

AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT PAPER FACESHEET TO BE COMPLETED BY ORIGINATING OFFICE		1. TRANSACTION CODE ("X" appropriate box) <input type="checkbox"/> Original <input type="checkbox"/> Change <input type="checkbox"/> Add <input type="checkbox"/> Delete	PP DOCUMENT CODE 3
2. COUNTRY/ENTITY INTERREGIONAL		3. DOCUMENT REVISION NUMBER	
4. PROJECT NUMBER 431-11-546-239	5. BUREAU a. Symbol TAB	b. Code 6	6. ESTIMATED FY OF PROJECT COMPLETION FY 7 9
7. PROJECT TITLE - SHORT (stay within brackets) [TEACHING COMMUNITY MEDICINE, PHASE III]		8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION a. INITIAL ^{mo. yr.} 8 76 b. FINAL FY 7 8 47p.	

9. ESTIMATED TOTAL COST (S000 or equivalent, S1 =)						
a. FUNDING SOURCE	Operational YEAR FY 70			ALL YEARS		
	b. FX	c. L/C	d. Total	e. FX	f. L/C	g. Total
AID APPROPRIATED TOTAL			437			683
(Grant)			437			683
(Loan)						
Other 1.						
U.S. 2.						
HCST GOVERNMENT						
OTHER DONOR(S)						
TOTALS			437			683

10. ESTIMATED COSTS/AID APPROPRIATED FUNDS (S000)											
a. Appo- riation (Alpha Code)	b. Primary Purpose Code	c. Primary Tech. Code	FY 70		FY 77		FY 78		ALL YEARS		
			d. Grant	e. Loan	f. Grant	g. Loan	h. Grant	i. Loan	j. Grant	k. Loan	
PH	539	560	437		0		246			683	
TOTALS			437		0		246			683	

11. ESTIMATED EXPENDITURES: 35 225 240

12. PROJECT PURPOSE(S) (stay within brackets) Check if different from PID/PRP

To improve the teaching and training of health professional and paramedical personnel in LDCs.

13. WERE CHANGES MADE IN BLOCKS 12, 13, 14, or 15 OF THE PID FACESHEET? IF YES, ATTACH CHANGED PID FACESHEET.

Yes No

14. ORIGINATING OFFICE CLEARANCE		15. Date Received in AID/W, or For AID/W Documents, Date of Distribution	
Signature	<i>L. M. Howard</i>		mo. day yr.
Title	Director, Office of Health		
		Date Signed	mo. day yr.
		6 1 8 7 6	

Teaching Community Medicine (page 2)

Note:

Funds for predecessor project, Teaching Community Medicine, Phase I and II with initial obligation in FY 72 and final obligation in FY 75 amounted to \$418,000.

This Project Paper was endorsed by the members of the R&DC on July 13, 1976.

Transmitted with PP approval memorandum Fritz/Farrar dated 7/27/76.

Drafters:

TA/H: [Signature], D. Parker :5/13/76

Clearances:

Originating Office:

TA/H: M. Shutt, M.D.

TA/H: R. Newman

Initial

date

ms
RCH

5/13/76
5/17/76

Other Offices:

TA/PPU: L. Wakefield

TA/PPU: [Signature] E.R. Fritz

[Signature]
[Signature]

8/2
7/27

Approval:

AA/TA: C. Farrar

[Signature]
for C. Farrar

8/2

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I SUMMARY AND RECOMMENDATION

A. Face Sheet

B. Recommendations

The following action is submitted for AID approval.

TQ	\$437
FY 77	-0-
FY 78	<u>246</u>
Total	\$683

C. Description of Project

It is proposed that for three years following the present field testing program, The Center For Educational Development In Health (CEDH), Boston University, be given a Field Service contract to respond to requests from LDC's and USAIDs to teach their methodology for community medicine using a Systematic Course Design Manual. After the initial seminars and workshops which teach their methodology, there would be follow-up consultation to assist and evaluate training so that proper application of the methodology would be insured. Concurrently, an instructors manual would be prepared, and the Systematic Course Design Manual simplified as appropriate for specific training situations.

It is anticipated that after this three year period no further TAB support for the CEDH will be required. Continued use of the resource would depend upon funding from Missions, Regional Bureaus, other donors or countries themselves.

Outputs from this project would consist of country consultations; seminars and workshops to instruct teachers in the methodology; a revised and simplified Systematic Course Design Manual; and an instructors manual. These outputs would be produced by the staff of the CEDH. The

project reflects the application of modern educational technology to health manpower development.

II. BACKGROUND AND DETAILED DESCRIPTION

A. Background

Agency experience to date has shown that health manpower training is a most critical requirement of new programs which seek to provide health, family planning and nutrition services to the majority. Training programs for medical professionals, midlevel supervisory personnel, and the most remote peripheral workers must be devised to respond to the real health needs of developing countries.

A growing number of AID-sponsored health projects are shifting from a categorical to an integrated approach in the development of health systems. This changing emphasis poses the problem of training and retraining a large number of health workers to assume their newly defined responsibilities. The Systematic Course Design method, developed by preceding CEDH and refined in/projects, offers a teaching methodology capable of making a major contribution in preparing LDC teacher-trainers to develop required new curricula and instructional materials.

The task-oriented CEDH developed methodology provides LDC's with a training tool which results in professional and auxiliary health and family planning manpower who are trained to respond to the identified needs of the poorest majorities of the developing world. This approach contrasts with the current teaching of health manpower in most of the developing world, which is based on didactic teaching models, and is inappropriate for the needs of developing countries.

Present teaching programs for health professionals in LDCs are

characterized by some or all of the following deficiencies:

- Instruction is usually delivered via lectures and demonstrations. Instructors generally do not utilize modern instructional methods, i.e., class participation, accessible to them in terms of cost and manpower. Evaluation of student performance is limited to written tests for the most part.
- Health professionals in the LDCs are not aware of existing course materials which may be appropriate to their own instructional needs.
- Courses are given in response to traditional curricula patterns rather than planned and delivered in accordance with long-range health manpower development efforts.
- Job specifications for health professionals are adapted from pre-existing models generally developed in the U.S. or Western Europe rather than derived from an analysis of the health manpower needs of the particular region.
- Courses are generally not planned according to a systematic derivation approach involving/of course objectives from job specifications and task analyses. Instructors are not trained in course design or in instructional methods and evaluation.

The major consequences of these deficiencies is that the medical, health and family planning professionals and auxiliaries who are directly responsible for providing majority coverage, complete their training ill prepared to face the tasks before them.

The methodology developed by the Center for Educational Development In Health attempts to address all of the above listed deficiencies.

A project to develop and field test an innovative educational methodology for the training of the trainers of the health profession in LDC institutions is nearing completion. During the development and testing a unique personnel resource has been created ⁱⁿ the Center for Educational Development in Health which has competence in teacher training methods and a demonstrated ability to alleviate LDC health manpower problems in divergent LDC situations. A great deal of interest has evolved among potential users of the methodology in LDCs for training trainers.

The (CEDH) is an interdisciplinary group composed of faculty with ~~medical~~, educational and social sciences backgrounds. The CEDH has devised a method of "training of trainers" who teach medical and health personnel. CEDH teaches the trainers to design courses for health personnel based on task analyses in the local situation. A manual of Systematic Course Design has been developed and is in the final stages of field testing in seven LDC settings.

This manual forms the framework for a course on systematic curriculum design developed at the CEDH. The purpose of the manual is twofold: 1) to be used as a basic text for courses on curriculum design in the health fields in the developing world, and 2) to be used as a guide to course design efforts by teachers in LDC's.

This technique, referred to as a "course design model," presents a particular systematic approach for developing courses that are relevant to the future needs of the students. This model has evolved with successive versions revised through experience with usage in the academic setting and in field trials in developing countries. While a follow-up assessment of the field test workshops will not be completed until mid 1976, the preliminary analysis substantiates the assumption that the systematic course design method

is useful and applicable to training teachers of the health professions in LDCs. The Contractor sponsored 7 workshops in Columbia, Honduras, Malaysia, Cameroon, Lebanon, Nepal and Vietnam. The field directors at the sites have conducted 8 additional workshops for trainers of physicians, nurses and allied health workers utilizing the systematic course design method. As a result of these original workshops, one hundred and fifty one units of instruction have been designed by field trial participants for the training of health assistants, assistant midwives, family planning workers, assistant nurses-hospital, sanitary technicians, nutritionists, laboratory technicians, pharmacy technicians, radiography technicians, dental technicians, health education technicians, physicians, and health administrative technicians. Seventy three of the one hundred and fifty-one units of instruction have actually been taught. Appendix A details experience from the preceding projects. Examples of multiplier effect begin on page 5 in Appendix A.

B. Description of New Project

Through the mechanism of a centrally funded contract, TAB will make contractor resources available to LDC institutions through AID missions to assist in the training of trainers in the Health professions. During the three year period of this project the CEDH will continue to revise the methodology as new lessons are learned. At the end of three years, continued use of the resource would depend upon funding from missions, other donors or countries themselves, and central funding will cease.

Upon approval of this project the field will be informed of the availability of the resource. Such notification will be continued on at least an annual basis.

Missions and regional bureaus may obtain the services by writing to the Office of Health, TAB.

The following is a brief description of the new project outputs:

- a. Trained LDC nationals (field directors) to provide leadership in systematic instructional design for training in the health fields.
- b. Trained teachers of health professionals accomplished by Field Directors on site.
- c. Adapted and field tested version of the text, Systematic Course Design for the Health Fields and a Teachers Manual, for use in LDCs. On the basis of data generated to date, the text will be simplified and adapted to serve health teachers with lesser educational background and with poorer understanding of English. More illustrative material will be developed which is representative of training problems in LDCs. The Teacher's Manual is intended to assist field directors and others in using the text to teach systematic course design methods. As in adapted text, the Teacher's Manual will include LDC specific exercises and examples.
- d. Curricula developed or revised, at the request of LDCs and in collaboration with field directors and CEDH. Requests for assistance in curriculum development or revision may vary in scope and complexity, from relatively small components of a curriculum to the development or revision of an entire curriculum for a health technician.

Services provided may include some or all of the following:

- Regular on-site consultation during the process of curriculum development or revision,
- Bibliographic support,
- On-site workshops on production of instructional materials and test construction, and

- Editorial assistance while work is in progress.
- e. Consultation and specialized training services provided to AID missions, desks, and bureaus on country-specific health manpower development problems. Consultation by contractor staff will take one or more of the following forms:
 - Follow-up of teacher training workshops in the LDCs. Here Center staff will provide on-site support for individual instructors who have participated in teacher training workshops utilizing the Systematic Course Design methodology.
 - Performance analysis. Center staff will assist curriculum planners in formulating, conducting and evaluating a performance analysis of health professionals for purposes of developing objectives for instruction.
 - Editorial support of ongoing curriculum development projects. As LDCs prepare course designs and instructional materials, CEDH staff will provide, as requested, periodic editorial review.
 - Evaluation of education programs for training health professionals. Contractor staff will assist LDCs in evaluating ongoing education programs by participating in the design, administration and analysis of test instruments.
 - Bibliographic support. The Center librarian will conduct literature searches to identify syllabi, instructional materials and research reports on health manpower curricula applicable to the LDCs.
 - Consultation to AID missions and AID Washington will be given in the broad area of curriculum planning, educational methods and evaluation.
- e. Upon request of AID missions, desks, or bureaus and their host countries, specialized short-term training can be tailored to the specific needs

of the individual(s) involved.

- f. The concept of establishing regional training sub-centers will be investigated by CEDH as an additional approach to achieving a multiplier effect in instructor training which will eliminate the need for continued dependence upon the Center. The value of regional training centers has been discussed with some of the field directors in the present project. Such centers would enable the project to achieve a critical mass of instructor training activity in a given area. An ongoing regional program would also assure that course and curriculum design activities would receive substantive and editorial support during the formative stages.

Fiscal 1978 is the last year of funding for this project. It is fully expected that by that time the methodology will be adequately developed and there will be sufficient regional and international awareness of benefits derived from this activity that future funding for additional activities will be assumed by Regional Bureaus, Missions, other Agencies such as WHO and IDRC, and countries themselves.

III. IMPLEMENTATION ARRANGEMENTS AND PLAN

A. Implementation Procedures

The contractor will continue to be the Center for Educational Development in Health (CEDH) which was established at Harvard University but moved in July, 1976 to Boston University. The Center felt that its interdisciplinary nature gave them no firm identity and attendant faculty support within the Harvard compartmentalized structure. Since the CEDH is involved primarily with practical training methodology and activities that do not fit the pure research orientation and copious production of publications associated with Harvard. Accordingly, they were responsive to overtures from Boston University to establish the Center in the Medical Center. Faculty are given joint appointments in the Medical and Education faculties. In addition to the project outputs which will normally be produced at the CEDH, or through field support of ongoing activities, USAID Missions or the Regional Bureaus will identify the need for technical assistance which can be provided by the CEDH in LDC's and prepare a scope of work including desired lengths and dates. The request is sent to the AID project manager in TA/H. The project manager will authorize the contractor to participate within funding limits.

The AID project manager is in the Office of Health, TAB. He has responsibility for monitoring contractor performance. He authorizes utilization of project funds for the purpose of providing consultations, workshops and seminars outside the U.S.

B. Implementation Plan

1. First Year

- a) Research, develop, and field test a Teachers Manual.
- b) Research and develop a simplified version of the manual Systematic Course Design for the Health Fields.
- c) Train LDC nationals (field directors) to provide leadership in systematic instructional design for training in the health fields.
- d) Field directors with support from the contractor train 50-100 teachers of health disciplines per year in the field.
- e) Develop and revise curricula at the request of LDCs in collaboration with field directors and the contractor.

f) It is anticipated that 3-5 formal or informal linkages per year will be formed with LDCs at the request of AID Regional Bureaus and Missions on country specific health manpower development problems.

g) Produce semi-annual report.

h) AID annual Project Appraisal Report.

2. Second Year

a) Publish a Teachers Manual.

b) Field test the simplified manual Systematic Course Design for the Health Fields.

c) Train LDC nationals (field directors) to provide leadership in systematic instructional design for training in the health fields.

d) Field directors train 50-100 teachers of health disciplines per year in the field with support from the contractor.

e) Revise and develop curricula at the request of LDCs in collaboration with field directors and the contractor.

f) It is anticipated that 3-5 formal or informal linkages per year will be formed with LDCs at the request of AID Regional Bureaus and Missions on country specific health manpower development problems.

g) Produce semi-annual report.

h) AID annual Project Appraisal Report.

3. Third Year

a) Publish the simplified version of Systematic Course Design

for the Health Fields.

- b) Train LDC nationals (field directors) to provide leadership in systematic instructional design for training in the health fields.
- c) Field directors train 50-100 teachers of health disciplines per year in the field with support from the contractor.
- d) Develop and revise curricula at the request of LDCs in collaboration with field directors and the contractor.
- e) It is anticipated that 3-5 formal or informal linkages per year will be formed at the request of AID Regional Bureaus and Missions on country specific health manpower development problems.
- f) Produce semi-annual report.
- g) AID final Project Appraisal Report.
- h) Complete external evaluation

IV. EVALUATION

There will be a three tiered evaluation of this project.

A. First Tier (Contractor)

A continuous model for evaluation has been developed by the contractor utilizing dimensions of acceptance, effectiveness, validity and worth for instructional programs. In addition at Field Directors Workshops, the contractor evaluates (1) The level of detail adequate to permit design of a unit of instruction; (2) Student competencies and checkpoints; (3) Unit syllabus; and (4) Printed materials.

B. Second Tier (AID)

Through the completion of an annual Performance Appraisal Report (PAR) at the end of the first year and annually thereafter. Project modifications, if required, will be based on findings in the PAR.

C. Third Tier (External)

At the second formal PAR review, the PAR committee will identify an outside educational consultant group to conduct an external evaluation, which timing and scope of work will be agreed upon by the PAR committee. Funding for the evaluation will be provided by funds provided in the project.

V. EXPECTED TRENDS

The training element of low cost integrated health delivery systems is emerging as one of the key determinants to success or failure of the system. The training costs involved in developing new health systems are considerable, so more effective training methods increasingly are being sought as more countries seek health coverage for a majority of their populations. Additional consultative and training assistance in health manpower development has been requested of the CEDH staff by health professionals or by AID for Jordan, Mali, Nepal, Swaziland, Tunisia, Honduras and El Salvador. It is anticipated that over the next three years CEDH will receive requests for assistance from approximately 12 countries.

VI. ALTERNATE SOURCES

In essence, this project proposes to prepare teachers and curriculum designers in LDCs to design, implement and evaluate curricula which are suited to their country's needs.

One alternative to this approach is to develop curricula for the LDCs here in the United States. This approach generally has contributed to the unsatisfactory state of affairs which now exists in the LDC's. Another approach for specific manpower requirements is the development of a "prepackaged" modular curriculum which is then adapted for each

country. This approach is now being tested in LDCs through a TAB project with the University of Hawaii.

Another possibility would be to develop sets of algorithms or decision guides in the form of flow charts. This approach is being used on a small scale in instructing paramedical personnel, but learning only by algorithms tends to develop a dependency on the decision guide thereby limiting the amount of judgement the worker can exercise. This limits the variety of types of personnel who can be taught this way.

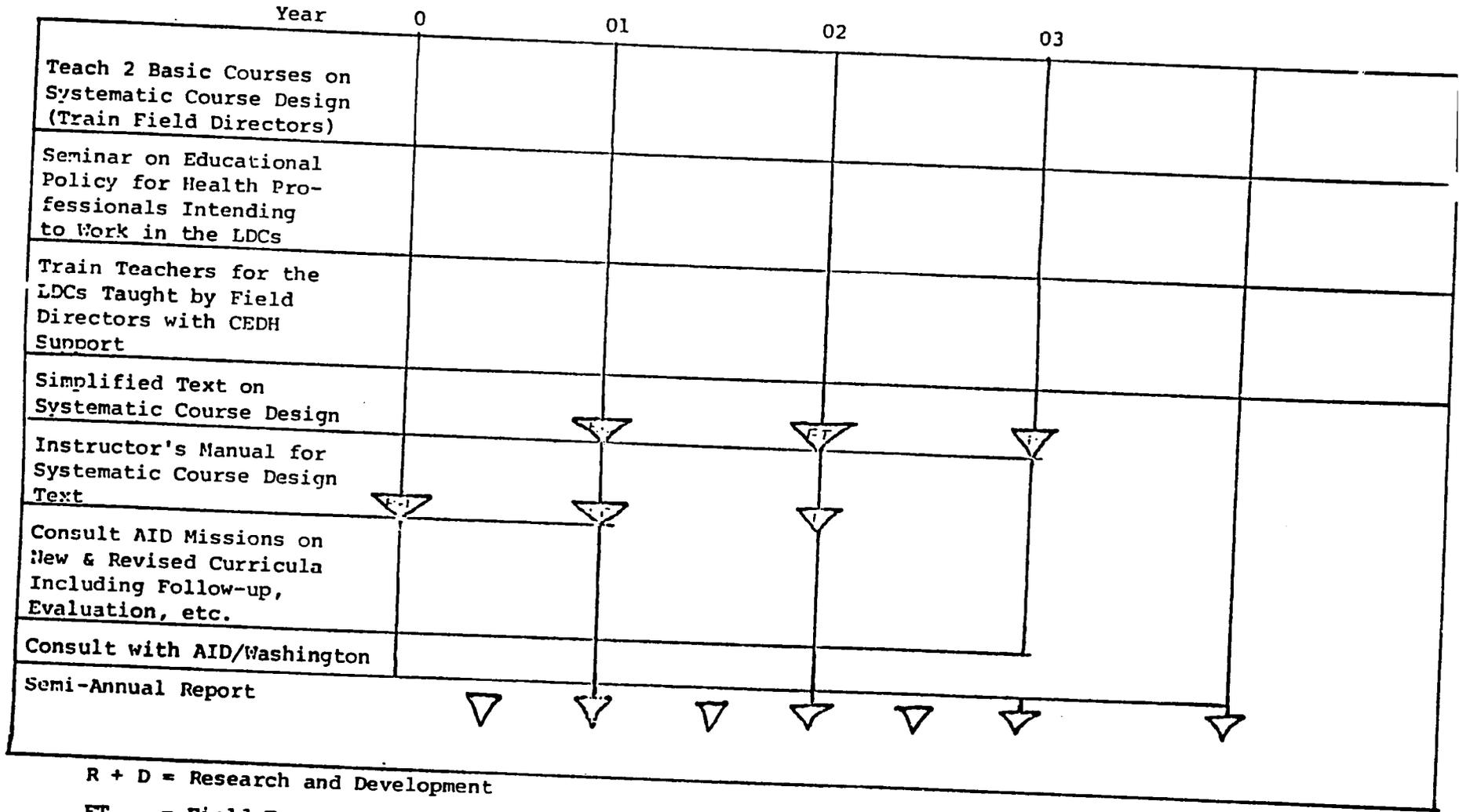
Another alternative would be for the Agency to provide specific direct support to existing training courses in the LDCs, with an intent of modifying course design through advisory services. AID does not have the resources to provide support on such a scale.

VII. OTHER ISSUES

The Center for Educational Development in Health has developed the educational methodology to be employed in this project. Implementation of the project will be dependant upon approval by SER of a Justification of Non-Competitive Procurement.

Gantt Chart

Health Manpower Development Project 1976-1979



PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: Teaching Community Medicine, Phase III

Life of Project
From FY 70 to FY 78
Total U S Funding \$683,000
Date Prepared:

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS																																																																												
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <p>To improve the quality of life by making basic health services, particularly those related to MCH, nutrition and family planning available and accessible to the majority of the population of developing nations, at a cost affordable by the assisted nations.</p>	<p>Measures of Goal Achievement:</p> <ol style="list-style-type: none"> 1. The increase in proportion of the population with access to the appropriate health, family planning and nutrition service. 2. The change in the relevance of health programs to meet country or regional specific health problems. 3. The increased efficiency of utilization of all health resources. 	<ol style="list-style-type: none"> 1. Infant and maternal mortality statistics; school and industrial attendance records. 2. Community health, nutrition and population surveys. 3. WHO and IDC communicable disease statistics reports. 4. WHO Demographic and Statistics Year-book. 5. Special Surveys and reports. 	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"> 1. LDC's are interested in improving the health status of their population. 2. Assistance in health sector will be acceptable to LDC's and will improve health status. 3. That the efficient utilization of trained manpower is a priority of LDC's. 4. An extensive training program is necessary. 																																																																												
<p>Project Purpose:</p> <p>To improve the teaching and training of health professional and paramedical personnel in LDC's by providing training services for LDC teachers/curriculum designers in the design of competency based and relevant educational programs for health workers at all levels.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ol style="list-style-type: none"> 1. LDC nationals will have been trained in effective course and curriculum design. 2. Courses and curricula developed by trained IDC teachers will be implemented. 3. Systematic Course Design utilized in developing countries for training health auxiliaries. 	<ol style="list-style-type: none"> 1. Reports by the Contractor. 2. On-site visits to assess the extent to which the new educational methodology is being disseminated. 3. Review by AID of the instructional materials produced under this contract. 4. Reports of LDC post-training performance evaluation of trainers. 	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> 1. A need and demand exists for an improved method of training LDC health personnel. 2. This methodology is an improvement on existing systems of training auxiliary health personnel. 3. The methodology of systematic curriculum design can be adapted to the constraints present in LDC's. 																																																																												
<p>Outputs:</p> <ol style="list-style-type: none"> 1. Trained LDC Nationals (Field Directors) to provide leadership in systematic instructional design for the health fields. 2. Teachers of health professional and paramedicals trained by Field Directors. 3. Adapt and field test a simplified version of text, Systematic Course Design for the Health fields and a Teacher's Manual. 	<p>Magnitude of Outputs:</p> <ol style="list-style-type: none"> 1. Annually 4-6 LDC health professionals with known leadership potential (sent by AID missions for specialized training). 2. 50-100 teachers trained in LDC's annually. 3. a) Published field tested Teacher's Manual in year 02. b) Published adapted and simplified version of field tested Systematic Course 	<p>LEDH</p> <ol style="list-style-type: none"> 1. Site visits by Home Field Staff. Semi-annual reports from Field Directors on activities in systematic instructional design. 2. Site visits by contractor staff. Semi-annual reports from Field Directors' trainee reports. 3. Formal field test of materials by Contractor. Reports from Field Directors and others on usefulness of materials. 4. Curricula implemented and evaluated 	<p>Assumptions for achieving outputs:</p> <ol style="list-style-type: none"> 1. LDC's can identify and provide support for training for LDC professionals. 2. A climate exists in the LDC which permits teachers of professions to develop and implement competency based courses and curricula. 3. LDC's require adapted text and teachers manual. 4. Agencies in LDC's planning, imple- 																																																																												
<p>Inputs:</p> <ol style="list-style-type: none"> 1. AID - Monitoring, funding. 2. Contractor - Sufficient manpower to supply their special training technology, project design. 3. LDCs - Trainees, physical facilities transportation and other in kind support. 	<p>Implementation Target (Type and Quantity)</p> <table border="1"> <tr> <td>Salaries</td> <td>\$79,920</td> <td>\$81,210</td> <td>\$84,946</td> </tr> <tr> <td>Fringe Benefits</td> <td>12,465</td> <td>12,688</td> <td>13,284</td> </tr> <tr> <td>Consultants</td> <td>19,000</td> <td>16,000</td> <td>16,000</td> </tr> <tr> <td>Services Purchased</td> <td>9,000</td> <td>9,000</td> <td>7,000</td> </tr> <tr> <td>International and Domestic Travel</td> <td>31,990</td> <td>31,990</td> <td>31,990</td> </tr> <tr> <td>Total Direct Costs</td> <td>152,375</td> <td>150,888</td> <td>153,220</td> </tr> <tr> <td>Indirect Costs @ 44%</td> <td>67,045</td> <td>66,391</td> <td>67,417</td> </tr> <tr> <td>External evaluation</td> <td></td> <td></td> <td>25,000</td> </tr> <tr> <td>Total</td> <td>219,420</td> <td>\$217,279</td> <td>\$245,637</td> </tr> </table>	Salaries	\$79,920	\$81,210	\$84,946	Fringe Benefits	12,465	12,688	13,284	Consultants	19,000	16,000	16,000	Services Purchased	9,000	9,000	7,000	International and Domestic Travel	31,990	31,990	31,990	Total Direct Costs	152,375	150,888	153,220	Indirect Costs @ 44%	67,045	66,391	67,417	External evaluation			25,000	Total	219,420	\$217,279	\$245,637	<table border="1"> <thead> <tr> <th></th> <th>01</th> <th>02</th> <th>03</th> </tr> </thead> <tbody> <tr> <td>Salaries</td> <td>\$79,920</td> <td>\$81,210</td> <td>\$84,946</td> </tr> <tr> <td>Fringe Benefits</td> <td>12,465</td> <td>12,688</td> <td>13,284</td> </tr> <tr> <td>Consultants</td> <td>19,000</td> <td>16,000</td> <td>16,000</td> </tr> <tr> <td>Services Purchased</td> <td>9,000</td> <td>9,000</td> <td>7,000</td> </tr> <tr> <td>International and Domestic Travel</td> <td>31,990</td> <td>31,990</td> <td>31,990</td> </tr> <tr> <td>Total Direct Costs</td> <td>152,375</td> <td>150,888</td> <td>153,220</td> </tr> <tr> <td>Indirect Costs @ 44%</td> <td>67,045</td> <td>66,391</td> <td>67,417</td> </tr> <tr> <td>External evaluation</td> <td></td> <td></td> <td>25,000</td> </tr> <tr> <td>Total</td> <td>219,420</td> <td>\$217,279</td> <td>\$245,637</td> </tr> </tbody> </table>		01	02	03	Salaries	\$79,920	\$81,210	\$84,946	Fringe Benefits	12,465	12,688	13,284	Consultants	19,000	16,000	16,000	Services Purchased	9,000	9,000	7,000	International and Domestic Travel	31,990	31,990	31,990	Total Direct Costs	152,375	150,888	153,220	Indirect Costs @ 44%	67,045	66,391	67,417	External evaluation			25,000	Total	219,420	\$217,279	\$245,637	<p>Assumptions for providing inputs:</p> <ol style="list-style-type: none"> 1. The Contractor has the experience and the capability necessary to carry out the project. 2. LDC's will provide trainees and facilities.
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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: Teaching Community Medicine, Phase III

Life of Project: From FY 70 to FY 78
Total U. S. Funding \$683,000
Date Prepared: _____

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p>	<p>Measures of Goal Achievement:</p>		<p>Assumptions for achieving goal targets:</p>
<p>Project Purpose:</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p>		<p>Assumptions for achieving purpose:</p> <p>4. The governments involved in the training are cooperative; provide facilities and students.</p>
<p>Outputs:</p> <p>4. Curricula developed or revised and specialized consultant services provided on country specific health manpower development problems provided to LDC's.</p>	<p>Magnitude of Outputs:</p> <p>Design in year 03.</p> <p>4. Requests for assistance from approximately 3-5 LDC's responded to annually.</p>	<p>5. Semi-annual reports by Harvard CEDH consultants of results and recommendations. AID mission evaluations of specialized training. Site visits by Harvard CEDH staff.</p>	<p>Assumptions for achieving outputs:</p> <p>menting and evaluating instructions design consultative services from Contractor and consultant</p>
<p>Inputs:</p>	<p>Implementation Target (Type and Quantity)</p>		<p>Assumptions for providing inputs:</p>

BUDGET TABLE

PERSONNEL	ANNUAL SALARY	FY 1977		FY 1978		FY 1979	
		M/M	\$	M/M	\$	M/M	\$
a. Co-Director	28,600	3.6	8,580	3.6	9,266	3.6	10,007
b. Co-Director	30,000	3.6	9,000	3.6	9,720	3.6	10,498
c. Technical Director	20,000	9	14,999	9	16,200	9	17,496
d. Instructor	18,360	6	9,180	6	9,915	6	10,708
e. Administrative Assistant	10,000	6	5,000	6	5,400	6	5,832
f. Secretary	9,800	12	9,800	12	10,584	12	11,432
g. Librarian	10,002	6	5,001	4	3,600	3	2,916
h. Field Evaluator	18,360	6	9,180	6	9,915	6	10,707
i. Educational Technologist	18,360	<u>6</u>	<u>9,180</u>	<u>4</u>	<u>6,610</u>	<u>3</u>	<u>5,350</u>
Total Salaries:		58.2	79,920	54.2	81,210	52.2	84,946
Fringe Benefits							
@ 15.5% (a, c, i)			5,079		4,972		5,093
@ 17.5% (b, d)			3,182		3,436		3,712
@ 14.5% (e, f, g, h)			<u>4,204</u>		<u>4,280</u>		<u>4,479</u>
Total Fringe:			12,465		12,688		13,284

BUDGET TABLE (Continued)

<u>PERSONNEL</u>		<u>01 YEAR</u>	<u>02 YEAR</u>	<u>03 YEAR</u>
Salary		79,920	81,210	84,946
Benefits		12,465	12,688	13,284
<u>CONSULTANTS</u>				
190 days @ 100		19,000	16,000	16,000
<u>TRAVEL/PER DIEM</u>				
International:				
Trainees: 5 RT tickets @ 835	4,175			
Per diem 70 days @ 40	2,800			
Staff: 13 RT tickets @ 835	10,855			
Per diem 310 days @ 40	12,400			
Domestic:				
Staff: 8 RT tickets @ 100	800			
Per diem 24 days @ 40	960			
		31,990	31,990	31,990
<u>OTHER DIRECT COSTS</u>				
Printing/reproduction	5,000			
Telephone/telegraph	1,000			
Books, Journals, Supplies	3,000			
		9,000	9,000	7,000
SUBTOTAL :		152,375	150,888	153,220
OVERHEAD @ 44%:		<u>67,045</u>	<u>66,391</u>	67,412
External Evaluation				<u>25,000</u>
TOTAL :		219,420	217,279	245,638

ESTIMATED COSTS OF OUTPUTS - YEAR 01

Output Elements	Core Staff		Consultants		Travel				Other Direct Costs Prorated	Overhead Prorated	TOTAL	Percent
	MM	\$	MD	\$	International Per diem Trans.	Domestic Per diem Trans.	Trans.	Trans.				
Curricula developed or revised at request of LDC's and in collaboration with Field Directors	13	20,822	60	6,000	6,000	4,175	480	400	1,750	17,436	57,063	26.01
Contractor trained LDC nationals to provide leadership in systematic instructional design for the health fields	14.2	23,173	20	2,000	2,800	4,175	480	400	2,250	15,522	50,800	23.15
Trained teachers of health professions by Field Directors with support from Contractor	12	18,304	60	6,000	6,400	6,680	-	-	1,1750	17,219	56,353	25.68
Adapt, field test and publish a simplified version of text <u>Systematic Course Design for the Health Field</u> and a <u>Teacher's Manual</u> for the LDC's.	19	30,086	50	5,000	-	-	-	-	3,250	16,868	55,204	25.16
SUBTOTALS	58.2	92,385	190	19,000	15,200	15,030	960	800	9,000	67,045	219,420	100.00

ESTIMATED COSTS OF OUTPUTS - YEAR 02

Output Elements	Core Staff		Consultants		Travel			Other Direct Costs Prorated	Overhead Prorated	TOTAL	Percent	
	MM	\$	MD	\$	International Per diem Trans.	Domestic Per diem Trans.	Trans.					
Curricula developed or revised at request of LDC's and in collaboration with Field Directors	13	22,488	50	5,000	6,000	4,175	480	400	1,750	17,729	58,022	26.70
Contractor trained LDC nationals to provide leadership in systematic instructional design for the health fields	13.2	23,995	20	2,000	2,800	4,175	480	400	1,750	15,664	51,264	23.59
Trained teachers of health professions by Field Directors with support from Contractor	12	19,770	50	5,000	6,400	6,680	-	-	1,750	17,424	57,024	26.25
Adapt, field test and publish a simplified version of text <u>Systematic Course Design for the Health Field</u> and a <u>Teacher's Manual for the LDC's.</u>	16	27,645	40	4,000	-	-	-	-	3,750	15,574	50,969	23.46
SUBTOTALS	54.2	93,898	160	16,000	15,200	15,030	960	800	9,000	66,391	217,279	100.00

ESTIMATED COSTS OF OUTPUTS - YEAR 03

Output Elements	Core Staff		Consultants		Travel				Other Direct Costs Prorated	Overhead Prorated	TOTAL	Percent
	MM	\$	MD	\$	International Per diem Trans.	Domestic Per diem Trans.	Trans.	Trans.				
Curricula developed or revised at request of LDC's and in collaboration with Field Directors	12	23,174	50	5,000	6,000	4,175	480	400	1,750	18,031	59,010	26.75
Contractor trained LDC nationals to provide leadership in systematic instructional design for the health fields	13.2	25,915	20	2,000	2,800	4,175	480	400	1,750	16,509	54,029	24.49
Trained teachers of health professions by Field Directors with support from Contractor	12	21,351	50	5,000	6,400	6,680	-	-	1,750	18,120	59,301	26.88
Adapt, field test and publish a simplified version of text <u>Systematic Course Design for the Health Field</u> and a <u>Teacher's Manual for the LDC's</u>	15	27,790	40	4,000	-	-	-	-	1,750	14,758	48,298	21.88
SUBTOTALS	52.2	98,230	160	16,000	15,200	15,030	960	800	7,000	67,418	220,638	100.00
External evaluation									25,000		245,638	

ESTIMATED COSTS OF OUTPUTS - YEAR TOTAL

Output Elements	Core Staff		Consultants		Travel			Other Direct Costs Prorated	Overhead Prorated	TOTAL	Percent	
	MM	\$	MD	\$	International Per diem Trans.	Domestic Per diem Trans.	Trans.					
Curricula developed or revised at request of LDC's and in collaboration with Field Directors	40	66,484	160	16,000	18,000	12,525	1440	1200	5,250	53,196	174,095	26.48
Contractor trained LDC nationals to provide leadership in systematic instructional design for the health fields	40.6	73,083	60	6,000	8,400	12,525	1440	1200	5,750	47,695	156,093	23.75
Trained teachers of health professions by Field Directors with support from Contractor	36	59,425	160	16,000	19,200	20,040	-	-	5,250	52,763	172,678	26.27
Adapt, field test and publish a simplified version of text <u>Systematic Course Design for The Health Field and a Teacher's Manual for the LDC's.</u>	50	85,521	130	13,000	-	-	-	-	8,750	47,200	154,471	23.50
SUBTOTALS	166.6	284,513	510	51,000	45,600	45,090	2,880	2,440	25,000	200,854	657,337	100.00
External evaluation								25,000			682,337	

APPENDIX A

Services to date:*

History of AID Harvard Relationship

Courses to prepare teachers for the health professions began at Harvard School of Public Health in 1956. Informal seminars involving 10-12 students evolved into a more formal program involving 25 students in 1968 and 85 students in 1972, the time when AID first began to support the project.

The following course offerings have been available to students in recent years.

- Introduction to Teaching Community Medicine and Public Health
- Curriculum Design
- Teaching Preventive and Social Medicine in the developing countries.
- Seminars on Educational Policy to prepare teachers of the allied health professions, public health and dentistry.

AID Support Phase I: Materials Development

An initial contract between Harvard and AID, July 1972 - June 1974, called for the preparation of curriculum development materials suitable for health professional training courses in LDCs.

Systematic Course Design Method

The materials development phase of the AID/Harvard relationship produced a methodology for systematic course design. This method, which is described in detail below, was developmentally tested with three generations of Harvard School of Public Health students. A non field-tested Systematic Course Design for the Health Fields was published in September 1974.

In developing a course (using the model), instructors first outline the professional responsibilities students will be expected to

*This section describes CEDH activities while the Center was at Harvard University. The Center moved to Boston University in July, 1976.

assume when training is completed. This listing of duties is then checked with active practitioners in the field to assure the responsibilities are accurately defined.

Following a refinement of the responsibilities listing, instructors then develop behavioral statements of terminal, intermediate, and entry level competencies expected of students in the classroom--statements familiarly known as "behavioral objectives." Finally instructors specify evaluation and instructional activities for each objective and prepare the syllabus.

An unusual feature of the systematic course design "model" is that it reverses the order in which courses usually are prepared. Course content and hours of instruction are specified only after a preliminary analysis of the student's post-training performance requirements are completed. Thus, the procedure ensures that the courses will be "competency-based"--that is, responsive to the "real world" demands of the position which the health worker will assume.

The innovative format of Systematic Course Design also provides for individualization of instruction. The text is divided into four major units; Unit A describes the model; Unit B describes implementation of the model and provides multiple examples with a series of programmed exercises focused on key aspects of the model; Unit C, a reference section, summarizes alternative methods and techniques used in the process of designing and evaluating instruction with advantages, disadvantages, and annotated bibliographies; and, a final section includes a "guidance system" which presents the model in capsule form for review of the main procedures by course designers.

Phase II: Field Test

On completion of the text Systematic Course Design for the Health Fields, AID contracted with CEDH to field test the materials in six developing countries: Cameroon, Colombia, Honduras, Malaysia, Lebanon and Vietnam (Because of the fall of Vietnam, Nepal was substituted as the sixth site). Systematic Course Design for the Health Fields was published by John Wiley and Sons, Inc. in October 1975. For purposes of these field tests, the book has been translated into Spanish and French. This second contract began July 1974 and will continue until June 1976.

Present international field testing of Systematic Course Design is a collaborative effort between CEDH staff members and LDC field directors who are teaching the Harvard course in their home countries. During the first 18 months of field testing, field directors have taught health professionals representing 28 health professions, including: nursing, primary medicine (physicians and health assistants), pharmacy, midwifery, health administration, and laboratory science.

Evaluation of each field site and resource support for each field workshop have been provided by CEDH staff members and associates.

Field directors were chosen because of their competence in course design as demonstrated by their performance in CEDH courses. Two field directors were chosen by their home institutions in collaboration with the local AID Mission. Both these individuals were given special training at Harvard to prepare them for their role in the field trials.

The field trial called for three stages:

Stage 1. Workshop at CEDH to train field directors in systematic course design.

Stage 2. Workshops at the field sites based on the Systematic Course Design model taught by field directors.

Stage 3. Courses taught by participants of Stage 2, using course designs prepared in Stage 2 workshops.

These stages are described in detail below.

1. Identification of graduates of the Center from the developing world who were both competent in systematic course design and willing to teach the course and assume the responsibility of becoming field directors in their own countries.
2. Negotiation of agreements with the field directors' home institutions to allow workshops on systematic course design to be taught and evaluated.
3. Participation of field directors in a two-week workshop to prepare them to teach the CEDH course in their own countries, (Stage 1).
4. Identification of participants to the workshops (Summer 1975-Spring 1976) willing to teach courses they had designed.
5. Teaching of the workshop by the field directors (Stage 2).
6. Evaluation of participants' course design products.
7. Follow-up of participants by observing them teaching their own courses based on the CEDH method. Follow-up also by means of questionnaires and interviews (Stage 3).

Colombia:

Because of the success of the CEDH workshop on Course Design, the Bogota field directors, Dr. Jaime Arias, Facultad de Medicina, Oficina Educacion Medica, Universidad Javeriana, Bogota and Dr. Francisco Yepes, Head, Bio-Medical Investigations Unit, Asociacion Colombiana de Facultades de Medicina have presented three workshops on course design at the Pontificia Universidad of Javeriana, Bogota. They also plan to give workshops at Universidad of Bucaramanga and Universidad of Cali. They are currently adapting the Spanish translation of Systematic Course Design for Latin American health professional trainers. LiMusa Publishing Co. in Mexico has agreed to publish this translation.

The board of directors of the Pan American Federation of Medical Schools (PAFAMS) plans to utilize the CEDH method after the basic text has been adapted for Latin American health professional trainers.

Honduras:

Dr. Jorge Haddad, Vice Rector, Health Sciences, University of Honduras, field director at Tegucigalpa, has already given a second workshop on systematic course design including 21 participants. Dr. Haddad, who is also Head of the Division of Human Resources, Ministry of Health, has developed a staff of five people to assist with curricular activities. A new curriculum for auxiliary nurses is being developed under the auspices of the Ministry of Health using the Systematic Course Design model.

Dr. Haddad has also served as a consultant in curriculum development for a new medical school in Ecuador. Dr. Haddad wrote: "and it is possible that a decision to follow the model will be reached

by the University, in which case I probably will be working with them in the field."

Malaysia:

Dr. Eddy Lo, Director of the Epidemiology Division and Malaria Evaluation Training Center, Institute of Public Health, Kuala Lumpur, conducted a workshop on systematic course design March 17-April 4, 1975. Six health professional schools in Malaysia were represented as well as the University of the Philippines School of Medicine.

Nepal:

Dr. Moin Shah, Dean, Institute of Medicine, Ministry of Education, asked CEDH Center staff to conduct workshops on course design and on teacher training at Kathmandu. These workshops for Institute of Medicine faculty have initiated curriculum development projects for a variety of health professionals including health assistants, auxiliary health workers, assistant nurse midwives, and nurses. (See also Nepal Report AID/csd 3613.)

Cameroun:

Dr. Lazare Kaptue, Professeur Agrege d'Immunologie Hematologie et Maladies de Sang Centre Universitaire des Sciences de la Sante, field director in Yaounde, has been asked to conduct a course design workshop at L'Ecole Nationale de Sante et d'Action Sociale Libreville, Gabon.

Lebanon:

The Lebanon workshop in systematic course design occurred July 14-28, 1975. Following the workshops the CEDH methodology was utilized by Dr. Nabil Kronfol, Assistant Professor Pediatrics - Public Health,

American University of Beirut, field director, in workshops he conducted in the Sudan, Saudi Arabia and the Free University of Iran. (Funding for these workshops was not from this contract. He has also been invited to aid in health manpower training in Sudan, Egypt and Jordan.)

Table I
 Participants and Products
 AID CEDH Workshops on Systematic Course Design
 April 1, 1976

<u>Location</u>	<u>Participants</u>	<u>Products</u>	<u>Courses Taught</u>
Cameroon	13	9	1
Colombia	20	20	9 *
Honduras	23	18	14
Lebanon	14	12	8
Malaysia	23	23	16
Nepal	29	27	27
Vietnam	<u>45</u>	<u>42</u>	<u>?</u>
	167	151	75

*Two other individuals are planning to teach their courses during 1976.

Multiplier Effect

To date the field trial has resulted in eight additional workshops offered by field directors. Names of field directors conducting these workshops, locations and number of participants, are summarized below (See Table II).

In addition, field directors designed and taught an additional 10 courses using the Systematic Course Design Model.

Table II

AID/Harvard Field Trial

Additional Workshops on Systematic Course Design Conducted by Field Directors

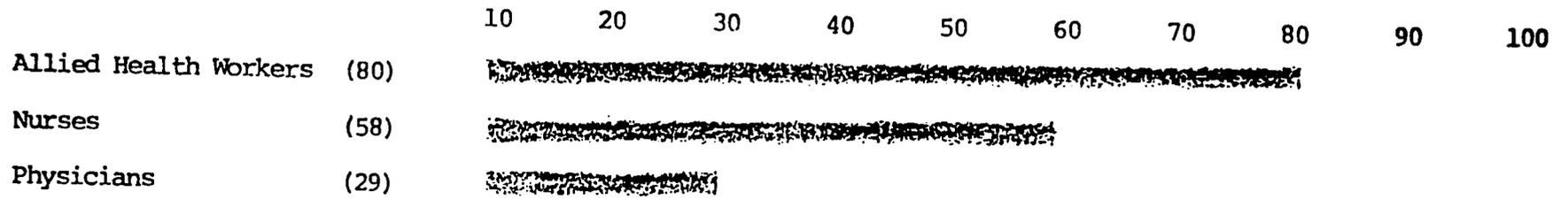
<u>Field Director</u>	<u>Location</u>	<u>Dates</u>	<u>No. of Participants</u>	<u>Participants' Teaching Field</u>
1. Kronfol	Tehran, Iran	March 9-14, 1975	8	Allied Health
2. Kronfol	Beirut, Lebanon	April 5-30, 1975	1	Nursing
3. Kronfol	Bahreïn	Feb. 15 - March 2, 1976	12	Nursing
4. Arias, Yepes	Bogota, Colombia	July, 1975	10	Internal Med.
5. Arias, Yepes	Bogota, Colombia	September, 1975	8	Preventive Med.
6. Arias, Yepes	Bogota, Colombia	September, 1975	10	Pediatrics
7. Haddad	Tegucigalpa, Honduras	January 6-17, 1975	23	Nursing Ed., X-ray & Anesthesiology Techs.
8. Haddad,	Tegucigalpa, Honduras	June 23 - July 4, 1975	21	Nursing Ed. & Psychology
9. Massey, Vanderschmidt	Kathmandu, Nepal	July 9-20, 1975	<u>11</u>	Allied Health
			104	

AID/Harvard Field Trial
WORKSHOPS ON SYSTEMATIC COURSE DESIGN

<u>Location</u>	<u>Field Director</u>	<u>Inclusive Dates</u>
1. Bogota, Colombia	Jaime Arias, M.D. Francisco Yepes, M.D.	December 9 - December 13, 1974
2. Tegucigalpa, Honduras	Jorge Haddad, M.D.	January 13 - January 23, 1975
3. Saigon, Vietnam	Duong Trong Thieu, M.D. Le Khac Dieu	February 24 - March 7, 1975
4. Kuala Lumpur, Malaysia	E.K C. Lo, M.D.	March 17 - March 28, 1975
5. Yaounde, Cameroon	Lazare Kaptue, M.D.	March 27 - April 8, 1975
6. Kathmandu, Nepal		June 20 - July 18, 1975
7. Beirut, Lebanon	Nabil Kronfol, M.D.	July 14 - July 24, 1975

Number of Participants by Profession

AID/CFDH Field Trial Workshops on Systematic Course Design



Units of Instruction designed by Field trial Participants for training of various categories of Paramedical and Medical Workers:‡

A. Health Assistants:

- *1. The Anatomy of the Digestive System
- **2. Health Post Health Committee (two units developed)
- *3. X-ray Physics
- *4. Performing Minor Wound Suturing in Emergency Situations
- *5. Medical Terminology
- *6. Poisonous and Nonpoisonous Snakes of Nepal
- *7. Group Discussion Methods
- *8. Body Electrolytes
- *9. Identification of Medicinal Plants
- *10. Techniques of Injecting TABCh
- *11. Supervision of Auxiliary Health Workers in Performance and Interpretation of Simple Lab Tests
- *12. Construction of Sanitary Wells in Rural Areas
- *13. Preparation of Simple Visual Aids
- *14. Control of Waterborne Disease in Rural Areas
- *15. Intestinal Parasites: Helminths
- 16. Sewage Treatment in Rural Areas
- 17. Communicable Disease Nursing
- 18. Nutrition
- *19. Antenatal Services for Pregnant Mothers
- 20. Patient's Environment
- 21. Gram Staining in Bacteriology
- 22. Home Care for Mother and Child

B. Nurses

- 1. Surgical Nursing
- 2. Ethics in Nursing
- 3. Postoperative Nursing
- 4. Emergency Nursing
- *5. Nursing Care of the Newborn
- *6. Psychological and Cultural Aspects of N
- *7. Domiciliary Delivery Procedures
- *8. Nursing Care of the Unconscious Patient
- *9. Home Visiting
- 10. Care in Thoracic Surgery
- *11. Types of Leadership
- 12. Public Health Nursing Administration
- 13. Surgery

* Course Taught

‡ 1 Course taught, but not shown on records: Public Health Practice

- *14. Diagnosis and Care of Illnesses
- *15. Mother and Child Illnesses
- *16. Technique of Nursing Care
- 17. Alimentation by a Nasal Tube
- *18. Oral Administration of Medications
- 19. TP Biochemistry
- *20. Postanesthesia Nursing Care
- *21. Administration of Medicines
- *22. Diarrheas
- 23. Microbiology
- 24. Parenteral Administration of Drugs
- *25. Preliminary Examination of Patients for a Surgical Intervention
- *26. Care of a Patient with Cardiovascular Disturbances
- 27. Insertion of a Nasogastric Tube
- *28. MCH Nursing
- *29. Nursing Process
- *30. Role of the Staff Nurse in Health Education
- *31. The Preoperative Patient
- *32. PHN Administration
- *33. A Course on Antenatal Care for Pregnant Mothers
- 34. Management and/or Supervision of a Normal Labor
- 35. Care of Patient in Psychiatric Nursing
- *36. Fundamentals of Nursing: Meeting the Needs of the Patient
- *37. A Course in the Use of the Snelling Chart
- *38. Introduction to Pediatric Nursing
- 39. Communication
- *40. Problems in FP Communication

C. Midwives

- 1. Supervision of District, Village, and Hamlet Maternities
- 2. Postnatal Care and Newborn Baby Care
- 3. Prenatal Care
- 4. Motivation for Family Planning
- 5. Nutrition for Pregnant Mothers
- 6. Baby Care
- 7. Obstetrical Maneuvers

D. Nurses Instructors/Tutors

- *1. Audiovisual Aids and Procedures
- 2. Methods of Teaching

E. Public Health Inspectors

- *1. Ancillarval Operations
- 2. Chlorination of Open Wells in Health District

F. Auxiliary Health Workers Rural Areas

- *1. Post Anesthesia Nursing Care
- *2. Conducting Antenatal Clinics Within the MCH Clinic
- *3. Personal Hygiene Measures
- 4. Nutritional Disorders Among Children Under Six
- 5. Accident Prevention in Children 0-4 years
- 6. Signs and Symptoms of Some Common Illnesses in Children
- 7. Prenatal Care
- 8. Fundamentals of Nursing
- *9. Preparation of the Perineal Area Prior to Delivery
- *10. Role of Auxiliaries in Prevention of Communicable Diseases
- *11. Continuing Education of Auxiliaries
- 12. Administration of Nutrition Services
- 13. Participation of Auxiliaries in Community Programs
- *14. Supervision of Direct Care of Patients by Auxiliaries
- 15. Group Discussion
- 16. Preparation of a Nursing Bag for Home Visit
- 17. Community Health Nursing
- 18. TB Patient at Home
- 19. Communicable Diseases
- 20. VD Control
- 21. Pharmacology
- 22. Primary Care Provider for Rural Iran - (Four Units Developed)
- *23. Concept of Maternal and Child Health in Rural Areas
- *24. Health Administration
- *25. Diseases in Prematures

G. Hospital Assistants

- 1. Postoperative Surgical Nursing Care

H. Dental Technicians

- 1. Dental Anatomy
- 2. Dental Health Education

I. Dental Assistants

- 1. Training of Consultant Auxiliaries

J. Nutritionists

- *1. Basic Concepts of Nutrition
- *2. Basic Principles of Pediatrics and Infantile Pediatrics

K. Laboratory Technicians

- *1. Basic Clinical Laboratory Practice
- 2. Collecting and Processing Clinical Specimens for Bacterial Examination
- 3. Performing the Widal Serological Test
- 4. Quality Control in Clinical Chemistry
- 5. Bacteriological Examination of Specimens
- 6. Techniques of Toxicology in Rural Areas
- *7. Special Bacteriology
- *8. Basic Clinical Chemistry

L. Laboratory Assistants

- *1. Refresher Course on Malaria Microscopy

M. Pharmacy Technicians

- *1. Dispensing Contaminant-free Mixtures of the Same Dosage

N. Pharmacy Assistants/Dispensers

- 1. Preparation of Eye Drops
- 2. Filling Prescriptions in Hospital
- *3. Systematic Course Design for Trainee Dispensers

O. Radiography Technicians

- *1. Preparation of a Patient for IV Urography
- *2. Therapeutic Radiography

P. Ayurvedic

- 1. Collection of Medicinal Plants

Q. Hospital Administrators

- **1. Hospital Administrators (2 units developed)

R. Medical Students

- 1. Histology and Embryology
- 2. Histo-embryology
- 3. Obstetrics and Gynecology
- *4. Pathology

- *5. Internal Medicine Pediatrics
- 6. Neurology
- *7. Physiology for Medical Students
- 8. Pediatrics
- 9. Neurophysiology for 1st year Medical Students
- 10. Pharmaceutical Chemistry
- *11. Respiratory Tract Illnesses
- 12. Health Planning
- *13. Cellular Response to Trauma
- 14. Medical Sociology
- 15. Biochemistry, Human Biology
- 16. Epidemiology Investigation
- 17. Urological Examination and Diagnosis
- *18. Infectious Diseases

S. Dental Students

- 1. Dental Pharmacology

T. Pharmacists

- 1. Pharmaceutical Chemistry
- 2. Fluid Pharmaceutical Suspensions and Emulsions
- 3. General Pharmacology

U. Basic Scientists

- 1. Nucleic Acids

V. Elementary School Teachers

- 1. Developing Self-Instructional Modules

W. College Undergraduates

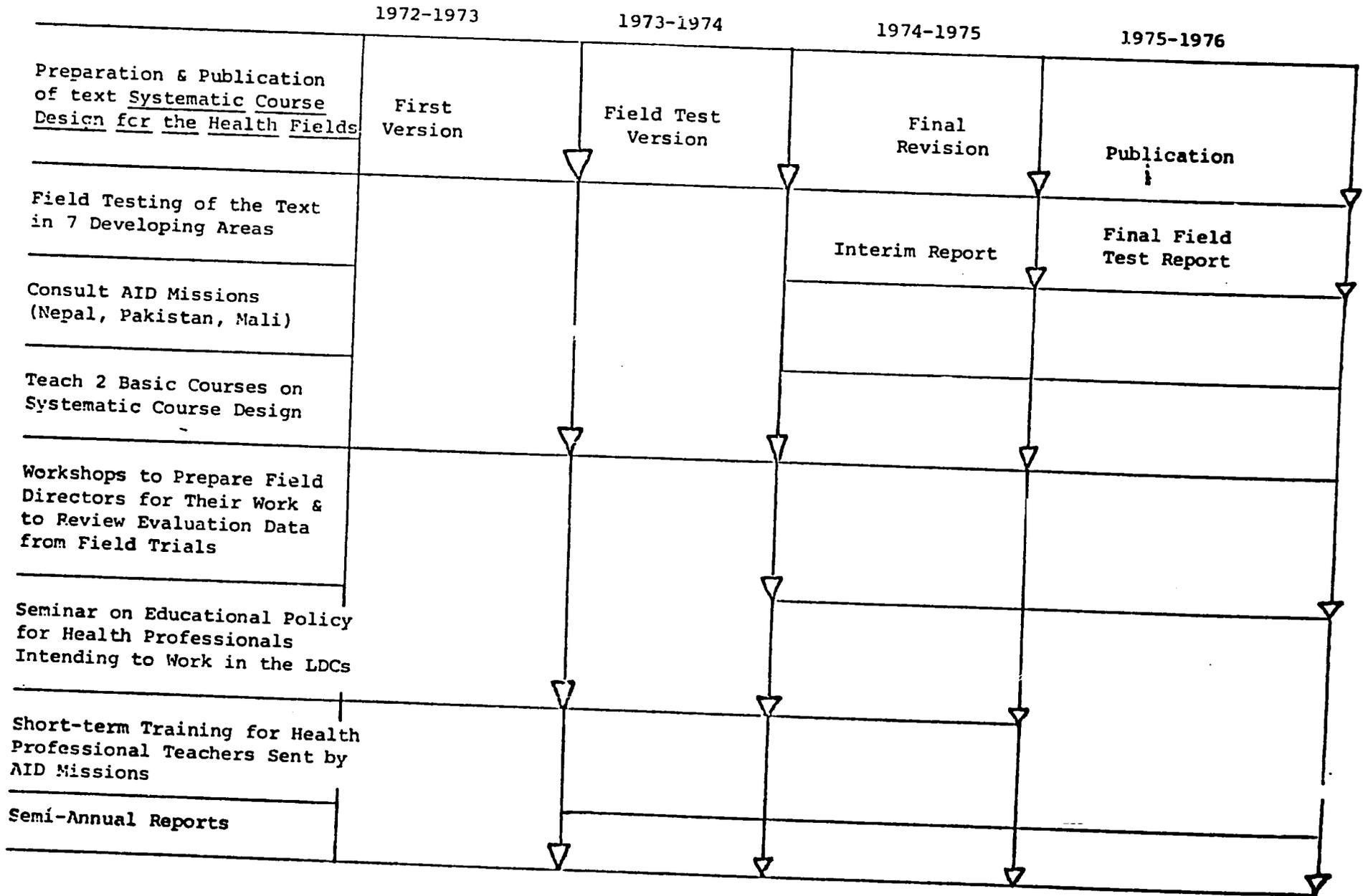
- *1. Health Services Administration

AID/CEDH FIELD TRIAL WORKSHOP ON SYSTEMATIC COURSE DESIGN

COURSES TAUGHT BY TARGET POPULATION

Nurse	(26) -----
Health Assistant	(17) -----
Auxiliaries	(10) -----
Medical Student	(6) -----
Laboratory Technician	(3) ---
Radiology Technician	(2) --
Nutritionist	(2) --
Hospital Administrator	(2) --
Nurse Instructor/Tutor	(1) -
Public Health Inspector	(1) -
Laboratory Assistant	(1) -
Pharmacy Technician	(1) -
College Undergraduate	(1) -

Gantt Chart Harvard USAID Contracts 1972-1976



UNITED STATES GOVERNMENT

Memorandum

TO : Memo to The Files

DATE: December 12, 1975

FROM : *M. M. Shutt*
TA/H, M. M. Shutt, M.D.

SUBJECT: Harvard PAR - June, 1975

The attached PAR review was prepared by Dr. Lloyd Florio. No log frame matrix apparently was completed. Accordingly, comments in the PAR which refer to "the attached matrix" are interpreted by me to either indicate that 1) Dr. Florio intended to prepare a log-frame and did not do so, or 2) that he was in fact referring to the PROP in response to questions dealing with the matrix and did not so indicate.



UNITED STATES GOVERNMENT

Memorandum

Proj. No. 9310239
PN-

(11) 239

TO : AA/TA, Mr. Curtis Farrar

DATE: July 27, 1976

FROM : TA/PPU, Carl R. Fritz *C.R.F.*

SUBJECT: PP Approval - Teaching Community Medicine, Phase III

Problem: Your approval is requested for the attached Project Paper, "Teaching Community Medicine, Phase III," authorizing TQ funding of \$437,000 and providing FY '78 funding of \$246,000. Total cost of the three year project is \$683,000.

Discussion: It is proposed that a field service contract be given to the Center for Educational Development in Health (CEDH), now located at Boston University, to respond to requests from LDC's to teach them methodology for applying modern educational technology in training the trainers of the health related professions. The methodology teaches the use of systematic course design and provides for initial seminars and workshops and follow-up consultations to assist and evaluate training. Concurrently, an instructors manual will be prepared, and the Systematic Course Design Manual will be simplified as appropriate for specific training situations.

Fiscal year 1978 is the last year of funding for this project. It is fully expected that by that time the methodology will be adequately developed and there will be sufficient regional and international awareness of benefits derived from this activity that future funding for additional activities will be assumed by Regional Bureaus, Missions, other Agencies such as WHO and IDRC and countries themselves.

The CEDH earlier projects developed and field tested a method of "training of trainers" who teach medical and health personnel. The Center taught the methodology to trainers in seven LDC situations who then designed courses for health personnel based on task analyses in the local situation. A manual of Systematic Course Design was developed and is in the final stage of evaluation based on field testing.

Preliminary analysis of the field tests at a Field Directors Conference held at Harvard in April substantiates the assumption that the systematic course design method is useful and applicable to training teachers of the health professions in LDC's. Requests for additional assistance from LDC's have already been



received. Regional Bureaus were generally strongly supportive of the project during the R&DC review, although NE Bureau representatives thought it might be 2-3 years before the NE countries would utilize project services to any significant degree

The CEDH was established at Harvard University but moved in July 1976 to Boston University. The Center felt that its interdisciplinary nature gave them no firm identity and attendant faculty support within the Harvard compartmentalized structure. Since the CEDH is involved primarily with particular training methodology and activities, it does not fit the pure-research orientation and copious production of publications associated with Harvard. Accordingly, CEDH was responsive to overtures from Boston University to establish the center in the Medical Center where full B.U. faculty support would be forthcoming. Faculty members are given joint appointments in the Medical and Education faculties.

Changes recommended in the attached minutes of the R&DC on July 13, 1976 have been incorporated in the project.

A memorandum for justification for non-competitive procurement of contractor will be sent to CM/COD/IT.

Recommendation: 1. That you approve, by signing the PP Facesheet page 2, the attached "Teaching Community Medicine, Phase III" Project Paper authorizing the obligation of \$437,000 TQ funds and providing \$246,000 of FY'78 funds subject to annual PAR's and an external evaluation before the FY'78 funding period.

2. That you approve the Environmental Threshold Determination. Appendix C of the PP.

Attachments: PP Teaching Community Medicine, Phase III
TAB-A Research and Development Committee Meeting
July 13, 1976.