

931/053

PD-HDU-371

1511-47322

PROJECT PAPER

Education and Nutrition: Performance and Policy

Office of Education

Development Support Bureau

June 9, 1978

## AID NARRATIVE SYNOPSIS

### Project Purpose

Policies and policy-related decisions related to health, nutrition, or education are not without effect and influence upon policies and decisions in the other sectors. It is the illumination of this interrelationship of effects that is the goal of this project. The project purpose is to develop, test and subsequently make available policy instruments to assist LDCs in making investment decisions in the areas of health, education and nutrition, to provide procedures which will enable LDCs with varying degrees of analytical capacity to utilize the results of the policy research; and to identify key variables which condition the acceptance or rejection of development programs aimed at assisting the poor in rural areas. To this end, the project will study the INCAP four-village data set collected, in part, to shed light on these variables and on the relationship between nutrition, health, and education.

### Problem to be solved

Specifically, the problem to be solved is lack of understanding concerning the relationship(s) between early childhood nutrition and health and their impact upon the ability of individuals living in rural areas of LDCs to perform in the school, the home and the labor force as described in detail in the proposal. The partial solution to this problem proposed by AID is an analysis of the INCAP four-village data set collected during a field experiment designed to examine these relationships.

### Beneficiaries

Those benefiting from this project will be all LDC infants and small children affected by policy determinations influenced by the findings of this project. LDC decision-makers will benefit by having such findings to assist them in their decision-making process.

### Relation to Other DS Technical Offices and Regional Bureaus

DS/ED experience with the 1977 Berkeley proposal indicates that there is widespread support for examination of the hypotheses stated. DS/RES, DS/N and PPC support the submission of the present proposal.

### Inputs and Staff Requirements

The project will require approximately \$120,000 over a one year period. It will require .5 month of DS/ED staff time to monitor during FY 79. DS/ED has this staff time to allocate to this project.

### Outputs

Berkeley will produce the following papers for distribution to AID and other international development professionals and to LDC policy makers in addition to a comprehensive report of the data analysis and findings due to AID as a record of work accomplished under the grant:

1. One summary paper presenting and discussing major findings;
2. One background paper constituting a review of the literature of published findings pertaining to the INCAP four-village study and germane to the Berkeley study;
3. One policy paper discussing the policy implications of the Berkeley findings for LDC education and nutrition programs.

In addition to these papers, a seminar discussing the findings with international assistance agency technical and policy staff will be held in Washington, D.C. using Department of State facilities.

### Project Issues

Quality of analysis plan. Comments from the research office passed on to Berkeley indicate concern over the level of detail in the proposal regarding hypothesis specification and analysis plan. Berkeley revised the proposal according to DS/RES suggestions.

Utilization plans. Comments from DS/ED passed on to Berkeley indicate concern over inadequate diffusion plans related to generating discussion of project findings. Berkeley revised the proposal according to DS/ED suggestions regarding additional papers and a seminar to utilize project findings.

Quality of data base. In 1977, a larger research proposal from Berkeley related to the INCAP study was rejected. Berkeley proposed a continued intervention and data collection in the four villages as well as data analysis. The quality of the INCAP experimental design and, in turn, the data base, were questioned at that time. The question was never fully resolved and the proposal was not funded.

The present proposal seeks no intervention funds whatsoever. The expenditure proposed by Berkeley is exclusively for the purpose of examining the large data set already in existence to pose hypotheses of direct interest to DS/ED because of their relation to formal education. It is in the process of using the data base for such a purpose that a clearer picture will emerge about what can and cannot be claimed. Indeed it is this type of analytical effort that is justified by the existence of so costly and complex a data set. For this reason, DS/ED and DS/RES feel the project is technically sound, not because all problems of quality regarding the data base have been answered, but because it is likely that the analysis will shed light on the hypotheses being tested despite these problems.

### PROJECT ANALYSIS

#### Technical Analysis

DS/ED and DS/RES find the project as amended by their suggestions technically sound. The project meets FAA Section 611(a) and (b). A threshold determination has been made that there will be no discernable environmental impact as a result of this project, and that a formal statement is therefore unnecessary.

#### Financial Analysis and Plan

This project is inappropriate for Rate of Return Analysis or for Recurring Budget Analysis of the implementing agency. DS/ED finds the financial plan reasonable for the scope of work proposed and the overall project financially sound.

#### Evaluation Arrangements

One mid-project progress report will be made orally to members of DS/ED, DS/RES, DS/N and other concerned AID/W staff. At that time mid-course corrections can be made in the progress of the project. Final evaluation will be made by AID/W technical staff based on the papers and seminar presentation by Berkeley.

TECHNICAL REVIEW CORRESPONDENCE

DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C. 20523

April 26, 1978

Dr. Charles S. Benson  
Professor, School of Education  
University of California  
Berkeley, Calif. 94720

Dear Dr. Benson:

As Dr. Schmeding has informed you, he has appointed me to coordinate the review process for the proposal, Education and Nutrition: Performance and Policy. In this capacity, I would like to keep you as fully informed as possible about the review process.

Three Agency review committees must approve the proposal: an Office of Education review committee; an Agency inter-bureau review committee known as the research and Development Committee (R&DC); and a Research Advisory Committee (RAC).

The Education Office and R&DC review are in progress. The next meeting of RAC is July 18-19. This is the earliest that we can put the proposal before that committee.

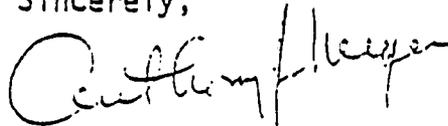
Two major improvements regarding the proposal have been suggested. They pertain to AID's ability to utilize project findings and to the relation of the data analysis plan to hypothesis testing. The memoranda attached from myself and Dr. O'Quinn of the Research Office explain these suggestions. While you are not required to take these suggestions, we feel that attention to them will improve the likelihood that the review process will lead to a favorable outcome. We cannot and do not make any assurances that the project will be finally approved, of course.

Dr. O'Quinn and I recommend that, if these suggestions are accepted, the proposal and budget be modified before submission to RAC. The deadline for submission of a revised proposal is June 1. This office would have to receive a revision on or before that date.

It is important for the Office of Education and R&DC reviews to know if you and your colleagues intend to make the suggested modifications. A letter stating what changes you intend to make would be sufficient for this purpose. The sooner such a letter of intent could arrive, the better.

If I can be of assistance to you in any way, please write or call (703) 235-9062.

Sincerely,



Anthony Meyer, PhD  
International Education Specialist  
Development Support Bureau  
Office of Education

cc: Office of Nutrition  
Office of Research

Clearance: Office of Nutrition

April 26, 1978

Summary of memorandum by A. Meyer on Berkeley proposal:  
"Education and Nutrition: Performance and Policy."

The following recommendations pertain to AID's utilization of project findings:

1. In addition to a comprehensive report of the data analysis and findings due to AID as a report of work accomplished under the grant, three other papers would greatly assist AID in diffusing findings and stimulating discussion and application of the findings.

These would be addressed to an audience consisting of AID and other international development professionals and to LDC policy makers:

- (1) One summary paper presenting and discussing major findings (This paper seems already envisioned by the proposal and does not appear to require more work than already proposed.);
- (2) One background paper constituting a review of the literature of all published findings pertaining to the INCAP four-village study; and
- (3) One policy paper discussing the policy implications of the Berkeley findings for LDC education and nutrition programs.

The final paper should also discuss the economic ramifications associated with implementing the policy suggestions in (3). This may be deemed a sufficiently independent subject which will require a separate paper.

2. In addition to these papers, a seminar discussing the findings with international assistance agency technical and policy staff would be desirable. This could be held in Washington, D.C. using State Department facilities at the conclusion of the proposed study.

UNITED STATES GOVERNMENT

# Memorandum

RU : DS/ED, R. C. Weaver  
DS/RES, M. Rehdig *MR*

DATE: April 17, 1978

DM : DS/RES, Floyd O'Quinn *FO*

SUBJECT: Unsolicited Research Proposal, "Education and Nutrition:  
Performance and Policy"

The proposed analysis of data from the INCAP four village study could produce some interesting and useful results. There are several problems with the experimental design and the manner in which the four village study was carried out, but the collection of the data appears to have been carefully done. It should be possible to identify potential biases in the study and then to draw some conclusions concerning nutrition and education after considering the effects of these biases. This appears to be the basic proposal the researchers are making.

While I would judge the basic proposal to be sound, the specifics of what the researchers would like to do should be developed further before submitting the project to the Research Advisory Committee (RAC). The chances are good that RAC would send the proposal back for further work before approving it. It may be possible to prevent further delay in getting the project started if some additional work is done on the proposal at this stage.

The observations below point out some areas where I think the proposal needs more work. The researchers may want to consider these observations along with any other comments they might have received.

1. The proposed project lacks design. It should be possible to structure the search for relationships among the variables through some type of analytical modeling. The proposal appears to consist primarily of applying a collection of statistical techniques in a giant data searching operation. The researchers should be able to provide a conceptual foundation for analysis. Do the various statistical techniques and the least squares model fit together in some overall analytical plan?

2. The hypotheses that are stated on page 15 are not well defined and in many cases are not concerned with the interventions of the original experiment. For example, the hypothesis that "more affluent families have higher average education for family members" has been tested many times in other projects and has nothing to do with supplementation.
3. One reviewer of a previous education-nutrition proposal that was based on the four village study suggested that larger, healthier children naturally need more food and would choose to consume more supplement than smaller children. If so the results of the analysis could be biased. This proposal should address this issue of self-selection under "choice to supplement."
4. It is difficult to judge from the preliminary analysis, as presented in the proposal, whether the data from the four village study would support an extensive analysis. Are there enough observations, for example, to make an analysis for a single village if pooling it with other villages proves not to be feasible? After having completed the preliminary analysis, the researchers should be able to address the issue of data adequacy more directly. Tables C-1 through C-5 show a number of estimates that are not significant at the 0.05 level. Is this due to the inadequacy of the data?
5. The least squares model shows a lot of potential and, I would guess, would be the heart of the analytical effort. It is presented as just one more statistical technique in the proposal. Perhaps the model should be specified using mathematical notations. Any assumptions, such as an assumption of linearity of functions in the model, should be stated.
6. The amount of money in the budget for computer time relative to that for professional services may raise some questions. Similarly, the absence of a statistician on the staff of what is essentially a statistical project could be questioned.



SCHOOL OF EDUCATION  
PROGRAM IN INTERNATIONAL  
EDUCATION FINANCE

BERKELEY, CALIFORNIA 94720  
CABLE ADDRESS: UNICALB  
TEL: (415) 642-6632

MAY 5 1978

Dr. Anthony Meyer  
International Education Specialist  
Development Support Bureau  
Office of Education  
Agency for International Development  
Department of State  
Washington, D.C. 20523

Dear Dr. Meyer:

As a result of the very constructive suggestions from you and Dr. O'Quinn contained in your letter of April 26, we are reworking parts of our Nutrition and Education proposal. In particular, we are rewriting the description of the plan of work which we hope will provide a clearer explanation of the methods we expect to use. Dr. O'Quinn's comments were helpful in indicating where the proposal lacked clarity. We hope that by redrafting this section we will answer all of his questions.

We are also grateful to you for the recommendations on the utilization of project findings. We are in agreement with them, including the methods of reporting and the seminar to discuss findings. These will be incorporated in the proposal, and the budget will reflect the inclusion of the seminar in Washington at the conclusion of the project.

Sincerely,

  
Charles S. Benson  
Professor

CSB:jw