AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D. C. 20523
BIBLIOGRAPHIC INPUT SHEET

FOR AID USE ONLY
Batch 59

1. SUBJECT CLASSIFICATION	A. PRIMARY	TEMPORARY
	B. SECONDARY	

2. TITLE AND SUBTITLE
Program in international education finance; report of activities, 1974

3. AUTHOR(S)
(101) Calif.Univ.,Berkeley. School of Education

4. DOCUMENT DATE	5. NUMBER OF PAGES	6. ARC NUMBER
1975	23p.	ARC

7. REFERENCE ORGANIZATION NAME AND ADDRESS
Calif.--Berkeley

8. SUPPLEMENTARY NOTES (*Sponsoring Organization, Publishers, Availability*)
(Activity summary)

9. ABSTRACT
(EDUCATION R&D)

10. CONTROL NUMBER PN-AAD-596	11. PRICE OF DOCUMENT
12. DESCRIPTORS	13. PROJECT NUMBER
	14. CONTRACT NUMBER AID/CM/ta-G-73-17 211(d)
	15. TYPE OF DOCUMENT

AID 590-1 (4-74)

AID/CM/ta-G-73-17 211(d)
Calif. -- Berkeley
PN-AA

UNIVERSITY OF CALIFORNIA

BERKELEY, CALIFORNIA

SCHOOL OF EDUCATION

PROGRAM IN INTERNATIONAL EDUCATION FINANCE

REPORT OF ACTIVITIES 1974

The Program in International Education Finance is concerned with research and training in the cost, efficiency, and finance of education in developing countries.

At the time the grant was awarded, it was evident that in spite of large and rapidly growing investments in education, there was an increasing disparity between educational needs and educational resources. At the end of the decade of the 1960s, the percentage of GNP invested in education by developing countries was comparable to that of the United States, Europe and the Soviet Union. And, in terms of percentage of the public budget, it was even higher.

Between 1960 and 1970, the developing countries had increased their public expenditures for education by roughly 117%. During the same period, their school enrollments increased by about 100%. But the percentage of school age children enrolled increased by less than 10%. At the end of the decade, more than half the population of these countries will have attended school, less than 30% will have gone to secondary school, and less than 3% will have received higher education. Thus, despite these efforts, the gap between educational needs and resources continued to widen.

This dilemma, it was felt, arose from several interrelated factors, among which:

(1) growing populations and increasing popular demand for services in the face of inadequate funds for development;

(2) inadequacy of knowledge about practical alternatives in funding, efficiency and measurement of outputs of education; and

(3) archaic and rigid systems of education where content does not meet the changing demands of social, economic, or political developments.

In February 1973, a five year (211d) grant of nearly one million dollars was therefore allocated by the Agency for International Development (AID) to provide support and initial seed money for research and training in the problem of funding, cost and efficiency. It was intended that resources for large scale field research would be sought from AID missions in developing countries or from other funding agencies.

The initial objectives of the Program, as spelled out in the grant, were:

(1) to develop new knowledge and insights with respect to educational finance, costs and efficiency in developing countries, through problem oriented research, field investigations and dissemination of knowledge and comparative experience;

(2) to develop new or improved tools for analyzing and developing present and potential resources for education; for measuring educational inputs, allocation utilization and outputs; and for comparative studies of costs and benefits of various kinds and modes of education;

(3) to assist with the training of individuals from the United States and developing countries in the study of critical aspects of educational finance, cost and efficiency;

(4) to help create and participate in an international network of institutions working in this field in both developing and developed countries.

The objectives listed above have proven valid and useful. In beginning to implement these tasks, some ordering of priorities was decided upon:

(1) The first task was to acquire a diversified and talented staff. This was completed by Fall 1973.

(2) Research priorities were then established. Considerable, time-consuming efforts were made to initiate field work. This took most of 1973 and 1974.

(3) At the same time, a few students were admitted to the Program in the Fall of 1974.

(4) Lastly we began in the summer of 1974 to establish an international network.

Accomplishments

The research is being pursued along these related levels of attack:

First level: This is the development of practical macro models using data and computer facilities available in developing countries. Our purpose is to improve existing macro policy instruments so as to better link decisions about education with an integrated view of other significant sectors. This work was headed by Jo Ritzen and includes Judith Balderston, Larry Bezeau, Edwin Puttick, Lalit Roy and (for part of the year) Stuart Wells. Mr. Abdelkarim Jaoua was sent by the Tunisian government to join this group for six months in 1974.

Second level: The second level serves to expand theoretical thinking as backup to the work being initiated by Jo Ritzen and his co-workers. At this point, we are focusing on the distributive consequences of the way resources for education are raised and allocated. That is, who pays and who gets educational services. This work is closely tied to the research already underway by having members of each group participate in the others. In the near future, we need to obtain new empirical data about the kinds of choices and preferences actually faced by decision makers in developing countries. That is, how do various legal and social factors constrain the kinds of revenue raising that can be contemplated - and affect the way education is paid for and used. These and other data can be used in model building, thus improving their coverage and effectiveness. This research is headed by Dr. Andre Daniere and involves Francisco Swett, Vien Phan, Eliana Sinay, and Larry Bezeau.

Third level: The third level is intended to provide additional backup research results to help improve subsequent models. Here our efforts concentrate on organizational dimensions of the problem. For example, we are interested in exploring in some detail how it is that some systems of education in developing countries are more effective or even efficient than others. What variables and characteristics are associated with such success? We are interested in a number of other issues -- the role of informal education, the issues of centralization and decentralization, the possibility of using the schools as producing units. Our strategy here is to scan and search for new facts and make these available to the model builders at our first and second levels of attack. The work is coordinated by Guy Benveniste and each project is headed by its own manager. Integration with the work of the model builders is achieved by interaction of the research staff in seminars, analysis of results, etc. This group includes Guy Benveniste, Irene Blumenthal, Stephen Cohen, Thomas Livingston, Namdar Khan (part of year), Rodney Reed and Prakash Sethi.

A. A First Level: Macro Modeling

This group calls itself the "Quantitative group". Since its creation in 1973, the group has sought to develop new knowledge, analytical methods, and tools for analyzing educational finance, cost, and efficiency while involving students, program staff and other participants from LDC's in its activities. It will be observed that many topics studied are interrelated, and that as a result knowledge gained in one application can be effectively used in another. The best way to describe the activities of this group is to list its activities while relating them to the various program objectives.

1. Development of Methodology (work undertaken at Berkeley)

1) Planning Methods for Technical Education

On the basis of an earlier study on planning technical education in Bangladesh by Jo Ritzen, Judith Balderston and Jo Ritzen have developed generalized results. The focus of this new enlarged study is the relation between the scope and scale of education and the stage of development and need for trained manpower. In order to measure, analyze, plan, and monitor the educational process, some relatively simple techniques are developed to deal with analysis and projection of student flow, cost and financing of technical education, and measurement of employment and earnings. Finally, all of these components are combined into a decision model that relates manpower targets to the capacity of technical schools. The decision model employs methods of control theory which are new to the field of education planning in developing countries.

This study, co-authored by Jo Ritzen and Judith Balderston, will appear in the Spring of 1975 in the Praeger Special Series as Methodology for Planning Technical Education.

2) Student Flow Model Manual

A manual of student flow models is in the process of being written by several members of the group (Judith Balderston, Larry Bezeau, Ed Puttick, Stephen Rhoads, Jo Ritzen, Lalit Roy, and Abdelkarim Jaoua) for the specific purpose of providing a practical tool needed by educational planners in LDC's. It is intended to be a "how to" book for those who make decisions on school capacity, teacher recruitment and financing based on student flows.

This manual defines such models, discusses data needs and shows how to construct student flow models from rudimentary data as well as from ideal data. It discusses programming techniques, personnel needs, and implementation of plans based on such models. Studies using student flow models that have been done in Berkeley for Bangladesh, Tunisia, California, and New York will be presented in brief form in order to provide examples of the use of student flow models. Costs and benefits of such modelling for policy purposes are explored in order to provide potential users with guidelines for deciding how much model building (and what machinery, personnel are needed) is appropriate in solution of their problems.

We are undertaking this work on student flows in order to provide LDC's with a practical tool based on knowledge gained here through theoretical work and case studies. The need for such a written work became apparent when working on specific Tunisian problems with representatives of that government.

This book will be published by a publisher in the bay area sometime in 1975.

3) Mathematical Programming Manual for Educational Planners

This manual is being prepared by Larry Bezeau. It is aimed at educational planners and students of educational planning who must either collect data, code and interpret the output of mathematical programming, or who must communicate intelligently with those who do. The manual is intended for readers who have no mathematical training beyond the secondary level, and who have little if any background in economics. It will familiarize the reader with the input and output of mathematical programming and provide an introduction of how to code, run and interpret a practical MP problem in educational planning using the most widely available computer code for this purpose (IBM's Mathematical Programming System). At present, no such manual exists in this field.

Two chapters of the Mathematical Programming monograph are complete, the first one in revised form. These two chapters have been tested with educators from Asia in a seminar at Stanford University, but the results of this test have not yet been evaluated. A computer program, prepared in conjunction with the manual, formats, paginates, and right justifies textual material. Both the program and the manual are on computer tape, which bypasses the typing of revised versions. The manual is designed for practitioners in the field of educational planning and is understandable by people who do not have a mathematical background.

4) Input-Output Modeling Applied to Manpower Planning

The development of a conceptual simulation model relating the labor market to the economy and the economy to the educational system. This work is a joint effort of Stephen Rhoads and Judith Balderston and uses data from the Tunisian economy and educational system. It was originally introduced by Jo Ritzen as a class project for his course in Systems Analysis in Education and involved members of the seminar who came from several LDC's and a variety of academic backgrounds in the experience of model building with limited data. The framework of this model was useful in conceptualizing the manpower problem briefly described under the following heading. Lalit Roy is developing this model further to include limited substitutability between different types of manpower according to the level of education.

5) Quadratic Programming Applied to Manpower Planning

"Manpower Targets and Educational Investments," by Jo Ritzen. A paper submitted to the Journal of Management Science and Operations Research, which is a summary of the decison model described in (A-1) above.

6) Simulation Games of School Finance

"Simulation Games of School Finance," by Jo Ritzen with Edwin Puttick, in the Journal of Educational Data Processing, Vol. 10, #5, 1973. This game, developed for use in a course in educational planning at Berkeley, and now used elsewhere, assigns roles to the players as citizens, families, and government agencies. It simulates how rational decisions can be made among alternative methods of financing education.

7) Optimal Investments for Universal Primary Education

"Optimal Investments for Universal Primary Education," by Jo Ritzen to appear in the Journal of Optimization Theory and Applications, March 1975. This paper uses optimal control theory to calculate the best investment trajectory for a developing country seeking universal primary education.

8) Optimality in Resource Allocation in a Statewide University System

A paper by Jo Ritzen submitted to the Socio-Economic Planning Science Journal presents a theoretical framework for resource allocation within a centralized system. It is stated in mathematical form applicable to any centralized university.

9) Education, Income Distribution and Economic Growth

Few, if any, analytical techniques exist to aid central planning boards in the long range planning of education systems, imbedded within economic planning. Jo Ritzen is attempting to develop a theory of economic growth in which more than one type of human capital is distinguished. The objectives of this study are to provide a planning tool by which economic growth and income distributive consequences of education can be considered simultaneously. This monograph is half-finished and scheduled for completion in June, 1975.

10) Educational Production and the Distribution of Teacher Time (with Donald Winkler and Shaun Hargreaves-Heap); The Optimal Allocation of Resources in the Production of Human Capital (with Donald Winkler); The Preferences of a Local Government Bureaucracy (with Donald Winkler); The Effectiveness of School Resources Over Time (with Donald Winkler)

The above papers have appeared in mimeographed form as the joint output of the PIEF and of an NIE grant to Donald Winkler of U.C. Santa Barbara and Jo Ritzen. They concern the distribution of school resources over students over time. Some of the papers are of an economic nature, "revealing" preferences of teachers and school administrators in the use of school resources. Other papers are of a theoretical nature, indicating normative school resource and allocation patterns.

2. Field Work - Cooperation with Network Institutions

1) Tunisia

During 1973-74, several members of the quantitative group and a member of the Division of Human Resources of the Government of Tunisia collaborated on the solution of specific Tunisian educational planning problems. This work relates Tunisian manpower needs at a future year (as expressed in target numbers to be reached in specific disciplines at the University) to student flows at the lower schools, and to teacher needs in specific subject areas. The problem was posed by M. Ezzedine Chelbi, Director of the Division of Human Resources of the Planning Department of the Government of Tunisia, and was conveyed by his assistant, Mr. Abdelkarim Jaoua, who joined us for six months in Berkeley. The Berkeley staff members who participated were Jo Ritzen, Stephen Rhoads, Larry Bezeau, and Judith Balderston.

The work resulted in a large scale computer simulation of the student flows, a quadratic programming solution directed toward minimizing deviations from manpower targets, and a linear program using data of flows from the various levels of the Tunisian educational system. This work involved utilization and improvement of some well known tools such as linear and quadratic programming, combined into a multi-stage model appropriate for the Tunisian problem.

The first phase of the work is now completed, and Mr. Jaoua has returned to Tunisia. At present, negotiations are underway with the Division of Human Resources of the Planning Department of the Government of Tunisia for Berkeley to send Mr. Stephen Rhoads to Tunisia to assist in the implementation of the computer program on the facilities available to that Department. Unfortunately, it has not been possible to obtain additional AID support for these worthwhile activities.

One byproduct of the effort was the revelation of the need for a manual of student flow models to help train personnel of LDCs involved in such research.

Another is the preparation of a document edited by Mr. Jaoua and entitled Vers Une Meilleure Orientation Scolaire et Universitaire for distribution in Tunisia.

2) Bangladesh

Continuing an earlier program of research financed largely by The Ford Foundation, the group has been using available data at Berkeley to study the financing of private schools, particularly at the secondary level. The aims of this study were (a) to provide a descriptive insight into how private schools function; (b) to analyze the impact of the private system on equality of opportunity; and (c) to analyze the impact of the private system on quality of education. The study employed basic statistical analysis of a large amount of data for the years 1963-1968 in then East Pakistan. The report based on this study by Jo Ritzen, Ed Puttick and Lalit Roy was issued in 1974 as a monograph entitled The Finance of Non Government Schools in Bangladesh.

As reported in 1973, Jo Ritzen visited Bangladesh in August/September 1973. And Dr. Selim, Director of the Institute of Education and Research, University of Dacca, visited Berkeley in early August, 1974. As a result of these conversations and of exchanges with the AID mission in Dacca and the appropriate AID bureaus in Washington, a new informal proposal for future collaboration in Bangladesh has been written and is now being reviewed jointly by the University Grants Commission, Dacca, and the Institute of Education and Research, University of Dacca. It includes several related studies concerning:

a. an analysis of Bangladesh degree colleges from the vantage point of social goals and efficiency. It would be chiefly the work of nationals of Bangladesh with reliance on expertise developed in Berkeley.
b. development of micro analytical tools for looking at income distribution.
c. development of macro analytical tools for integrating education into the economy.

If the necessary funding for this program is obtained from AID, the work would be jointly headed by Jo Ritzen, working out of Rotterdam, and by Dr. Selim in Dacca. Most of the research would be conducted by staff already in Bangladesh, and Berkeley would send Edwin Puttick and Lalit Roy, who have been associated with the work of the group and are available to proceed to Bangladesh early in 1975. Hopefully, approval of this project will take place while the staff is still available to undertake the research.

B. Second Level Distribution Implications and Financing of Education

Education development plans often failed due to unrealistic projections of available financing. Often targets had to be bent all around (usually through cuts in education quality rather than enrollments) or were subject to selective cutting (or swelling) in response to actual financing opportunities. More disturbing still is the fact that inadequate use of available financing alternatives has led to greater overall stringency than was necessary. This has resulted in grossly unequal levels of access to education among social groups, and has distributed burdens without reference to benefits received.

1. Work in Berkeley

1) Principles and Methodologies of Financial Planning. The principles and methodologies to be developed are required to meet two conditions: (1) potential users must retain the option to select objectives and their relative weights, while assisting them in the identification, formulation, and quantification (where necessary) of objectives; and (2) models should be usable by education policy makers with minimum intervention on the part of professional "system analysts" or other practitioners of the art of optimization. For a number of reasons, however, it is essential that the work not only proceed "in the field" (i.e. within the context of the selected countries), but that it also involve the active participation and commitment of local counterparts. It is important that the proposed

instruments remain "open" in terms of numerous pieces of highly localized behavioral information. Reaction by different groups (varying in identification from one country to another) to various forms and levels of taxes, education fees, subsidy incentives, loan and grant systems, voluntary service calls, etc., is closely related to the social makeup of each country, and the job of relating "fiscal" behavior to social structure char ter-istics from one country to another has not even begun.

As a first step in the proposed program, Andre Daniere prepared, during the period preceding his arrival in Berkeley in February, 1974, a fifty page document justifying the concept of financial planning, outlining the type of practical instruments which could be utilized for this purpose, describing some of the instruments in detail and identifying research needs for their implementation. A first version of the document, entitled Principles, Objectives, and Methods of Financial Planning for Education, was prepared in January, 1974. The document is being rewritten and expanded to include: (a) a critical discussion of the treatment of "equity" in the recent literature on education financing; (b) a detailed discussion of problems in the specification and measurement of distribution objectives; and (c) an explicit treatment of "distributive efficiency" as a residual objective.

Simultaneously, a review of Models of Educational Planning is also being undertaken. This includes: (a) a critical review of the recent relevant literature; and (b) a mathematical formulation of the proposed planning models.

This research is conducted by Andre Daniere with the assistance of Mr. Vien T. Phan.

2) The Optimum Design of Student Loan Programs. A major study of student loan programs in LDC's is underway, using not only the experience of LDC's but also the experience of the United States. The focus is on higher education, and much of the information is being obtained in Latin America. A theoretical framework and illustrative U.S. data are utilized to compare alternative features of student loan programs in terms of specified objectives. Based on an international survey now in the course of implementation, existing programs will be evaluated by reference to the identified set of desirable features.

This study is conducted by Andre Daniere with the assistance of Ms. Eliana Sinay.

3) The Economics of the New Technology of Education. Stuart Wells initiated this research in 1974. It had at first been our intent to have Stuart Wells work on our grant half time. Then, when the 211d grant was awarded to the Institute of Communication Research at Stanford, he would work half time with them - thus establishing a network linkage with that institution. These plans were delayed when Stuart Wells accepted an attractive offer in Canada.

A first draft of about half of a manual on the economics of the new technology of education was completed in August 1974. The manual provided procedures for making decisions about investments in new educational technologies. Stuart Wells and Guy Benveniste are continuing work on this, but the completion date has been postponed to 1975.

2. Field Work and Cooperation with Network Institutions

1) Peru

Larry Bezeau, also a member of this team, is working with Alex Toledo of Stanford University on education and income distribution in Peru using raw census data from Peru. Additional funds outside the grant are being sought to analyze this data. Depending on funding this could become an important activity. At present no output is contemplated, since no funding is available.

2) Bolivia

Andre Daniere visited Bolivia on three occasions for a total of seven weeks during February-September 1974 in response to RFP of the Bolivian Ministry of Education for technical assistance. Travel was covered by AID missions, while the grant contributed salaries and other services.

The proposed work includes:

(1) assistance in the reorganization of educational planning activities, both at the national and district level;

(2) supervision of, and participation in, research work in support of planning activities (sample survey of primary education, cost-benefit analysis of alternative programs, development of planning instruments);

(3) studies in education financing.

The project will involve three members of the Program in field work; A. Daniere: 3 months in 1975 and 3 months in 1976, for studies in education financing, organization/supervision of research work carried out by Bolivian teams under direction of Berkeley team.

F. Swett: 18 months beginning in June 1975, for assistance in reorganization of planning activities, local training, research, and supervision of research work carried out by Bolivian teams. (Note: 4 months of the 18 month period will be required for other activities of the Program).
A specialist in rural education: 24 months in 1975-76, for assistance in the planning and evaluation of programs in rural education. (Note: The individual in this position will be attached to the Program only for the duration of his two-year service in Bolivia.)

The amount of backup services in Berkeley will depend on the funding available under the assistance contract.

Cooperative arrangements have been proposed at two levels:
(a) with members of the Economics Department of Universidad Catolica in La Paz for the conduct of scheduled research studies;
(b) with a local California firm (Educational Factors, Inc.) for the provision of assistance in program evaluation. The evaluation activity was tied to planning in the RFP issued by the Bolivian Ministry of Education, so that the informal proposal by Berkeley had to incorporate evaluation services.

In addition, the Berkeley Program joined a consortium of other U.S. universities under the direction of the Academy of Educational Development in Washington, to present a single bid on all components of technical assistance required under the Bolivian RFP.

The informal Berkeley proposal was incorporated in the consortium proposal during early November and delivered to the Ministry of Education in La Paz on November 14. At this writing, no word had been obtained as to the outcome of these initial negotiations.

As a result of recent efforts by A. Daniere, the following conclusions were reached about the potential for research in Bolivia:
The level of information on population characteristics, school resources, pupil achievement, and financial flows in Bolivia is so low as to prevent the systematic utilization of whatever behavioral data could be obtained from special surveys. In addition, government energies are too fully absorbed by the resolution of structural and organizational problems to permit a systematic and sophisticated attack on problems of education finance. The traditional view of financing as a recurrent curse to be dealt with on an ad-hoc basis still prevails. Thus the need of Bolivia at this stage for (a) the creation of a strong data base and (b) the identification of glaring inefficiencies and/or inequities in the present system of education distribution and financing. At a later stage, after initial debates have sensitized the leadership to problems and possible solutions in this area, more ambitious instruments will hopefully acquire relevance. From a pragmatic point of view, this experience is proving most valuable to the project since it forces the Berkeley group to come to grips with realities which may not be apparent to researchers with experience in more sophisticated environments.

3) Ecuador

Andre Daniere visited Ecuador on three occasions during February-September 1974 for a total of nearly 3 weeks. Again, travel was paid by AID missions and the grant contributed per diem salaries and other services.

Informal proposals to AID/Ecuador and TAB have the following purposes:

Part 1: Design of a framework for the utilization of data collected or scheduled for collection under the sector analysis undertaken by the Ecuadorian Ministry of Education with AID assistance. Processing and first analysis of selected data sets in primary education, including student flows, expenditures, costs and financing, tabulated characteristics of schools and student populations.

Part 2: Full multivariate analysis of data from the stratified sample of primary schools, school personnel and school pupils collected in the course of 1974. Material from the sample includes responses to comprehensive questionnaires administered to pupils in several grades, teachers, and school directors, as well as the results of several tests administered to pupils. With or without complements, the available data may provide the basis for a "Coleman Report" of Ecuador and, by extension, of the Andean Region.

Part 3: Utilization of sector analysis data for educational planning and policy analysis, using instruments developed by Jo Ritzen.

Part 1 of the project commits amounts of time varying from 1 to 2 months on the part of six staff members including Daniere and Ritzen over the period November 1974 to February 1975. Francisco Swett will spend from 4 to 8 weeks in the field to coordinate Program activities with supporting work of the Sector Analysis Committee in Quito.

Part 2 of the project will be directed by an associated member of the Program, Barbara Heyns, presently a faculty member of the Department of Sociology in Berkeley, and manned by new personnel. The Study is to run over approximately one year.

Part 3 of the project will not begin until after completion of Part 2 unless a preliminary analysis of the sample provides adequate information on the "production function" of primary education in Ecuador. It will run over 12 months, with a contribution of 3 months by Jo Ritzen, 3 months by an associate member of the Program, Donald Winkler, now a faculty member of the Department of Economics at the University of California, Santa Barbara, and 6 months by members of the Program's research staff.

Cooperative arrangements: Parts 1 and 3 of the project will proceed in close collaboration with the Sector Analysis Committee of the Ministry of Education in Ecuador, and (especially with Part 1) specialists of the AID mission in Quito. The work on planning and policy analysis in Part 3 will be coordinated with related work in Peru, where different planning models are being implemented by Philip Blair and Hector Correa.

Part 2 will be conducted in collaboration with Jose Ortega, president of Ingeneria de Sistemas, Quito, who has been responsible for all data processing required until now by the Ecuadorian sector analysis, and who will perform a preliminary analysis of sample data in February 1975.

At present it would appear that AID/Ecuador has decided to proceed with Part 1 of the program. The informal proposal submitted by Berkeley is now being used by the mission to write a contract which will be negotiated with Berkeley. In anticipation of this contract, work has begun on elements of the analysis.

With respect to Parts 2 and 3, funding will depend on AID/Ecuador's approved grant-loan program for the coming year and in part on TAB's interest in supporting the effort. Although the work is most promising, has regional implications, and although we have repeated verbal assurances that financing of field work will not be difficult to obtain, no such funding has been obtained to date.

4) Colombia

Andre Daniere visited Colombia on three occasions for a total of more than two weeks in the period February-September 1974. In addition, Guy Benveniste and Francisco Swett joined him for part of a week to finalize a proposal with the Centro para el Desarollo de la Educacion No-Formal (CEDEN).

A joint proposal of CEDEN and Berkeley would be submitted to AID/Colombia and TAB for funding. This would include a cost-benefit study of programs of non-formal education in Colombia. While 'cost' is to be understood in the traditional sense of social-resource cost, the 'benefit' concept is extended to a whole vector of 'social outcomes' which can be linked (together with resource costs) into a social objective function.

The analysis is to proceed at two levels: (1) large sample of programs with questionnaires addressed to staff, participants and former participants, leading to a multivariate analysis of the determinants of program performance and, thence, to the cost-outcome analysis of alternative programs within specified programmatic areas; and (2) sub-sample of programs for case studies in accordance with the traditional methods of social anthropology. The study will provide a special treatment of large centralized organizations of non-formal education, such as APCO.

Under the most optimistic expectations, the project cannot begin before the Spring of 1975. It will involve some work by Guy Benveniste, a marginal input from Daniere and a more substantial participation of Francisco Swett (4 man-months over an 18 month period). The main Berkeley resources will be supplied by Program associates, two of whom have been identified at this time for possible participation: Dr. Lovell Jarvis of the Economics Department of Berkeley, and Sue Ellen Lanstein of the Sociology Department. The bulk of the sampling work and of the case studies will be done by Colombian counterparts.

Cooperative arrangements: The proposal is to be made jointly by Berkeley and by the Centro para el Desarollo de la Educacion No-Formal (CEDEN) in Bogota. CEDEN is a private research group supported by the Fundacion para la Educacion Permanente (FEPEC), also in Bogota. They initiated the project following an earlier survey of programs of non-formal education which they undertook in several districts of Colombia in 1973. In general, the Berkeley team will concentrate on the design and analysis of the large sample, while the Colombian team will deal with case studies. The plan, however, is for collaborative research work and joint publication of reports. The AID mission in Bogota played a central role in facilitating the linkage of CEDEN and Berkeley.

A first preliminary draft proposal was prepared by CEDEN in June-July and communicated to AID (TAB and Latin American Bureau). Based on favorable reactions in Washington and on further consultations in Bogota between CEDEN/FEPEC and interested Colombian agencies, a meeting was arranged by USAID/Colombia in September between representatives of the Berkeley Program and representatives of CEDEN. Agreement was reached on the general terms of a new, improved proposal, and some of its elements were drafted. At present, CEDEN is in the process of writing a complete draft for joint submission in December.

C. Third Level: Organization Arrangements Conducive to Improving Internal and External Efficiencies

1. Work in Berkeley

1) Survey of Soviet Educational System
This study was initiated in 1973 by Irene Blumenthal.

Past Soviet experiences and experiments promise useful comparative material. Some of the approaches and methods taken bear closer investigation, especially since the Soviets proceeded to develop their educational system with limited resources.

In scanning the collected material, both primary sources from the USSR and secondary material from the West, it has become apparent that some of the most valuable data relates to Soviet non-formal education, a subject largely neglected by Western observers. Such areas as on-the-job training, the literacy campaign, out-of-school educational opportunities, the role of youth organizations, the utilization of mass media in education, etc. illustrate the wide ranging educational efforts pursued by the USSR in support of economic development and modernization.

The initial assumption that Soviet educational policies and developments are relevant to LDC's has been strengthened. Although the U.S.S.R. has reached a level which places it among the developed nations, this was reached rather recently. Furthermore, the country still deals with large pockets of relatively underdeveloped regions (especially outlying rural areas and the non-European Northern portion of the country) and economic sectors such as agriculture. The ability of the Soviet Government to obtain close coordination between needs for nation building/economic development on one hand and educational policies and their implementation on the other without some of the political and social constraints existing in the non-socialist societies allows the testing of various policies in a more rarified, laboratory-like environment than elsewhere. A case in point is manpower planning and education.

Another area of the study holding promising results is the use of educational programs by Soviet authorities in support of economic development and modernization. Here the use of non-formal and informal education is noteworthy. Beginning with the literacy campaign in the twenties and thirties to the present network of extension programs and people's universities, cultural clubs, lecture series, vocational training opportunities at the place of work, such as the schools of communist labor, the special educational programs for youths, especially those conducted by the Pioneer organization in their palaces or house, all attest to the continued and serious effort in this direction.

In the Spring of 1974, the International Bank for Reconstruction and Development took an interest in this work and commissioned an additional research component on Soviet educational reforms. Irene Blumenthal authored a report Educational Reforms and Economic Development in the U.S.S.R. which has been submitted to the IBRD. The co-sponsorship of the IBRD has permitted to expand the work to focus on aspects not included in our original study.

The final manuscript will be published by Praeger in 1975. Some aspects of the work have been reported in an article authored by Charles Benson, Jo Ritzen and Irene Blumenthal, "Economics of Education," Social Science Quarterly, September 1974.

2) Economics of Non-Formal Education

Manzoor Ahmed who has been working with Philip H. Coombs at ICED came to Berkeley in August 1973 to initiate a study of economics of non-formal education. The purpose of his study is to provide an easy to read manual on how to think about the economics of non-formal education, particularly how policy makers can assess effectiveness and efficiency. What are legitimate costs of non-formal education? What are the advantages and disadvantages of non-formal education in terms of raising revenues? How can the analyst think about both benefits and costs? In his study, Manzoor Ahmed shows the limits of analysis and the difficulties inherent to the rationalization of such complex decisions.

The manuscript was completed in 1974; a preface has been written by Charles Benson, and the study is now being printed by Praeger for publication early in 1975.

3) Educational Organization of the Future

This effort includes Guy Benveniste, Irene Blumenthal and Stephen Cohen from the Department of City and Regional Planning.

During the year Benveniste authored a number of papers including: "The Role of Utopian Models in Socio Technics," "On the Consequences of Excessive Educational Planning," "On the Training of Educational Planners," and "Planning, Errors and Organizational Health."

Stephen Cohen is working in Paris at the invitation of the Prefecture de Paris (with additional funding received from other sources).

The work focuses on problems of centralizaton and decentralization. It also focuses on the impact of administrative rationalization on the fundamental reorganization of education and other social sectors.

Stephen Cohen intends to have a first manuscript as scheduled for Spring 1975. Benveniste and Blumenthal have completed the review of the literature and are now selecting case studies for secondary analysis. Their work should be completed in 1976.

4) The Role of Multinational Corporations in the Training of Higher Level Professional Managers in Less Developed Countries

Professor Prakash Sethi of the School of Business Administration at Berkeley is undertaking this study as part of a larger research project designed to look at the "Multinational Corporation as a Political Institution." The purpose of this segment of the study, which is funded by the

AID, is to evaluate the role played by large multinational corporations (MNC's) in the development of skilled technical and managerial talent in the less-developed countries (LDC's).

Multinational Corporations (MNC's) have always emphasized their contribution to the local economics in terms of capital, technology, and management skills. However, the former two have received the greatest play because of their tangible nature and visible character. The recognition of the training aspect was forcefully brought home in 1968 with the publication of Servein-Schreiber's book The American Challenge, wherein he ascribed the success and dominance of the American corporation in Europe not so much to capital and technology but to better management skills.

LDC's have since recognized the point and have been increasingly emphasizing the hiring of local managers by the MNC's in their operations in those countries. In many LDC's, MNC trained managers provide the only available pool of skilled managers. It is not uncommon for a local manager of MNC affiliate to move into high government planning and administrative jobs. The most dramatic example of such a practice is found in Colombia where the last two presidents of the country were the chief executive of Celenese Colomania -- the local subsidiary of Celenese Corporation of the United States.

To develop a framework for comparative analysis, P. Sethi visited Japan for three weeks in September 1973. The objectives were:

1. To understand the decision-making styles of Japanese management, their attitude toward governments of their own country and those of host countries, attitude toward competition, and social-cultural sensibilities of the host countries.

2. Compare the above with those of U.S. based MNC's in order to evaluate their effect on the host nations.

While in Japan, he measured the sensitivity of Japanese MNC's to host country conditions by analyzing the responses of big business to changing social environment in Japan especially in relation to public dissatisfaction pertaining to the issues of pollution, consumerism, and business' involvement in government. This has resulted in the following publications:

1. Japanese Business and Social Conflict: A Comparative Analysis of Response Patterns to Social Problems with American Business, (In press, to be published by Ballinger Publishing Company, Cambridge, Mass. in January 1975.)

2. "Japanese Management Practices and their Relevance to American Business," currently being revised. Accepted for publication in Columbia Journal of World Business.

5) Historical Study of the School as an Economically Self-Supporting Unit

This project focuses on organizational arrangements whereby schools can be self-supporting through the productive activities of students. The study is largely historical in nature although field work to review contemporary efforts in Africa has been undertaken.

The project is headed by Thomas Livingston who visited Tanzania, Zaire and Ghana in the months of August and September, 1973. Research was conducted in the archives of the French and British governments during the summer of 1974.

The project will provide a short handbook for use by policy makers in developing countries. Completion of this handbook is now expected for early 1975.

From results to date, it appears that the most relevant contemporary efforts are those in Tanzania where the larger rubric of "Education for Self-Reliance" encountered for the entire program: some headmasters encouraged all students to spend vast amounts of time on farms and consequently school work in a pedagogical sense suffered. Initially those headmasters most productive in agriculture were praised and those less so, chastised. Now there is greater emphasis upon the "social and moral" implications of "self-reliance" and less on the overtly economic objectives, although plans and programs are projected for greater and more efficient school farms. Schools such as Kivukoni Colleges, which is the training center for TANV, the political party, have been self-sufficient in food production since the 1960's.

2. Field Work. Cooperation with Institutions Abroad.

1) Liberia: Comparative Study of Government and Non-Government Schools in Liberia

The objective of this study, headed by Rodney Reed, is to provide practical information about the different characteristics of private and public schools in Liberia so as to be able to provide information on relationships between selected school descriptive and economic inputs and measured cognitive and non-cognitive outcomes.

In Liberia approximately 40% of the primary and secondary school population attend non-government schools. The reasons for this situation are not clear, especially when student cost to attend these schools is higher than the cost to attend government schools. One might conclude, therefore, that non-government schools are more effective and thus more desirable to attend.

If non-government schools are more effective, are there identifiable programmative and operational aspects of these schools that can be utilized to enhance the performance of students in government schools? Or, are differences in student performance in government and non-government schools associated with differences in student characteristics, teacher characteristics, or general school characteristics?

The proposed study provides information which will 1) enhance the national educational planning capability by recognizing the impact of government and non-government schools, 2) enhance school efficiency by providing information that can be used to develop or update uniform school reporting and assessment systems, and 3) provide an analysis of school effectiveness based on economic and human inputs.

Initially it had been thought that Rodney Reed would work both in Ethiopia and Liberia. He had hoped after a visit to both countries in 1973 that additional funding would be forthcoming from AID.

When no additional funding was obtained we decided to conduct a much smaller study in Liberia. The collection of data for this study was completed during the summer of 1974. The final report is scheduled for January 1975.

D. Library

The Library of the Program in International Education Finance is located within the Library of the Institute of Governmental Studies, Room 109, Moses Hall. The PIEF library staff is composed of one half-time librarian. Non-professional clerical duties - the reproduction of catalog cards, filing, and the paging of materials from the closed stacks - are being provided by IGS for the PIEF collection.

The PIEF library collection contains 1071 cataloged titles as of November 1, 1974. This number represents an increase of 974 newly processed titles since the 1973 Report on Activities. A monthly Accessions List was initiated in October, 1973. The Accessions List is currently distributed to 90 foreign and domestic institutions and government agencies.

The Library attempts to function as a "working collection" for the PIEF research staff members. Staff members are expected to initiate publication requests. In response to requests for materials not in the collection, the library completes the acquisitions process, catalogs the book into the collection, and distributes the publication to the researcher. In order to expedite the acquisitions process, the library has been released from its obligation to use the A.I.D. contractor for book procurement. In addiition to fulfilling staff-initiated requests for publications, the library has attempted to contact and order relevant publications from governmental agencies, private associations and research organizations throughout the world - 40 in the U.S. and 95 in foreign countries.

Training

Dr. Charles Benson heads the new Program in Economics and Finance of Education within the School of Education. Existing programs in the Division of Policy Planning and Administration of the School of Education are also used by students enrolled with us.

Therefore, our training program under this grant is an integral part of the normal activities of the Graduate School of Education. Students joining the Program are usually candidates for the master's or doctorate degree in Education. They apply for admission according to normal procedures of the University. In addition, informal arrangements have been made with the Business School, the departments of Computer Science, Industrial Engineering and Operations Research, and Economics to facilitate admission to these departments for a few (selected) foreign students interested in the Program who, by reason of their past training and specialization, would logically be admitted in these departments.

An applicant to any program in the School of Education must be admitted to the Graduate Division. There is a limitation on the number of students who may be admitted each quarter for graduate study on the Berkeley campus. Each program within the School of Education, therefore, operates on a quota basis and students are urged to submit applications for admission and re-admission as early as possible. Applicants for admission should write to Professor Charles Benson, Chairman, Program in Economics and Finance of Education, School of Education, University of California, Berkeley, California, 94720, U.S.A., to receive the necessary forms and information.

Generally, applicants to the Graduate School of Education are admitted for the fall quarter (starting in late September or early October). Decisions on admission for the fall quarter are made in the spring and complete applications must, therefore, be received beforehand. Applications to this Program should have all forms and letters of recommendation filed before February 1 for admission in the fall. In other words, the admission process requires a one-year lead time.

Attention is called to our two step master's and Ph.D. program. Essentially the two step program consists in having candidates for a master's degree come to Berkeley for a two year program. During this period they also become familiar with the requirements for the Ph.D. They return to their country after these first years having completed work toward the master's degree. After one or two years in service in their country, they may return to Berkeley to undertake further academic work toward a Ph.D. and return to their country to complete their dissertation.

Cooperative Arrangements

1. Research

The Program seeks to establish working relations with selected universities or research centers in developing countries wishing to participate in joint research and/or training activities. It is expected that such working relations would usually involve specific research or training projects. These projects would usually have to be funded separately. However, it is anticipated that where local government support exists, U.S. government AID missions will consider support for carefully formulated joint undertakings. In addition, support will be sought from other sources such as foundations or international organizations.

Results from joint research projects will be published in the host country by the organizations. Where appropriate, the results will also be published by the Program and distributed in other countries.

2. Library cooperation

The program will apprise cooperating institutions of acquisitions in its collection. Where possible, copies of specialized materials unavailable upon request to cooperating libraries in developing countries.

3. Exchanges of Personnel

In some cases exchanges of personnel may be arranged. This will be particularly important where joint research programs are underway.

4. Conferences, short-term training, etc.

The program may make mutually beneficial arrangements for conferences, workshops or other short-term training programs in developing countries. Again, this will be particularly important where joint research projects have been initiated and research results from one country can be generalized.

HOW TO CONTACT THE PROGRAM

The general address and telephone number of the program is:

Professor Guy Benveniste, Principal Investigator
Program in International Education Finance
School of Education
University of California
Berkeley, California 94720
Cable address: UNICALB
Telephone: (415) 642-6632

For information on training and admissions, the address is:

Dr. Charles Benson, Chairman
Program in Economics and Finance of Education
School of Education
University of California
Berkeley, California 94720
Telephone: (415) 642-6632

For library cooperation, write:

Ms. Joan Bowlby
Assistant Librarian
Program in International Education Finance Library
I.G.S. Library
109 Moses Hall
University of California
Berkeley, California 94720

Respectfully submitted,

Guy Benveniste

Guy Benveniste, Ph.D.
Principal Investigator