Review, discussed policy implications of trends in A.I.D.'s education assistance.<sup>2</sup> He asserted that the

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<sup>2</sup> "A.I.D. Assistance to Education: A Retrospective Study" by Frank Method (February 1981) traces 20 years of the Agency's assistance to education and details support for the argument put forward to this Conference.

Agency's education mandate is less restrictive than education programmers have assumed and urged reconsideration of intervention strategies that have all but disappeared from the A.I.D. portfolio, such as assistance for basic education. He said that any intervention at any level of the education system that improved overall access to the system and its use of resources should not be considered proscribed by policy.

The question now, he said, was to determine what education interventions relate to current administration directives which require education projects to address: rural development, economic productivity, institutional development, development administration and private sector priorities. He argued against accepting without question the assumption that such program objectives limited interventions to manpower development and participant training projects. To the contrary, he argued, there is strong evidence that basic education--primary schooling and adult literacy training--is closely related to these program priorities. He cited results of recent studies finding high rates of return for basic education investments and close links between basic education and changes in other social behaviors, such as health practices, fertility rates, etc. He further argued that by addressing the quantitative objective, i.e., the expansion of basic education opportunities, other objectives such as quality, access, relevance, efficiency and cost effectiveness will "inevitably" be addressed. While he maintained that the expansion of schooling was probably more feasible than either A.I.D. or the countries believed, he acknowledged the "serious constraint" posed by the shortage of resources --financial, administrative, and

institutional-- their lack of mobilization and their inefficient use.

Method urged participants to think about the primary schooling problem as a systems problem in which all objectives are inter-dependent and to view the primary system as a subsystem of a larger system of education and training that includes nonformal education, secondary education and higher education. In conclusion, he challenged participants to think positively about education and to make proposals for projects instead of reacting to criticism. "We mustn't censor ourselves," he said. "I'm quite sure we can help our colleagues in developing countries to meet their goals" for universal education within the current program priorities. "We need to ask ourselves, 'What level of resources would be necessary to reach universal primary education at some time in the foreseeable future?'"

In the discussion following Method's presentation, overseas A.I.D. staff pointed out an apparent contradiction between his advocating submission of new education project proposals and reports that A.I.D. senior staff have been "cool" towards education projects in meetings with the mission directors. Method noted that until the education sector reached consensus on its own direction and made a forceful case for its approach, it could not expect to be taken seriously by Agency policy-makers.

#### C. Evaluation Findings at Other Agencies

A panel of experts from the World Bank, the United Nations

Development Program, and the U.S. National Institute of Education presented lessons from their agencies' assistance to education sector development.

UNDP official, Patrick Shima, echoed A.I.D.'s evaluation findings that successful education interventions required long-term commitments both by the donor agency and by the host government. However, contrary to A.I.D.'s finding that large projects tended to be more effective, Shima advocated scaling down education projects and focusing on specific components of assistance. He also urged that reform efforts be tied to on-going host country efforts rather than be initiated by donor agencies. He based these conclusions on findings of a UNDP-UNESCO evaluation study of 25 UN-assisted education projects implemented since 1970.<sup>3</sup> Of the three categories of projects studied --integrated rural reform strategies, educational planning projects, and institutional modernization strategies-- he said findings indicated none had been very effective but that educational planning projects had been more successful than the others.

Charles Stalford of the U.S. National Institute of Education, emphasized the political nature of decision-making relating to public education, underlining A.I.D.'s own findings that political, economic

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<sup>3</sup> A full report of this study is expected to be published soon. A draft summary entitled "Evaluation Study on UN System Assisted Educational Innovation and Reform Projects" is currently being circulated.

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and cultural conditions in a country were often critical in determining the success or failure of an education intervention. Because of the political nature of education, Stalford cautioned against using findings from any one project as the basis for decision-making, but urged aggregating results from many projects into a set of information useful to decision-makers. He stressed the value of formative evaluation --on-going feedback to project implementors--the importance of time in producing visible results in education projects, and the utility of experimenting with alternative approaches to evaluation.

Mats Hultin of the World Bank's Education Department urged a trend in the Bank toward more assistance for formal education and less assistance for adult basic nonformal education, which now claims about one-third of the Bank's education expenditures. In support of this shift he cited the lack of host government commitment to nonformal education projects, the Bank's inability to provide adequate supervision for such projects and the tendency of such projects to change from nonformal to formal projects over time. He also said the Bank had overestimated the need for adult basic education by confusing assessed need with effective demand: Bank nonformal programs are only about one-third utilized by the potential client population, he said. Hultin argued that countries can afford formal education and can achieve universal primary education depending on the efficiency with which they allocate their resources. He cited the example of China which has a per capita income of \$250 and achieves 93% primary school

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enrollment using 3.2% of its GNP. This compares, he said, with other low per capita income countries which spend as much as 3.9% of their GNP but enroll only 50-60% of the eligible primary school population. Key to China's success, he said, are the involvement of the local community and school fees. He said teacher salaries are based on what each community can pay and implied that low salaries are compensated for by high community esteem for teachers.

D. Education and Development

Ruth Zagorin, Deputy Assistant Administrator and Director for Human Resources at A.I.D., posed several provocative questions to the group about issues she regards as fundamental to the future directions of A.I.D.'s human resource development assistance. What difference, she asked, would it make to the development process if A.I.D. withdrew entirely from the education sector? Have we made a case for the relationship of education to agriculture, productivity, health, the status of women, population issues? Does the U.S. have a comparative advantage in education assistance? What can a small country do over 10 years with \$10 million toward building its human resource capacity? Where should our priorities be in Africa, for example, where we can point to the lack of a communication infrastructure, the lack of institutional infrastructure, and the lack of trained manpower? In participant training with its high costs? In institution building? At what level?

Participants responded with equally provocative observations and comments about the importance of education for the development process:

-E. Malie  
Lesotho

When you ask if there would be a loss if there were no aid, in my own imagination, I'm thinking of somebody watching a person who is sinking in the river and standing on the other side with a rope...who says, "Well, let him sink," and that would be really the effect of dumping aid as far as we from Africa are concerned...The United States has got to take up the challenge and be champion of giving assistance to the other countries...

-B. Jacobs  
Consultant

It seems to me that the difficulties and frustrations that surround both your questions and attempts to answer them comes from strictures that somehow the Agency has created. Somehow or other we have to think in terms of boundaries and sectors rather than in terms of the development

process...We have never learned to use the systems approach in the development process. You can eliminate education as a sector, but you will not eliminate it from the development process. You will not eliminate it from A.I.D. program...

-G. Corinaldi  
USAID/Morocco

I think essentially the people in A.I.D. consider themselves to be economic development specialists...The people who control the money and the policy in this Agency come from...a very powerful discipline...(with) powerful quantitative tools to analyze issues. That's why the Administrator...wants us to make judgments on the basis of economic development criteria. I'm not saying this is entirely wrong. But I'm not saying its entirely right...Yes, we're able to argue our case --as educators-- but oftentimes many of us are not equipped to argue our case in terms of economic criteria. But economic criteria are used to make judgments about what we do...If the educator cannot speak in terms of rates of return ...we're sometimes at a disadvantage.

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-N. Rifkin  
USAID/Mali

I submit that, at least in Sahalean West Africa, the largest private sector consists of the farmers themselves. And that the extent to which we can educate them...we will further the goal of developing this vast private sector and at the same time further the goal of economic development because the future of these states is in agricultural development.

-J. Singletary  
A.I.D./W

I would suggest we need to take a careful look at the purpose of development...I submit self-sustained development is what we ought to be looking at...If you're going to have development, you're going to have changes in the way people think, the way people act, their knowledge base...The way you get from a fetus to a judge or an agriculturalist is through the education process. So if A.I.D. wants as its goal...helping countries become self-sustaining, there is no question but that there's a role for education.

E. Expanding the data base

Projects currently in progress became the focus for informal evening sessions both nights of the conference. The first evening focused on projects in specific countries. Host country participants and field mission personnel teamed to lead discussions about a manpower training project underway in Zaire and a programmed learning project being implemented in Liberia. Another group discussed a rural training project in Tanzania while another discussed a non-formal education project in Lesotho. In each case, the presenter gave an overview of the project and the group raised questions relevant to the issues under consideration by the workgroups. Informal groups on the second evening looked at broader programmatic issues. One group heard presentations on the use of communications technology in various A.I.D. projects: a satellite project; a radio math project in Nicaragua; and a health project that uses radio in Honduras. Another group discussed participant training issues, while a third talked about the organization of the education sector in A.I.D. missions overseas.

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#### IV. ANALYSIS AND RECOMMENDATIONS

##### A. Group I: Host Country Institutional Capability and Commitment

Group I made several generalizations and recommendations as a result of discussions relating impact evaluation findings and personal experiences to issues of host country institutional capability and commitment. The analytical framework that the group devised for examining the data used the structural organization encountered by A.I.D. in a country as a way of operationalizing the notion of institutional capability. Impact evaluation findings were thus discussed in terms of: 1) vertical institutions (national, regional, local); 2) horizontal interministerial relations; 3) host country-other donor relations; and 4) the role of private sector and private voluntary organizations. The analytical framework used procedural issues, primarily those relating to funding, as a way of operationalizing the notion of commitment. This discussion focused on: 1) approval and allocation mechanisms; 2) intra-governmental, PVO/Private sector, and donor processes; 3) budget and project cycles; and 4) project identification, implementation, and evaluation.

The group discussed at length the tensions that often exist in the host country among national, local, and regional institutions; among ministries; among donor agencies and the host government; and between the government and the private sector. They noted that such tensions--sometimes positive, sometimes negative--can be exacerbated by outside interventions. The group concluded that A.I.D. strategies for developing institutional capability needed to address these

tensions. (See the Group I report in Appendix D.1.)

In presenting a summary of its deliberations to the final plenary session, Group I highlighted the fundamental importance of training in institution-building but urged the Agency to go beyond the simple act of training individuals to include organizational development assistance as part of its intervention strategies.

The group offered several recommendations emerging from its analysis of the structural evidence in the impact evaluations:

1. A.I.D. policy should emphasize the need to take into account interests, roles and capacities of a wide range of local institutions in project design, implementation, and evaluation.
2. Where A.I.D. perceives weaknesses in key institutions which impede the ability of governments to make decisions, assess needs, manage and implement its own education program, A.I.D. should be willing to assist in strengthening these capacities. We should provide interventions to strengthen

- planning capabilities
- administration and management capabilities
- leadership capabilities
- research and development capabilities
- materials production capabilities

(The group noted that such interventions might lead to new patterns of interaction and coordination among ministerial levels.)

3. A.I.D. should be willing to participate in discussions with other donors in an effort to create possibilities for sharing projects. A.I.D. should increase its collaboration with other donors to build basic education systems.

4. A.I.D. should pay increased attention to and work with host government institutions in development and support of private sector institutions participating in education programs.

The group did not feel ready to put forward specific recommendations about the commitment issue but did offer some generalizations based on its analysis of procedural issues in the impact evaluations.

1. A.I.D. procedures for project approval and financial allocations may be incompatible or poorly coordinated with relevant mechanisms in the host government. This has real implications for host country planning and is a problem we need to address.

2. Regardless of who initiates a project, the critical task is ensuring that, as it develops, it becomes "owned" by local government and institutionalized as part of the local system. This occurred successfully in the projects in Korea and Kenya, but was unsuccessful in the Philippines.

**B. Group II: Sustainability of Projects and Programs**

Group II drew several policy implications from evidence presented in the impact evaluation studies about sustainability. The group

defined "sustainability" as the ability of a project to continue on its own after A.I.D.'s intervention had ended. In developing this definition, the group noted that sustainability was going to depend, at least initially, on the usefulness of the project to those persons benefitting from it, i.e., the project staff, the institutions, and the beneficiaries. Proceeding from this "given," the group elaborated and described eight factors impacting on project sustainability:

1. importance of long-term A.I.D. involvement
2. host country ability to finance recurring costs
3. adequacy of manpower available to continue the project
4. the extent of host country demonstrated commitment to the project
5. institutionalization of the project
6. adequacy of reward structure to project personnel
7. political stability
8. effectiveness of phase-out process

Each group member reviewed one of the impact studies for data relevant to each of these factors. The findings were then shared with the group and a determination was made about the extent to which each factor played a role in the sustainability of the projects reviewed. One group member was responsible for recording comments about each of the factors during the sharing session and subsequently wrote a summary paragraph on that factor for the group product. (See the Group II report in Appendix D.2.)

Group II found, in relating the factors listed above to the data in the impact studies, that host country commitment, availability of adequate manpower to sustain the activity, institutionalization of the project, and political stability were factors present to a large extent in most of the projects under review. However, the case of Kenya demonstrates that, despite the presence of most of the factors favoring sustainability, Kenya's lack of ability to finance recurring costs and A.I.D.'s lack of an adequate time horizon for involvement resulted in the near disappearance of the project following the end of A.I.D.'s intervention. (See chart in group report, Appendix D.2.)

Based on their discussions, Group II made the following policy recommendations for achieving project sustainability where desirable:

1. A.I.D. should carefully consider project objectives in terms of realistic implementation time frames and allow for flexibility with regard to the life of the project.
2. A.I.D. should consider whether the long-term benefits of education projects in countries unable to sustain recurrent costs merit external assistance to finance recurrent costs beyond the life of the project.
3. A policy should be established to ensure that projects are designed to include adequate training components to provide an adequate number of qualified personnel.
4. As host country commitment is a necessary prerequisite to successful project implementation and sustainability... commitments should be an integral aspect of project implementation.

5. Institutionalization of project efforts must be a foremost consideration from design through implementation with proper checkpoints built into the project process.
6. A.I.D. should encourage and, when feasible, make possible special incentives for selected project personnel.
7. A.I.D. should assure, as part of phasing out, that adequate human and financial resources remain to bridge the gap between relative financial dependency and autonomous sustainability.

C. Group III: Appropriate fit between host country socioeconomic, cultural, political, and technological needs and realities, and planned project/program interventions.

Group III generated several recommendations and numerous sub-recommendations as a result of discussions about the "fit" between host country and A.I.D. needs and realities. The group tackled this broad topic by examining findings from impact evaluations and personal experience to determine whether there was any evidence to suggest a relationship between socioeconomic, cultural, and technological fit of a project and a project's impact in the country. To do this, each group member examined one of the impact studies and one or two personal examples using a group-prepared form for recording data. Members then shared their findings and discussed at length whether project success or failure was related to project "fit." Out of this discussion came a number of generalizations regarding each aspect of "fit." These generalizations and supporting evidence are detailed in Group III's report. (See Appendix D.3.)

In summarizing the group's findings for the final plenary session, group leaders outlined examples of some projects where appropriate fit was related to positive impact and others where inappropriate fit was associated with negative impact. Liberia's Improved Efficiency of Learning project was cited as an example where careful consideration of host country socioeconomic and cultural conditions enabled A.I.D. to replicate successfully a programmed learning approach originally tested in the Philippines. Key to the Liberian success was the formation of a local committee to adapt the project to Liberia and the willingness of A.I.D. to use traditional teacher training structures to implement a highly innovative project. Assistance to elementary and secondary school development in Afghanistan demonstrates a positive relationship between cultural "fit" and impact. There, educational materials were produced in two languages to accommodate two different linguistic groups within the country. At the same time, however, efforts to address Afghan history in the materials failed to acknowledge that each of these groups had its own view of the country's history, thereby diminishing the value of the materials nationwide. In Ecuador a successful project in one province failed to be adopted in other provinces, primarily because it lacked support at the national ministry level, thus demonstrating the importance of political "fit" for success and impact. Kenya and Korea had projects where radio was successfully used as a medium of instruction in ways appropriate to the needs of the countries and associated with project success. On the other hand, television used

as a supplemental delivery system in Nigeria, all but disappeared from the project once A.I.D.'s involvement ended.

In conclusion, the group presented recommendations regarding host country participation in A.I.D. projects.

1. Benefits will result from increased participation of local institutions at all levels in which a project is involved. Therefore, existing A.I.D. policy regarding participation should be more carefully followed so that design, implementation and evaluation involve host country institutions.
2. Consideration should be given to NOT funding projects where there is no evidence of participation in the earliest design stages.

D. Group IV: Replicability

Group IV proposed several concrete recommendations to the Agency for enhancing the replicability and spread of projects. Initially the group defined and distinguished between the concepts of replicability and spread.

Replicability: A conscious, directed effort to apply effective approaches to new projects in other countries, sectors and disciplines confronting similar problems.

Spread: Extension and dissemination within the same country or contiguous area.

The group then focused on the question: What can A.I.D. do to replicate positive aspects of its experience and not to replicate negative aspects?

A considerable amount of time was spent generating a list of conditions that favor or militate against replicability. The list, which became the framework for analysis of the impact evaluation findings, included:

1. host country demand/energy/commitment
2. cost effectiveness
3. knowledge about what worked and why
4. information dissemination/communication

Following close examination of the impact evaluation findings and personal experiences in light of the conditions for and against replicability, the group concluded that little concrete evidence was available to them. Their analysis led to a list of concerns and subsequently to a set of recommendations for the Agency. (See Group IV's report in Appendix D.4.)

Group IV presented the following policy recommendations to the final plenary session:

1. Some unit in A.I.D. (possibly Sector Councils) should be charged with reviewing projects for potential replication and disseminating this throughout the agency.
2. A.I.D. must have an understanding of what has worked and why.
  - a. Document implementation with real formative evaluation.
  - b. Enforce requirement for thorough quarterly implementation reviews at Mission level.

- c. Consider rolling designs, i.e., shorter general implementation plans for project papers with more detailed and specific plans at project start-up and periodic revision during implementation.
3. Conscious, serious attention must be given to the Agency's information dissemination system...to get useful, tailored, relevant, down to earth information to users. Information flows should be vertical, lateral (across sectors), and external (including other donors).
4. A.I.D. should give more attention to research on strategies for more cost effective approaches especially in basic education.
5. A.I.D. design procedures should require a review of past experience (state of the art) and the explicit identification of lessons learned (what works, what does not work).

**E. Group V: Design, implementation, evaluation, and feedback**

Group V, whose topic covered the entire project development process, touched on a number of issues raised by other groups in its discussion and final recommendations. The group chose for its analytical framework the guidance questions suggested for the topic by Conference organizers:

- What are the donor constraints which encourage (discourage) project/program effectiveness and impact?
- What should the purposes and goals of A.I.D. education projects be?

-By what criteria should these purposes and goals be identified?

-By what mechanisms can evaluation become a more useful tool in the design process?

Four teams or subgroups then examined individual impact studies in light of these questions and shared their findings with the whole group. The group identified, based on this discussion, major issues in project design and generated a list of education project goals. The teams then wrote recommendations for policy derived from their discussion of the evidence.

Due to time constraints, the group discussion centered on project design issues. This discussion underlined the importance to project design of host country commitment, institutional development, project cost effectiveness, and socioeconomic fit of projects. Although the Conference focus was limited to education projects per se, Group V dwelled at considerable length on implications for the project design process of educational activities in other sectors. The group suggested that perhaps the education sector should be redefined in terms of education activities rather than education programs. (See the Group V report in Appendix D.5.)

In the final plenary session, Group V made the following policy recommendations for Agency consideration.

1. Host government policy and funding and structural constraints, must be systematically analyzed during the project design process, to enable project design to address such constraints.

2. A.I.D. should develop a long-term human resource development strategy, especially in countries where A.I.D. has limited funding and personnel, and focus efforts in government priority areas where A.I.D. has a comparative advantage.
3. Project design should allow sufficient time for a project to achieve its stated objectives, especially in the case of innovative projects.
4. Projects should be designed to be cost-effective, with plans built in for the host government to assume recurrent costs once A.I.D.'s intervention has ended.
5. Education projects should be designed to be an integral part of the country's education sector strategy and of its development process.
6. Project design and implementation should involve true participation of host government officials, project implementors, and beneficiaries.

## V. RESPONSES FROM AGENCY OFFICIALS

Following the workgroup reports, two senior A.I.D. officials offered reactions and comments. First, Bradford Langmaid, Deputy Assistant Administrator of the Bureau for Near East, commented on the workgroup recommendations. Finally, Joseph Wheeler, Deputy Administrator of the Agency, responded to questions from the participants.

Langmaid expressed his concern for two issues not addressed in workgroup recommendations and underlined the importance of building a political and economic constituency for a project to secure host country commitment. He said he was disappointed not to hear a demand that A.I.D. do something about restoring to its project portfolio traditional education programs which the evidence shows had had significant impact in several areas, from developing basic ministerial capacities to the design of curriculum and educational services. He noted that education ministries in developing countries were probably better equipped, had more resources, and thus a better opportunity to have an influence than the ministries of health, agriculture, and defense. This, he said, was a valid point favoring education assistance and a point that deserved to be made.

Langmaid said that the recommendations had failed to address budgetary concerns which are important to building a case for education assistance. He said A.I.D.'s concern over how projects relate to host country programs and objectives called for an examination of host country budget capacity and an analysis of how and

why they spend their money as they do. He noted that despite the high costs of education, A.I.D. had failed to explore fully ways of mobilizing resources at the local level to support costs of teachers, books materials, buildings and maintenance. He also pointed out that most governments are unaware of what it costs for them to produce a literate student, usually a revealing figure in relation to efficiency goals.

In conclusion, Langmaid addressed the issue of host government commitment and sustainability. He said that continuation of a project after A.I.D.'s intervention had ended required a private demand for the project. Therefore, it was incumbent upon A.I.D. to build into the project both a public and a private commitment for the project and its continuation. There was a need, he said, to develop in the government political and economic constituencies with vested interests in the continuation of the project. "I'm not sure we spend enough time building that kind of a constitutency," he said.

In responding to participant questions, Wheeler addressed several issues that had been central to group deliberations throughout the conference and urged the educators to present a forceful argument for education assistance to the senior Agency staff.

Agency policy  
in general:

This administration's policy includes  
continuing concern for basic human needs,

with food, better health, education, concern for the distribution of benefits, coupled with tactical concerns for how you get there the most effective way. There is strong emphasis on production, and strong emphasis on utilization of every individual's talents and abilities, including entrepreneurial abilities. The continuum is there.

Agency policy  
in education:

There is a need in this administration for an articulation of education policy, what it is we would like to be doing, to what extent Mission Directors are encouraged to develop education projects...The Administrator is open to discussion about education. I would encourage boldness in this discussion...We do need a methodical review of experience, what succeeded, what failed, to buttress the arguments. That material is here. Now it needs to be presented to the executive staff...

Funding for  
education projects:

This administration has spoken (about education) in the form of budget. And it's a difficult situation. In terms of the

development assistance budget, education is holding its own or going down. There is a continuing priority given to agriculture...to population; we're urged to do more in energy. Then there are the residuals, health and education...which includes a number of project areas I would not necessarily classify as education, such as labor and participant training. The real funding for education is only a piece of a functional portion of the budget.

Basic education:

There's a good chance that you'll get a hearing if you make a good case for basic education, providing it's well grounded in a set of arguments...The dilemma is that we probably don't have the resources for basic education. But I still think A.I.D. can help a government put together a funding package to do a worthy project.

Project size:

Project scale is politically important. Large projects can have impact. In the planning stages it is important to mobilise high level political support, to involve ministries such

as finance and planning...Education is not going anywhere...unless there's a political interest and a political will. It needs to be articulated and it needs to go beyond the ministry of education, into the ministry of planning, into the political system.

Systems approach:

The systems approach is important. We've got to help the government take a long term look at the education system. We've got to build on what they have.

Project time frame:

Most bureaucrats can't see much farther than seven years...But we have to be realistic about how long it takes to institutionalize things, about the time needed for effective technological transfer, and to accomplish goals. Lay out a 20 year project time frame with five or six or eight year segments and program in periodic reviews. Recognize that changes will be necessary over time as situations change.

Agency Staffing:

I'm not ready to accept reduced staff.

\* \* \*

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The Impact Evaluation Conference ended, but the discussion of the issues raised will continue. A draft policy for the education sector is scheduled for presentation to the Administrator in mid-April with a sector strategy to be developed soon thereafter.

APPENDIX A

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APPENDIX B

AGENDA  
EDUCATION SECTOR  
IMPACT EVALUATION CONFERENCE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
Marriottsville, Maryland, U.S.A.  
February 15-17, 1982

DAY I

- 8:00 Bus leaves State Department (21st Street Entrance)
- 9:30 Registration at Marriottsville
- 10:30 Conference Opening
- Welcome: Bob Berg  
--Conference Background, Purpose and Overview: Twig Johnson
- 11:00 Impact Evaluation Findings and Issues: Marion Kohashi  
Warren
- 12:15 Lunch
- 1:30 Workgroups: Session I - Discussion of Impact  
Evaluation Findings and Field Experiences that  
Bear on Assigned Topic
- 2:30 Policy Issues: Frank Method
- 3:30 Break
- 3:45 Workgroups: Session II - Identify Issues and Develop Work  
Plan Including Responsibilities for Matching  
Findings Against Issues.
- 6:00 Dinner
- 7:00 Expanding The Data Base: Presentations of Additional Cases  
and Issues
- 9:00 Wine and Cheese - Compliments of the Pragma Corp.
- 9:30 Workgroup Coordinators Meet

DAY II

- 8:15 Breakfast

9:00 Panel: Latest Evaluation Findings and Research Agenda  
 --Charles Stalford, (U.S.) National Institute of  
 Education  
 --Mats Hultin, World Bank  
 --Patrick Shima, UNPD  
 10:15 Break  
 10:30 Workgroups: Session III - Match Findings Against Issues and  
 Begin Drafting Recommendations  
 12:15 Lunch  
 1:30 Workgroups: Session IV - Continue Drafting Workgroup Report  
 3:30 Break  
 3:45 Workgroups: Session V - Complete Draft Report  
 5:30 All Draft Reports to Pragma Conference Office  
 6:00 Dinner  
 8:00 Education and Development: Ruth Zagorin  
 9:00 Expanding the Data Base: Informal Sessions

DAY III

8:15 Breakfast  
 9:15 Workgroups: Session VI - Critique Other Workgroup Reports  
 10:45 Break  
 11:00 Workgroups: Session VII - Revise Reports in Light of  
 of Comments; Finalize Presentation to Plenary  
 12:15 Lunch  
 1:30 Plenary Session: Conference Summary and Presentation of  
 Workgroup Recommendations  
 3:00 Break  
 3:15 Response: Mr. Joseph Wheeler, Deputy Administrator, A.I.D.  
 Final Discussion  
 4:45 Bus Leaves for State Department

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## APPENDIX C

### CONFERENCE MATERIALS EDUCATION SECTOR IMPACT EVALUATION CONFERENCE AGENCY FOR INTERNATIONAL DEVELOPMENT

#### GENERAL

- "PPC/E Education Sector Report: A Summary of Impact Evaluation Findings," Marion Kohashi Warren. (February 1982)
- "A.I.D. Assistance to Education: A Retrospective Study," Francis J. Method. (February 1981)
- "Investments in Education in Developing Countries: The Role for A.I.D.," Donald Foster-Gross. (May 1980)
- "DS/ED Nonformal Education: A Retrospective Study, 1970-1980," Chris Krueger and Jeanne Moulton. (May 1981)

#### IMPACT EVALUATIONS

- "Thailand: Rural Nonformal Education - The Mobile Trade Training Schools." (October 1981)
- "Korea Elementary - Middle School Pilot Project." (October 1981)
- "Northern Nigeria Teacher Education Project." (September 1981)
- "U.S. Aid to Education in Nepal: A 20-year Beginning," (May 1981)
- "Radio Correspondence Education in Kenya."
- "Jordan Education Sector Impact Evaluation."
- "U.S. Aid to Education in Paraguay: Education Development Program."
- "Philippines Project IMPACT: An Assessment of a Low Cost Alternative for Universal Primary Education."

#### DESK REVIEWS

- "Nonformal Education in Rural Ecuador."
- "Elementary and Secondary Education Project in Afghanistan."
- "Sector Loans and Education Development in Colombia."
- "Sector Loans and Education Development in Brazil."

APPENDIX D.1

GROUP I

HOST COUNTRY INSTITUTIONAL CAPABILITY AND COMMITMENT

INTRODUCTION

The problem of the host country institutional capability and commitment needs to be considered within the specific areas of structure, procedure and implementation.

The eight reports under consideration are important insofar as they help us have an understanding and an appreciation of the need for continuous and harmonious collaboration by all parties concerned in A.I.D. programs.

In this summary we shall specifically deal with the situation from the point of view of the host country and the donors, indicating the key findings based on research, personal experiences of the participants, and other relevant issues. Drawing from these findings we will make a statement of policy and suggest possible recommendations.

STRUCTURAL

1. Vertical institutions (National, Regional, Local)
2. Horizontal Interministerial Relations
3. H.C. - Other Donor Relations
4. Role of PVO and Private Sector

## PROCEDURAL

1. Approval and Allocation Mechanisms (Processes)
2. Intra-Governmental, PVO/Private Sector, Donor
3. Budget/Project Cycle
4. Project Process of Identification, Implementation, Evaluation

The first aspect to look at is the structure of institutions that can be identified at these levels--national, regional and local. In projects in which two or more of these levels are involved, there is often tension between them which requires resolution. The main reasons for tensions are identified as:

- a) lack of communication
- b) bureaucratic jealousy
- c) actual or perceived incompetence between levels
- d) lack of coordination
- e) changes in attitudes

These tensions are a normal fact of life. However, the group noted that the start of a new project often introduces new tensions or sharpens existing tensions. These tensions cannot usually be completely avoided. The issue for program development is whether they can be made creative.

Evidence of these tensions can be found in the case studies for reasons (b) and (c) in the Radio Correspondence Project (Kenya) and for reason (e) in the Philippines Impact Study. The NNTEP project in Nigeria represents a special case where the tensions were partly between two of the U.S. institutions involved and partly new tensions between institutional and bureaucratic elements in Nigeria

restructured its government during the project period. Similarly, Jordan illustrates the difficulty of planning assistance where the ministry had not yet developed its own planning capacity. This resulted in periods of disagreement over program priorities. Jordan developed its own institutions and worked through several periods of turbulence in the period during which A.I.D. assistance was provided. The Korea case appears to represent a case of successful vertical coordination.

The above tensions are mainly vertical tensions among hierarchical elements. Other tensions exist horizontally among elements at any level. Most importantly, tensions exist at the inter-ministerial level. The non-existence of meaningful interactions at the inter-ministerial level often leads to a lack of coordinated project implementation. The coordination required for effective implementation of the assistance project often forces ministerial elements to interact in ways which are not normally required for operation of their own programs. In some cases the most lasting impact of the education assistance project may be to bring about new patterns of interaction and coordination among ministerial elements. Among the types of projects which often have this effect are nonformal functional skills training project, vocational training projects in fields such as agriculture, and advanced training projects which include a manpower planning and assessment activity. Examples where the failure to adequately anticipate and resolve problems of horizontal coordination affected project success include the Nepal

program, Thailand and Colombia. A common problem is the failure to bring ministries of finance and economic planning into the process at an early stage of project development and planning.

In addition to the tensions and coordination problems among institutional elements of the local government, tensions often exist between the local government and the donor community. These tensions exist partly because of differences in perception between the donors and the recipient government as to the definition of the problem, priorities among the problems and views of how to proceed in solving the problems. There are often differences in views of how to proceed. In many cases, the government may change or change its priorities during the life of a project, necessitating adjustments on both sides to the new situation. Afghanistan is a case in point. The donor may have a predetermined favorite solution which, if it attempts to proceed without full agreement or understanding in the local government will lead to conflicts and problems in implementation. The radio correspondence course in Kenya represented a donor judgment that this approach could be developed without capital or institution-building elements. This was incorrect and another donor had to provide the capital inputs, without which the project could not function. Ultimately the project confronted problems of recurrent teacher salaries which could have been anticipated by better collaboration and forward planning at the initial stages.

The group noted the need for attention to coordination among the donors, but did not have cases on which to base recommendations for such coordination. A particularly delicate set of tensions arise when

the donors attempt to use the assistance to leverage or bring about what they consider to be needed reforms. The group discussed this at length and reached consensus that it was appropriate, and often necessary, for the donor to take steps to bring about needed coordination and to obtain decisions affecting project implementation. However, where the donor exceeds this role to the point of attempting to make decisions for the local institutions or to force decisions in predetermined directions, it is considered an unwarranted and inappropriate intrusion on local decision making and often leads to the increase of tensions rather than the cooperation needed to insure effective project implementation. The A.I.D. role in accelerating the pace of education planning in Jordan appears to have been an example of an appropriate, though strong, role in bringing about coordination and decision at a critical point.

There was agreement that the institutions relevant to education include many in the private sector and the role of community level organizations. While the group stressed the importance of involving community organizations it noted the case of Kenya in which the accelerated development of community schools under the Harambee movement created a problem of supplying teachers rapidly enough and of maintaining the recurrent costs of these schools. The need to find a solution to the problem of large numbers of poorly trained teachers forced the Kenya government to look for an alternative means of in-service training. The result was the Radio Correspondence program. Eventually, the failure to find a solution to the other problem, the costs of employing these teachers at the salaries appropriate for their upgraded status, became prohibitive and led to the collapse of

the in-service training scheme. This case illustrates a tension between the objective of involving more elements in education decision making and the ministry's need to maintain sufficient control to ensure effective project implementation.

Both A.I.D. and the local government have an interest in finding ways to relate education effectively and channel assistance to the local communities. The government has need to develop new mechanisms and A.I.D. may have to assist in developing these mechanisms.

Additional structural/procedural issues which the group discussed but did not fully resolve include:

- Budget and project cycles may be incompatible
- Time frame for project implementation and impact may be inadequate
- A.I.D. procedure for project approval and financial allocation may be incompatible or poorly coordinated with the relevant mechanisms in the local government
- Regardless of who initiates the project, the critical task is insuring that as it develops it becomes 'owned' by the local government and institutionalized as part of the local system. The Philippines examples appear to have been instances in which this was not accomplished. Korea and Kenya appear to be successful examples.
- Need for periodic consultation, particularly on manpower and budgeting matters, and for full local participation in project monitoring and evaluation.

APPENDIX D.2

GROUP II

SUSTAINABILITY OF PROJECTS AND PROGRAMS

Sustainability of any educational project will depend upon the extent to which it is perceived as being useful by both project beneficiaries and host country officials. We identified from the impact studies and other relevant experiences the critical criteria that determine continuance of education efforts after A.I.D. involvement has ceased. After listing the criteria, we analyzed each case study. The criteria and our conclusions follow:

ISSUE 1: Whether the sustainability of a project is linked to A.I.D.'s having committed itself to an adequate time horizon over the life of the project.

An examination of A.I.D.'s project impact evaluations reveals that A.I.D.'s involvement must be sufficiently long term to allow for the development of an institutionalized infrastructure and a qualified professional cadre for continuous implementation. A.I.D.'s involvement in Nepal, Jordan, Paraguay and Korea gives evidence of sufficiently long-term development assistance that permitted the creation or re-enforcement of key educational institutions and their staff over a period of 20-35 years.

On the other hand, and in all fairness, perhaps for reasons beyond A.I.D.'s control, our involvement in education sector projects in Thailand, Kenya, and the Philippines was not sufficiently long term to allow for the full institutionalization of all projects in terms of acceptability to both beneficiaries and to the governments concerned.

Recommendation: A.I.D. carefully consider project objectives in terms of realistic implementation time frames, and, depending upon the complexity of the project, allow for flexibility with regard to the life of the project.

ISSUE 2: Whether economic environment is an important element of sustainability; whether given commitment, the host country can effectively handle recurring costs whether through internal budget support or foreign assistance.

Thailand, Korea, Nigeria, Jordan and Paraguay all enjoyed rapid economic growth, which made it possible for the host countries to handle their contributions and to meet recurrent costs. Nepal's economy has shown modest improvement, but its capacity to meet costs depends on external support, which has been adequate but may not continue to be. The Philippines project depended on external contributions and is struggling to survive. In Kenya, the shock to the economy by the oil crisis caused retrenchment from planned levels of operation.

The success of educational programs depends on economic possibilities for graduates. This, in turn, is affected by the amount and quality of economic growth. The availability of overseas job opportunities and the remittance-fed economy of Jordan solved a

growing unemployment problem which in the mid-60s threatened the sustainability of an effective educational system. In Nigeria, oil revenues permitted the country to handle demand for secondary education created by the project.

But economic growth can create problems. In Jordan and Paraguay, growing economies are providing job opportunities that compete with and drain the educational system. In the Philippines, the availability of outside resources for traditional educational approaches (through the World Bank) undermined incentives for the low-cost education pilot project.

Conclusion: The economic environment, in any given country, can significantly affect whether a government is able to sustain the recurrent costs of education projects. A.I.D. should consider, in these cases, whether the long-term benefits of such projects merit external (A.I.D. and other donors) financing of recurrent costs beyond the normal life of project.

ISSUE 3: Whether an adequate number of qualified personnel are available to sustain the project.

The issue addresses the question of numbers of personnel trained both technically and in management areas, their presence in the system after project is terminated, and the adequacy of the numbers and their areas of specialty.

In all of the impact evaluations reviewed--Thailand, Ecuador, Paraguay, Pakistan, Kenya, Jordan, Korea, Philippines, and Nepal--the

training program was significant and introduced enough trained technicians to ensure the sustainability of the project after A.I.D. withdrawal. There were no examples of adverse effects of training manpower or cases in which training was inadequate or not done in sufficient volume to cover the needs.

Recommendation: A policy should be established to assure that projects are designed to include adequate training components to provide an adequate number of qualified personnel.

ISSUE 4: Whether the degree to which the host country has demonstrated a commitment to the project, by supplying essential financial and qualified human resources, impacts upon the sustainability of the project.

Host country commitment is defined here as the timely provision of necessary project inputs. It includes contributions "in kind" (an environment of "legitimacy" with support from appropriate national, regional, and local prestige figures and necessary legislation to permit the project to function; available facilities, equipment, and supplies; and adequate numbers of host country personnel with at least minimum professional qualifications). It also includes direct contributions of financial resources to supplement donor contributions.

Almost all of the projects reviewed in these impact evaluations seemed to contain a high level of host country commitment during the life of the project and most are being sustained with local resources. While political and economic constraints may negatively affect the continuance of projects, a high level of host country commitment will often sustain projects.

Policy and Strategy Recommendations: Host country commitment

is a necessary prerequisite to successful project implementation and sustainability. A.I.D. policy should provide for early involvement of the host country in planning, management, and evaluation to help ensure adequate provision of host country resources during the life of the project and beyond. Host country commitments should be stated as specifically as possible in project documents, and regular monitoring of the provision of these commitments should be an integral aspect of project implementation.

ISSUE 5: Whether the project is effectively institutionalized (integrated) with indigenous organizations.

The evidence from the projects/programs studied, as well as other examples cited, shows that successful institutionalization of A.I.D.'s efforts is a positive, even necessary, contributor toward sustainability. Some projects, like those in Korea, Paraguay and Nepal, fit at the outset, or soon thereafter, into established institutional frameworks. Others, for example those in Nigeria, Thailand and Kenya, were able through implementation to establish themselves institutionally, leading to their having sustained effects. That is not to say that institutional changes did not take place where institutional fit was achieved. Indeed, in most instances significant changes did occur, but where these reforms took hold and were sustained, they succeeded as a result of their integration within the institutional setting.

Conclusion: Sustainability, the evidence indicates, derives

from the successful institutionalization (systemic internalization) of project/program activities. The policy implication for A.I.D. is that the theme of institutionalizing project efforts must be a foremost consideration from design through implementation, with proper checkpoints built into the project process to measure successful movement toward this objective.

ISSUE 6: Whether sufficient reward structures exist to encourage participation of essential personnel.

In all projects staff were paid and presumably received fringe benefits consistent with their positions. There is no evidence that any (staff) received special incentives for leaving secure positions or agreeing to work in hardship posts.

In at least one case (Thailand, for example), project staff received sufficient psychological rewards to make for little job turnover. In Nigeria, because in a real sense the project "created" a school system, many participants experienced considerable job mobility. In most countries, teachers and other staff who received professional training (Paraguay, Nepal, Ecuador, Thailand, Nepal) were satisfied with the training and in at least one case (Nigeria) trainees were very positive about the training.

Overall, of the 10 projects reviewed, three were rated "high" and four were rated "adequate" in terms of this issue. Two were rated "N/A" (not known or not appropriate). This suggests the reward structure is a key issue which should receive attention. (See chart following report.)

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The problem with incentives is what happens when the project is completed or becomes institutionalized and or stabilized. The answer is: incentives should stress good management, recognition, training, and psychological rewards rather than money.

Recommendation: A.I.D. should encourage and, when feasible, make possible special incentives for selected project personnel.

ISSUE 7: Whether political stability is an essential element in project sustainability.

Political stability is always helpful in promoting project sustainability. In the Philippines, Kenya, Thailand, Korea, and Paraguay, stability contributed to a predictable decision-making environment that significantly facilitated project implementation and followup.

Elsewhere, instability hampered sustainability primarily when it brought a regime to power which was unfriendly to the United States. Thus, projects may be sustained when instability takes the form of coups or civil war. Nigeria's commitment to education meant that the Northern Nigeria Education Project had sustained effects despite a prolonged civil war, and a new military regime in Ecuador has seen no reason to discontinue U.S. aid.

The policy implications of this variable are limited. Policy-makers will often not wish to discontinue aid in unstable or potentially unstable countries. Indeed, there will be strong pressure for increases in aid in many such instances. Perhaps the principal implication is that expectations of aid in these circumstances should not be over-anticipated or over-sold.

ISSUE 8: Whether A.I.D.'s method of phasing out project affects sustainability.

The data were mixed here and often there was not a great depth of information about this process. In Jordan, Korea, Kenya, and Nepal, there was a readiness to end involvement with the contractor and the process appears to have been done reasonably well. In each case, it was done gradually, with counterparts assuming full responsibility. The extent to which the process was a product of a clearly articulated plan is unclear. In Afghanistan, Paraguay, and Ecuador, abrupt project endings were due to sudden political interventions, and there is no opportunity to assess the impact of a phase-out plan in any normal sense. In Nigeria the civil war led A.I.D. to rethink its involvement and to end the project at a time that coincided with the originally planned "life of project;" this should probably be added to the list of premature endings due to political intervention. In Thailand, the project phased out because A.I.D. felt that it had done all it could; the host country, however, wanted continued funding. Here, in fact, the program has continued and grown. It was felt that there was no adequate description of the Philippines project phase-out plan, but questions were raised about the role of the MOE in funding inputs after assistance ended.

Conclusion: When a project is allowed to come to its natural maturity, A.I.D. should assure, as part of phasing out, that adequate human and financial resources remain to bridge the gap between relative financial dependency and autonomous

sustainability. Since some contractors may resist handing over control and some countries may not want to give up A.I.D. money, it probably makes sense to include criteria for disengagement in the original project plan, as well as some indication of the steps to take in phasing out the project.

Is there a role for the private sector?

In implementing projects, private sector firms are more responsive and flexible than universities and USAID's have more control. Following A.I.D. phase out, a private firm and/or contractor may continue to make its services available at a reduced level at cost, given their commitment to program sustainability. The private sector abroad represents a considerable resource that has yet to be tapped. University expertise (research capabilities) and on-the-job training (once the basic 3Rs are taught) appear to be a better use of resources than vocational school training. Educational equipment, such as that for teacher training schools and/or vocational education provide, limited opportunities for the private sector, especially when such equipment is easily maintained and/or usable at village level.

PROJECT SUSTAINABILITY

|   | Thailand | Ecuador | Paraguay | Afghanistan | Kenya | Nepal | Jordan | Nigeria | Philippines | Korea |
|---|----------|---------|----------|-------------|-------|-------|--------|---------|-------------|-------|
| 1. Adequate time horizon for AID involvement          | X        | ✓       | ✓        | N/A         | 0     | ✓     | ✓      | ✓       | 0           | ✓     |
| 2. Economic growth/ability to finance recurring costs | 0        | ✓       | 0        | ✓           | 0     | 0     | ✓      | ✓       | ✓           | ✓     |
| 3. Adequate manpower to sustain activity              | ✓        | ✓       | 0        | ✓           | ✓     | ✓     | ✓      | ✓       | ✓           | ✓     |
| 4. HC commitment                                      | ✓        | 0       | ✓        | N/A         | ✓     | ✓     | ✓      | ✓       | X           | ✓     |
| 5. Institutionalization                               | ✓        | 0       | ✓        | ✓           | ✓     | ✓     | ✓      | ✓       | 0           | ✓     |
| 6. Adequate reward structures                         | ✓        | N/A     | 0        | N/A         | ✓     | 0     | 0      | 0       | X           | ✓     |
| 7. Political stability                                | ✓        | ✓       | ✓        | ✓           | ✓     | ✓     | 0      | 0       | ✓           | ✓     |
| 8. Effective process of phasing out                   | X        | 0       | N/A      | N/A         | ✓     | ✓     | ✓      | N/A     | X           | ✓     |

✓ = High

0 = Medium

X = Low

N/A = Not known or not appropriate

APPENDIX D.3

GROUP III

"FIT" BETWEEN HOST COUNTRY AND AID NEEDS AND REALITIES

INTRODUCTION

To begin with, our overall purpose in this report was to re-examine homilies and cliché's about cultural, political, economic and technological factors as predictors of project success or failure.

Very few people in A.I.D. deny that, if our projects fail to respond to these kinds of realities, we run the risk of fulfilling our own prophecies in public but fooling ourselves in private because our host-countries really don't want what we're selling.

To achieve this, we reviewed the evidence in the impact evaluation reports and our experience, which indicates that there is a relationship between impact and the correspondence between project activities and host country social, economic, cultural, political and technological needs and realities--"fit" matters.

Considerable evidence was discussed which shows close correspondence leads to positive impacts and that poor fit produces no or negative impacts. The evidence is presented in support of recommendations about how we can improve the "fit" of projects and their ability to achieve project purposes.

## SOCIO-ECONOMIC FIT

To improve the socio-economic fit of A.I.D. projects with host country needs and realities, A.I.D. should:

1. Continue efforts to tie purposes of A.I.D. projects to priority economic plans and objectives of host country.

Evidence: A.I.D. primary teacher training project responded directly to development priorities of Northern Nigeria Government. Similar data can be found in the Afghanistan Primary and Secondary Education Report, and the Nepal, Jordan and Korea Reports.

2. Obtain assurance of host country financial commitment in recurrent and capital budget.

Evidence: Zaire Management Institute Project, positive example: Funds have been set aside by Zairian government for capital and recurrent costs.

3. Recognize the possibility of differing perceptions (between A.I.D. and host country and within the host country) of socio-economic needs and negotiate to a shared view.

Evidence: In Liberia, the host government requested a traditional inservice teacher training. Original A.I.D. preference was for programmed learning such as Project IMPACT in the Philippines. The IMPACT model, with serious adaptations to Liberian needs, was adopted. In Jordan and Nepal, national objectives regarding vocational education were not congruent with local aspirations—enrollments were low. In Thailand, the Hill tribes found the national literacy program irrelevant to their opium growing industry.

4. Be assured of realistic incentive systems for project beneficiaries.

Evidence: During the Kenya Radio Correspondence Education Project teachers were motivated by professional promotion and salary increase they would receive upon successfully completing the course. The National budget however could not support the salary increase of several thousand teachers who participated in the project.

#### CULTURAL FIT

The data indicate that:

1. Cultural factors make a difference to the success or failure of projects.
2. These cultural factors are identifiable.
  - Religious factors (in Afghanistan, inclusion of Moslem elements in the curriculum was important);
  - Language differences (an important element in the Afghanistan program was the use of two local languages; the Paraguay program successfully introduced elementary education in Guarani);
  - Sex and age roles (Thailand Mobile Trade Training Units notably successful in reaching youth and rural women);
  - Differences in prestige and rank;
  - Cultural values.

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Lessons learned are:

1. In project design, set up joint host country-donor committees for project development and implementation to ensure that cultural factors are respected throughout the life of the project.

Evidence: In Liberia a committee redesigned the Improved Efficiency of Learning Project to be acceptable to rural people. In Cameroon, a committee ensured that education programs were conducted in both national languages.

2. Make sure educational achievement is rewarded by recognized credentials. Tie educational innovations into the formal education system.

Evidence: Project IMPACT provides an example of the lack of good recognition of educational achievement. In the Kenya radio distance teaching project, on the other hand, teachers received step increases and pay raises.

3. Make sure any change in the role of teachers and students is well understood and acceptable to teachers and the community served.

Evidence: Students transferred out of Project IMPACT because its innovations were not well accepted.

4. Recognize that cultural patterns can vary at national, regional, and local levels.

Evidence: A literacy program that worked successfully in the Thai lowlands had poor enrollments and high dropout in hill areas. The Thailand Mobile Training Unit program was designed to dovetail with traditional work patterns of women, rural children, and small farmers.

5. Use local host country social scientists and institutions in project design, implementation, and evaluation.

Evidence: Rural curriculum development in Cameroon was designed and tested by local social scientists. Project IMPACT lacked this kind of planning and evaluation. Radio Farm Forum in Nigeria (1967) successfully used culturally recognizable situations, local languages and local actors to teach educational concepts. Educational television programming in Ivory Coast was done entirely in Ivory Coast by the evaluation unit created with the Ministry of Primary Education and Educational Television.

#### POLITICAL FIT

Evidence from several studies (e.g., Kenya, Korea, Nepal, Paraguay, Thailand, Ivory Coast) indicates that positive impacts are produced by projects that take political concerns into account. Evidence from three studies (Afghanistan, Ecuador, Cameroon) show that negative results followed a lack of political awareness.

The evidence suggests that:

- a. There are political barriers to development,
- b. Education is inherently political in nature.

Thus, our project strategy should:

1. Ensure that project purposes and goals agree with national aspirations by developing broad bases of political support in national, regional, and local groups and by involving participants as early as possible in making decisions about the project. In Korea the curriculum objectives were

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validated by comparing them with the constitution of Korea. In Nepal, project goals were taken from two national policy documents. In Afghanistan, the evaluation suggests that the Faculty of Education, established at the Kabul University by TCCU, was disbanded because the project did not take into account political interests in the Ministry of Education and Kabul University.

2. Establish an information network to inform participants and other interested parties about project activities--USAID may be the hub of a network at the beginning of a project. In an African country, a relevant central government office was surprised to discover an interesting rural development project two years after it had started. In Afghanistan, the USAID mission did little to involve or inform the government about planning the Afghan Demographic Studies and the contractor had to travel to Kabul to explain the project to Ministry of Planning officials.

#### TECHNOLOGICAL MIT

Appropriate educational technologies include both hardware technologies, such as radio and print, and "technologies of instruction," such as instructional systems design (Korea), programmed teaching (Philippines Project Impact) and distance teaching (Kenya and Korea).

1. The way technological considerations are optimally treated depends on the newness of the technology in the society. If new, a period of preparation of intended users is very desirable, to generate familiarity with, and mastery of, the technology and its particular use. If, instead, it is a modification in the educational use of current technologies, the reeducation process is inherently different, but even more complex.

In Korea, the five-year development process, using numerous demonstration classrooms throughout the country, served to demystify the new set of technologies. In Zaire, a sophisticated technology was rapidly introduced, and collapsed for lack of a maintenance capability.

The effort to re-popularize radio, as a major instructional tool, illustrates the second point. Wider adoption of the break-throughs in instructional radio in recent years (e.g., Nicaragua and Thailand "radio math", Honduras and Gambia rural health instruction) face the barrier of earlier patterns of ineffectual or trivial use of radio.

2. In feasibility analysis, improved data must be developed on the recurrent costs of technological elements, including replacement and maintenance after the donor has left, and the affordability of replication. In Ivory Coast's ETV project, the rapid introduction into rural areas required the use of high-cost battery power; the result was an overall recurrent cost beyond easy affordability. Mobile vans are parked around the world for lack of gasoline and spare parts.

3. Success in maintaining an educational technology is often dependent on how central its educational function has been designed to be; ancillary, supplementary functions rarely induce effective use and maintenance. On the other hand, the central though not exclusive use of radio and programmed instruction in Korea ensured their use and maintenance.

4. The introduction of new technology for instruction requires adequate adaptation, demonstration, and information diffusion within a country to promote its acceptance and use. The difficulties in sustaining local acceptance faced by Project Impact may be traced in part to insufficient adaptation to local values about the character of schooling. A subsequent, related project in Liberia has made fundamental adaptations based on local values (teachers are used, not peer instructors; the project training will operate in existing national institutions, the teacher training colleges).

5. The educational technology that is selected certainly depends on available local infrastructure. Kenya's radio correspondence project took advantage of the very good postal and radio broadcasting capabilities in the country.

6. Technology will play a rapidly increasing role in education, and major commitments must be made as sensibly as possible. Nations, therefore, need to obtain good independent advice on the viability of technological options in their own environment, to be less dependent on industrial salesmen and technological experience from developed countries. In such analyses, there must be a recognition of the multiple criteria appropriately used by developing country decision-makers: technological, socio-economic, political, and cultural—all impacting on technological choice.

A.I.D. agencies have a responsibility to encourage such host country expertise and leadership. They can also provide the specialized expertise needed to analyze new technological options. Such advise should be provided whether or not associated with specific foreign assistance projects, given the growing importance of technology. Korea illustrates both sides. KEDI's failure with a very new technology, the tethered balloon, can be traced to inadequate analysis of its compatibility with local climatic conditions. On the other hand, within their areas of competence, both KEDI and the Korean Institute for Science and Technology ("KIST") provided capability for Korea itself to make reasoned educational decisions in a wide range of development projects. This is the surest way to ensure a technological fit in an ever-changing world.

#### RECOMMENDATIONS

1. The the existing A.I.D. policy regarding participation should be followed more religiously so that design, implementation and evaluation involve host country institutions.
2. That projects not be funded unless there is evidence of participation in the earliest design stages.
3. That funds be provided to pay for participation of local nationals at appropriate stages of project development.

APPENDIX D.4  
GROUP IV

WORKSHOP ON REPLICABILITY AND SPREAD

The Question: What can A.I.D. do to replicate positive aspects of its experience and not replicate negative aspects of its experience?

Introduction

In distinguishing between replicability and spread, the group defined replicability as a more conscious directed effort to apply effective approaches to new projects in other countries, sectors and disciplines. Spread refers to extension or dissemination within the same country or contiguous area.

Some preliminary concerns of the group:

1. Replicability requires better analysis of previous experience than is usually available. Project components (e.g., technical packages, project processes, personnel, context) should be disaggregated and their role in achieving success or failure assessed as part of determining the replicability of an experience.

2. Most projects are replications of some type; i.e., replications of U.S. approaches or styles, some successful, some not. (The Afghanistan program was an example of a fairly straight transfer of U.S. experience which appears less successful than programs based

on U.S. experiences but adapted to local circumstances. Replication for replication's sake is not the point, but replication as a tool for improving effectiveness and efficiency requires much more attention than it has received to date.

3. While generating lots of talk and increased interest in a period of tight resources, replication of positive aspects of A.I.D. projects and programs seems to be no one's responsibility, nor is it effectively dealt with in design, evaluation or agency information system.

4. There was very little in the 12 documents reviewed that related directly to replication, the exception being Project Impact in the Philippines. The Nicaragua math project was also mentioned in subsequent group discussion. However, replication of both of these is just beginning and it is too soon to predict how they will work.

5. There was information in a number of the studies regarding spread. Project Impact was attempting to convince the World Bank to let them spend money on modules as opposed to text books leading to increased spread. The Thailand program now covers the entire country but recurrent costs are a problem. In Kenya the high number of teachers who became qualified and entitled to higher salaries created an unanticipated demand on government funds as the project spread.

#### Requirements to Effectively Disseminate Positive Experiences

In order for A.I.D. to replicate the positive aspects of its experience and not replicate negative aspects, A.I.D. needs to know

about what worked, what didn't work and why. Most A.I.D. evaluation documents and assessments provide inadequate documentation. <sup>In</sup> In addition, the information that may have been recorded somewhere is not synthesized or easily accessible. There is even less information about why something worked than what worked. Too often the people dimensions of projects and programs (A.I.D. personnel, host country implementors, contractors) are not explicitly addressed even though people may have been the driving factor behind project success. This could affect a successful or unsuccessful replication elsewhere. Also, documentation of processes and project environment (including physical, social, cultural, institutional and economic) receive much less attention than the technical components. Assuming that A.I.D. can overcome this lack of knowledge of what worked and why, the next critical limiting factor becomes developing improved information dissemination and communication mechanisms. Information dissemination currently is generally ad hoc and informal; it is concentrated within sector specialties and within Regional Bureaus or parts of Regional Bureaus. A.I.D. needs to focus much more seriously on information dissemination within A.I.D., between donors, among contractors and among developing country decision-makers.

#### Policy Recommendations

1. The A.I.D. Sector Councils should have responsibility for identifying replicable experiences and disseminating this information.

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2. A.I.D. needs to do what it says it is doing. Documenting the implementation process will require real formative evaluation. Creating real formative evaluation will, in many cases, require rolling design, more general implementation plans at the Project Paper stage, more extensive implementation plans at project start up, and then revisions on a regular basis. These elements become even more critical as longer time frames for projects are considered.

3. With regard to replication, conscious, serious attention must be addressed to the Agency's information dissemination system. Information flows will have to be vertical, lateral (across sectors), external (including other donors). S & T/DIU has made a useful start, but more must be done to get useful, tailored, relevant, down to earth information in the hands of people who need it. A.I.D. perhaps underestimates the importance of site visits and travel, informal interactions at meetings and focused workshops of practitioners, including contractors and host country counterparts. There is no substitute for direct contact among principals involved in program implementation.

4. A.I.D. needs to give more attention to strategies for more cost effective approaches (especially in basic education). Private sector (consulting firms, PVO's and universities) approaches to education and training should be examined.

5. A.I.D. design procedures should require a review of past experience and the explicit identification of lessons learned (what works and what does not).

Additional Ideas, Suggestions, Unresolved Issues, Comments

1. A.I.D. should carefully assess pilot project efforts so that, if successful, there will be resources (national, A.I.D., and other donors) available for replication and spread.
2. Projects that think about possible success and replicability at the beginning (e.g., Project Impact) of the effort stand a better chance of being replicated.
3. The greater the success, the greater the demand for spread and generally the greater the cost burdens to maintain programs. Korea and Nigeria cases where GNP rose differ from Kenya, Thailand and Jordan which put more stress on the country to keep the program working. While predicting the economic future is difficult, early consideration of recurrent cost issues should be a part of replication decisions.

APPENDIX D.5

GROUP V

DESIGN, IMPLEMENTATION, EVALUATION AND FEEDBACK

A major objective of the workshop, as stated in the guidelines is to suggest how the design and impact of A.I.D. education projects can be improved. Working Group Five's topic, therefore, is of particular significance if not the topic of primary concern. Each component of the topic has its own set of issues, but time and space limitations compelled the group to focus on project design, accepting the fact that plans for implementation, feedback and evaluation, which of necessity are incorporated in the project paper, constitute an integral part of project design. Accordingly, the group identified major issues related to project design and made an effort to indicate possible ways of dealing with them by drawing upon the findings of the impact studies and from the experience of its members. Drawing upon the above, policy and strategy recommendations were formulated.

Relevant issues include the following:

1. The U.S. may possess some comparative advantages to contribute to LDC education development, but there is little firm evidence to support this hypothesis.
2. Scope and Flexibility of Education Projects. Education projects should focus upon certain priority areas, using

criteria such as their impact upon health, agriculture, equity, productivity, host country needs and participation, etc.

3. Costs. The potential economic impact of education projects should be estimated. An effort should be made to determine how they can be made more cost-effective. <sup>A.I.D.</sup> A.I.D. must deal with host country fiscal constraints and recurrent project costs.
4. Institution Building. With funding limitations, A.I.D. should undertake long-term institution-building projects in education only when certain criteria are met. High among these criteria are impact upon development priorities, particularly infrastructure for growth of private enterprise.
5. Host Government Commitment to Educational Reform. A prerequisite to some A.I.D. education sector projects should require a prior host government undertaking for educational reform.

Education goals for A.I.D. projects should be derived from agreed-upon A.I.D. strategy and purposes in the education sector.

Some goals evident from analysis of the studies are:

1. Establishment of cost-effective education systems and networks consistent with the experience of other countries and earlier projects.

2. Improvement in the management and planning capacity of host countries to develop effective policy and programs.
3. Positive response to educational projects to the requirements of development in other sectors, e.g. agriculture, population, health, energy.
4. Strengthening of educational institutions and resources, e.g. libraries, translation of materials, laboratory equipment, etc.
5. Increased transfer of technology and improved levels of training in science and technology, management skills and vocational education.
6. Involvement of the resources, expertise and capital of the U.S. and host country private sector.
7. Expanded inclusion of women among beneficiaries of education.

#### Key Findings and Conclusions

The review of the 12 Impact Evaluations and desk studies revealed instances where successes or failures appeared to be related to design and implementation approaches and procedures. The following are cited as examples.

Projects planned for sufficient duration were more successful than those terminated too soon. Where innovation is involved, the process seems to call for extended time and continuous assessment to assure the final product serves perceived needs.

Attention is needed to economic productivity and cost effectiveness, a design specification not included when many of the

projects appraised were initiated. Inputs could be measured against outputs in order that host governments and A.I.D. could calculate a rate of return on the investment. Designs sometimes overlooked recurrent costs. In particular, thought should be given in project design to ways in which host governments could meet these costs as A.I.D. assistance was phased out.

The assumption is usually made that projects are designed within the context of national development plans to which they are intended to contribute. Designers might consider making specific reference to development plans and education sector policies and programs in particular. It has seemed easy to overlook potential and desirable linkages with indigenous institutions already active in the particular education field addressed by the project. Ways in which the project could serve as a catalyst in developing local initiative, participation and financial support would be useful to cite as guidance for those administering the project.

A factor in project success appeared to be the identification of very specific target groups and beneficiaries. Broader participation of host country governments and institutions as well as A.I.D. contractors and other foreign participants in the project design process was considered beneficial, even though the limitations of such involvement are recognized.

Designs which were prepared in great detail were thought to lead to inflexibility in implementing the project in some instances. Feedback mechanisms incorporated in designs would have helped project manager and contractors undertake mid-course adjustments. The use of A.I.D. leverage to help institute reforms in the educational system was evident in some projects and it was felt desirable if designers gave consideration to this issue in all education projects.

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In some countries, such as the Primary and Secondary School Project conducted over a 23-year period in Afghanistan, more attention to recruiting or providing advisors with extensive knowledge of the socio-cultural setting and local languages would have been desirable and strengthened project impact. Textbooks and other educational materials for projects that transplanted American models were deemed less successful than those adapted to suit the indigenous society and culture. Host country and A.I.D. barriers were thought to impede contractor management and implementation of projects.

Host countries raised the issue of "education for what?" when it was not clear in the project design that there was linkage with development activities in other sectors.

There would be value in devising means to integrate the various kinds of evaluations that were conducted on projects, including, for example, annual mission project evaluations, management reviews of contractor performance, consultant studies, audits, etc. Mid-course evaluations and management review were not used in all cases to adjust project implementation or modify the project design where appropriate. If the project design had provided for use of control groups not associated with the program, evaluation of innovative or experimental projects might have been strengthened.

#### Policy Implications and Recommendations

During the project design process host country policy, funding and structural constraints must be systematically analyzed. This will permit the project to be designed to overcome or reduce the effect of the constraints. Alternatively, through other actions, steps can be planned to ease the constraints.

In countries where A.I.D. has limited funding and personnel, priority should be assigned to formulation of a long-term strategy for development requirements. Education projects should be carefully selected from the range of those requested by host governments in order to assure optimum flexibility and long-term impact. For example, if a country's high priority is to raise the quality of rural life, an increased allocation of resources may be required which promises improvement in rural education and training.

Education project design should provide sufficient time to achieve stated objectives, but retain flexibility to adjust activities to meet the changing needs of a country. Projects involving innovation should especially be funded for longer periods to assure success of the final product.

Projects should be shaped to be cost-effective, paying due attention to the requirement for recurring costs and planning for the host government to finance the activity when A.I.D. support is terminated.

Design of education projects should consider their function as well as their components of the education sector strategy for that country as well as their contribution in the development process. Linkages to local institutions already involved in that field should be expressly provided for as should means through which they can be integrated into the educational system.

Beneficiaries and target groups are usually identified in project design, but often are not involved in it. Those to be involved in implementing the project should, if possible participate in the project design, e.g. contractor personnel, Peace Corps volunteers, host country institutions.

Design of education projects should avoid great detail, particularly with reference to tasks to be performed and contractor requirements, since this may lead to inflexibility or scattering of effort. Where appropriate, consideration should be given to ways in which the project can exert leverage for educational reforms. Adjustments in implementation of projects can be made more systematically if feedback mechanisms are built into project design.

A.I.D. should design activities in a way to assure that contractor personnel will have knowledge of the socio-cultural setting and local languages. Caution should be exercised not to transplant American institutions, textbook models and curriculum without adapting them to indigenous society and culture.

In formulating goals and purposes, criteria should include consideration of the cultural and social setting, local economy, host country educational system and strategy, overall A.I.D. policy and strategy, sector policy guidance, the capabilities and limitations of local institutions, the potential that a project can overcome constraints, etc.

In designing and implementing education projects, A.I.D. should seek linkages with development activities in other sectors. A.I.D. education specialists should play a more active and central role in designing the educational and training components of projects in other sectors. This may mean that the Agency must have available specialists in education who have the technical competence to provide such advice.

Efforts should be made to correlate the findings and recommendations of all evaluations.

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