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AID 1350-1 (7-71)

PIO/T

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES

1. Cooperating Country: World wide 168412

Page 1 of 12 Pages

2. PIO/T No.: 931-11-690-090-73

3. [X] Original or Amendment No. ____

4. Project/Activity No. and Title: Cost Methodologies-Education Technology No. 931-11-690-090 (312)

DISTRIBUTION

5. Appropriation Symbol: 72-11X1025

6.A. Allotment Symbol and Charge: 425-31-099-00-70-61

6.B. Funds Allotted to: [X] A.I.D./W [ ] Mission

7. Obligation Status: [X] Administrative Reservation [ ] Implementing Document

8. Funding Period (Mo., Day, Yr.) From 6/1976 To 6/30/77

9.A. Services to Start (Mo., Day, Yr.) Between 15 June 76 and 15 July 76

9.B. Completion date of Services (Mo., Day, Yr.) 30 June 78

10.A. Type of Action: [X] A.I.D. Contract [ ] Cooperating Country Contract [ ] Participating Agency Service Agreement [ ] Other

10.B. Authorized Agent: CM/COD

Estimated Financing $1.00=		(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date
11. Maximum A.I.D. Financing	A. Dollars		$100,000		$100,000
	B. U.S.-Owned Local Currency				
12. Cooperating Country Contributions	A. Counterpart			FUNDS RESERVED BY [signature]	
	B. Other			POSTED 4/28/76 SER/FM/CSD	

13. Mission References

14. Instructions to Authorized Agent

AID/W is authorized to secure the services of a contractor through the regular RFP competitive bidding process.

15. Clearances — Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate
TA/EHR James Chandler [signature]
TA/EHR Wilbur Wafflow [signature]

B. Funds for the services requested are available
TA/PPU, Mary Mozynski [signature] 4/22/76

C. The scope of work lies within the purview of the initiating and approved Agency Programs
TA/PPU, Robert Mills [signature]

D.

E.

F.

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to

Signature and date:

Title:

17. For the Agency for International Development
TA/PPU, Carl Fritz
Signature: [signature]
Title:

18. Date of Signature: 4/26/76

GPO 867-266

AID 1350-1X (9-70)	Cooperating Country [illegible]	PIO/T No.	Page 2 of 12 Pages
PIO/T	Project/Activity No. and Title [illegible]		

SCOPE OF WORK

19. Scope of Technical Services

A. Objective for which the Technical Services are to be Used

The overall objective of the requested services is to [illegible] and the use of economic measurement tools in educational planning, decision making and management in the LDCs.

B. Description

The sub-objective of the requested services related to this project is to provide the LDCs with the economic measurement tools for planning, and managing educational technology programs and to increse the usefulness and use of these tools.

The specific purpose of the requested services is to provide the LDC and other (e.g., AID) planners and decision makers with published methodologies and guidelines which are:

1. Required in order to make decisions about the costs of educational technology projects;

2. Required in order to make decisions concerning cost effectiveness/benefits of alternative educational technology systems;

C. Technicians

(d) Duration of Assignment (Man-Months)

The composition of the Technical Staff will probably be from the following disciplines(fields of specialization):

To be determined

Educational Economist, Education Technology Specialist, Systems Analyst, Educational Measurements, Educational Evaluator, Educational Planning, and Research Assistants.

(2) Duty Post and Duration of Technicians' Services Contractor's duty post: United States. Visits and some work will be done by contractor and contractor consultants in and with several LDCs. LDC selection for site visits will be contingent upon consultations with AID/W, Missions and the LDCs.

(3) Language requirements

French and Spanish

(4) Access to Classified Information

None.

(5) Dependents ☐ Will ☒ Will Not Be Permitted to Accompany Technician

D. Financing of Technical Services

(1) By AID - $200,000

(2) By Cooperating Country –

AID 1350-1X (9-70) PIO/T	Cooperating Country: World wide	PIO/T No.	Page 3 of 12 Pages
	Project/Activity No. and Title: Cost Methodologies-Education Technology No. 931-11-690-090		

20. Equipment and Supplies *(Related to the services described in Block 19 and to be procured outside the Cooperating Country by the supplier of these services)*

A. (1) Quantity	(2) Description	(3) Estimated Cost	(4) Special Instructions
N/A			

B. Financing of Equipment and Supplies N/A

(1) By AID – $ (2) By Cooperating Country –

21. Special Provisions

☒ A. This PIO/T is subject to AID (contracting) (PASA implementation) regulations.

☒ B. Except as specifically authorized by AID, or when local hire is authorized under the terms of a contract with a U.S. Supplier, services authorized under this PIO/T must be obtained from U.S. sources.

☒ C. Except as specifically authorized by AID/W, the purchase of commodities authorized under this PIO/T will be limited to the U.S. under Geographic Code 000.

☐ D. Other *(specify)*:

22. Reports by Contractor or Participating Agency *(Indicate type, content and format of reports required, including language to be used if other than English, frequency or timing of reports, and any special requirements)*

The following reports will be prepared for use by the project's advisory panel (comprised of staff from AID/W, Missions and LDCs) as part of the specific evaluation and advisory process.

1. The contractor will provide to AID/W at the end of 4 months after contract initiation:
   a. (twenty-five) (25) copies of a report concerning Phase I operations to include:
      (1) work done on preparation of the methodological manual;
      (2) the development of the typology and its use for site selection;
      (3) correspondence with Missions and LDCs re: collaboration.
   b. (twenty-five) (25) copies of a report of Phase II activities to include plans and preparation for the "state of the art" study for cost/effectiveness/benefit.

2. At the end of 9 1/2 months after contract is signed, the contractor should submit to AID/W:
   a. (twenty-five) (25) copies of a report of Phase I operations to include:
      (1) results of field tests operations including Mission, LDC and AID/W collaboration;
      (2) the draft dissemination plan.
   b. (twenty-five) (25) copies of report of Phase II operations to include:
      (1) The findings and recommendations resulting from the "state of the art" study.

(continued pg. ___

23. Background Information *(Additional information useful to Authorized Agent and Prospective Contractors or Participating Agency; if necessary cross reference Block 19.C(4) above.)*

TAB/EHR

24. Relationship of Contractor or Participating Agency to Cooperating Country and to AID

A. Relationships and Responsibilities

AID/W TA/EHR

B. Cooperating Country Liaison Official

N/A

C. AID Liaison Officials

TA/EHR, James Chandler, Office Director
TA/EHR, William R. Charleson, Specialist
TA/EHR, Wilbur M. Waffle, Project Manager

AID 1350-1X (6-63)

PIO/T

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES

☒ Worksheet ☐ Issuance

Cooperating Country: Worldwide

PIO/T No.:

Project/Activity No. and Title: Cost Methodologies-Education Technology No. 931-11-690-090

LOGISTIC SUPPORT

28. Provisions for Logistic Support

A. Specific Items (Insert "X" in applicable column at right. If entry needs qualification, insert asterisk and explain below in C. "Comments") N/A

	In Kind Supplied By		From Local Currency Supplied By	
	AID	Cooperating Country	AID	Cooperating Country
(1) Office Space				
(2) Office Equipment				
(3) Housing and Utilities				
(4) Furniture				
(5) Household Equipment (Stoves, Refrig., etc.)				
(6) Transportation in Cooperating Country				
(7) Interpreter Services				
Other: (Specify) (8)				
(9)				
(10)				
(11)				
(12)				
(13)				
(14)				
(15)				

B. Additional Facilities Available From Other Sources

N/A

C. Comments

3. To provide those LDCs requiring the costing methodologies with methods and with guidance for estimating cost/effectiveness of employing such methodologies.

B. Description of Project

I. This project has two phases:

a. Phase I of one year's duration has two parts:

Part I: Using the work done in a previous GTS project contract (No. 931-11-999-987-73 AID/TA/EHR) as a starting point, this part is directed toward the development of methodologies for costing educational technology programs; to the testing of the methodologies through field work undertaken collaboratively with LDCs and Missions; and the preparation and dissemination of the methodologies and field test results by means appropriate for use by LDC planners and decision makers.

Emphasis will be given to the development and testing of cost methodologies in a range of country settings which typify significantly different levels of analytical need and capacity in the area of costing educational programs employing educational technology. The range of analytical needs and capacities will be developed as a representative typology. There is a feeling expressed by knowledgeable and experienced AID staff that typologies developed appropriate for various levels of LDCs development will cluster in three or four representative groupings based on LDC's present levels of analytical needs and capacities. These needs and capacities will be investigated and developed in phase I by the contractor with the concurrence of the project review panel. Needs will be described in policy terms; capacity of available data base, personnel, hardware, software, etc. Decisions concerning the sites selected will be based upon criteria developed by the contractor and approved by AID/W.(1) When possible, efforts will be linked to providing cost analysis within existing educational projects funded by the agency. The timing and phasing of this part of the project is shown in the attached phasing chart. (See page 12)

This part covering all of II-A-1 and parts of II-A-3,4,5, and 6 (services to be provided) should require approximately 1 year (12 months) from the signing of the contract.

b. Part II of the project will cover the two-year project span divided into Phase I and Phase II. The first half of Part II (first year) will be concluded concurrently with the end of Phase I, Part I. At this point, the implementation of the remaining part of part II (phase II) (2nd year) is contingent upon the approval of the AID/W review panel, who will have reviewed the work to date at this point in the life of the project.

Part II of the project programmed for the two-year life of the project will be devoted to:

(1) An advisory review panel comprised of representatives of each of the regional bureaus, PPC, of Missions and LDCs where appropriate and the contractor as a participant will have the overall responsibility for the evaluation of contractor performance, for providing guidance and advice as to project direction, and for judgment and input as to changes in the project's scope, nature and termination during its implementation.

b. The development of methodologies for making cost/effectiveness and cost/benefit analysis of educational projects; the testing of the methodologies through field work undertaken collaboratively with LDCs and Missions; and the preparation and dissemination of the methodologies and field test results by means appropriate for use by LDC planners and decision makers. As in the development of cost methodologies (part I), emphasis will be given to producing methodologies which are appropriate for a range of LDC capacity. It is expected that the criterial developed in the first part of the project will serve for site selection in part II. The timing and phasing of this part of the project is also shown in the attached phasing chart. (See page 12).

This part covering all of II-A-2 and part of II-A-3,4,5, and 6 (services to b provided following section) will cover the entire two-year period of the contract. During the first year of Phase II running concurrently with Phase I operations, the contractor will do a state of the art study (cost effectiveness/benefit) and prepare an outline for a cost effective/benefit methodologies manual. At this point in time in project implementation; e.g., one year after initiation, Phase I will have been completed and Phase II will be at roughly the same state in development as Phase I was at project initiation. This is because the state of the art study and an outline for a manual on methodologies for costing educational technology programs was done under the previous GTS contract mentioned.

Phase II has one part of one year (the 2nd year) of the project. This phase covers the second half of Part II. It will start with preparation of the cost effective/benefit methodology manual, the field testing if these methodologies, the preparation of a dissemination plan, the revision of the manual based on field testing, the write-up of the manual in final form, conducting the seminars and in disseminating the manuals. (The phase I activities in part I and the phase II activities part I and II are listed in the phasing chart page 12.)

II. Description of Services Required.

A. Services to be provided

Technical Services are sought through competitive bidding to providing:

1. A set or sets of published methodologies for estimating the cost of educational technology projects to include (for Phase I: Part I).

Indicate block numbers.

Use this form to complete the information required in any block of a PIO or PA/PR form.

a. A range of methodologies which are related and relatable to a specified range of analytical needs and capacity in LDCs; (See C below).

b. Detailed case studies of specific applications of the methodologies;

c. A procedural guide for assisting users to determine which of the offered methodologies is most appropriate for a particular country's analytical needs and capacities.

2. A set or sets of published methodologies for estimating the cost effectiveness/benefit of educational technology projects (Part II, Phases I and II) to include;

a. A range of methodologies which are related and relatable to a specified range of analytical needs and capacities in LDCs;

b. Detailed case studies of specific applications of the methodologies;

c. A procedural guide for assisting users to determine which of the offered methodologies is most appropriate for a particular country's analytical needs and capacities.

3. A report on the development of a typology of analytical (costs and cost effectiveness/benefit) needs and capacities and its implication with respect to the project's site selection for field trials of methodologies; seminar site selection and follow-on recommendations;

4. Not to exceed four (4) seminar workshops (size, number and content to be determined during the course of Phase I in consultation with the project's advisory committee);

5. The provisions of advisory services to other planned or on-going educational technology projects. That it, it is expected that the provision of methodological guidelines and guidance (during and upon completion of Phase I and Phase II), an output of this project, will be used as inputs to on-going or planned educational technology projects (when called upon and funded by such other technology projects).

6. The contractor will be responsible for developing a dissemination plan for the published manual(s) of methodologies and for the actual dissemination of the manual(s). The exact format that the manuals will take will depend on experience and feedback gained during parts of this project. In any case the manula should contain as a minimum;

a. The methodologies in appropriate form for use

b. A procedure for selecting the appropriate methodology for a

Indicate block numbers.

Use this form to complete the information required in any block of a PIO or PA/PR form.

b. (continued) given LDC setting
c. Guidelines as to how to apply the methodologies
d. The case studies developed during the history of the project and their results
e. The results of the seminars conducted during the project and
f. The provision for a limited amount of short term academic training for these key LDC decision makers who may require such services in order to apply the methodologies developed to the optimium. In addition, in-country training will be provided as needed. The amount of both the academic and in-country training will be reviewed by the project review panel and the LDCs involved.

III. Suggested operational format for contractor

The following is a suggested operational schedule that could be used as guidelines for the contractor in implementing the project, following the signing of a contract.

Part I:

1. Adaption of an implementation plan for contractor, AID/W, and the field.
2. Familiarization with work done in previous GTS contract.
3. Field test sites selected.
4. Field tests completed.
5. Revision of methodologies completed based on field tests feedback.
6. Progress report submitted to AID/W.
7. Seminars set up.
8. Seminars completed.
9. Feedback from seminars incorporated in methodologies revision.
10. Manuals of methodologies completed.
11. Manuals disseminated.
12. Evaluation of Phase I work.

Part II:

1. Part I work plan finalized relating to Part I activities where possible.
2. Draft methodologies provided to AID/W and the field.
3. Field test sites selected.
4. Field tests completed.
5. Evaluation of field tests.
6. Submission of progress report.
7. Revised methodologies provided incorporating feedback from field tests and evaluation.
8. Seminars set up.
9. Seminars completed.
10. Seminar evaluation completed.
11. Final methodologies completed incorporating feedback from seminars and evaluation.

AID-1350-1X (7-69) CONTINUATION SHEET	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	[X] Worksheet [ ] Guidance	PAGE 10 OF -- PAGES
FORM SYMBOL	TITLE OF FORM	1. Cooperating Country Worldwide	2.a. Code No.
		2.b. Effective Date	2.c. [ ] Original OR Amendment No:
		3. Project/Activity No. and Title Cost Methodologies-Education Technology No. 931-11-690-090	

Indicate block numbers.	Use this form to complete the information required in any block of a PIO or PA/PR form.
	Part II (Continued) 12. Manual of methodologies completed. 13. Manuals disseminated. 14. Evaluation of Phase II completed.

22

3. At the end of 11½ to 12 months after signing the contract, the contractor will submit to AID/W;

a. twenty-five (25) copies of final report for Phase I to include the following in addition to other information that the contractor may wish to submit:

(1) Revision of manual based on field test results and feedback;
(2) Write-up of final manual and field test studies;
(3) Dissemination activities - status of dissemination process and results of workshops and seminars;
(4) Copies of reports or information on the seminars and workshops.

b. Twenty-five (25) copies covering the first year's work in Phase II. This report should include in addition to information as project progress, highlight, problems etc., copies of the draft outline for the proposed manual for methods for cost/effectiveness and cost benefits for programs employing educational technology.

4. At the end of 16 months, the contractor will provide AID/W;

a. Twenty-five (25) copies of a report of Phase II covering the first four months of the second year to include:

(1) Work done on preparation of the methodologies manual;
(2) The development of a typology and its planned use for site selection
(3) Correspondence with missions and LDCs re: collaboration.

5. At the end of 9½ months of the second year or 5½ into the second year, the contractor should provide AID/W:

a. Twenty-five (25) copies of a report on Phase II operations to include:

(1) Results of field test operations including Missions, LDC and AID/W collaboration;

(2) Draft dissemination plan.

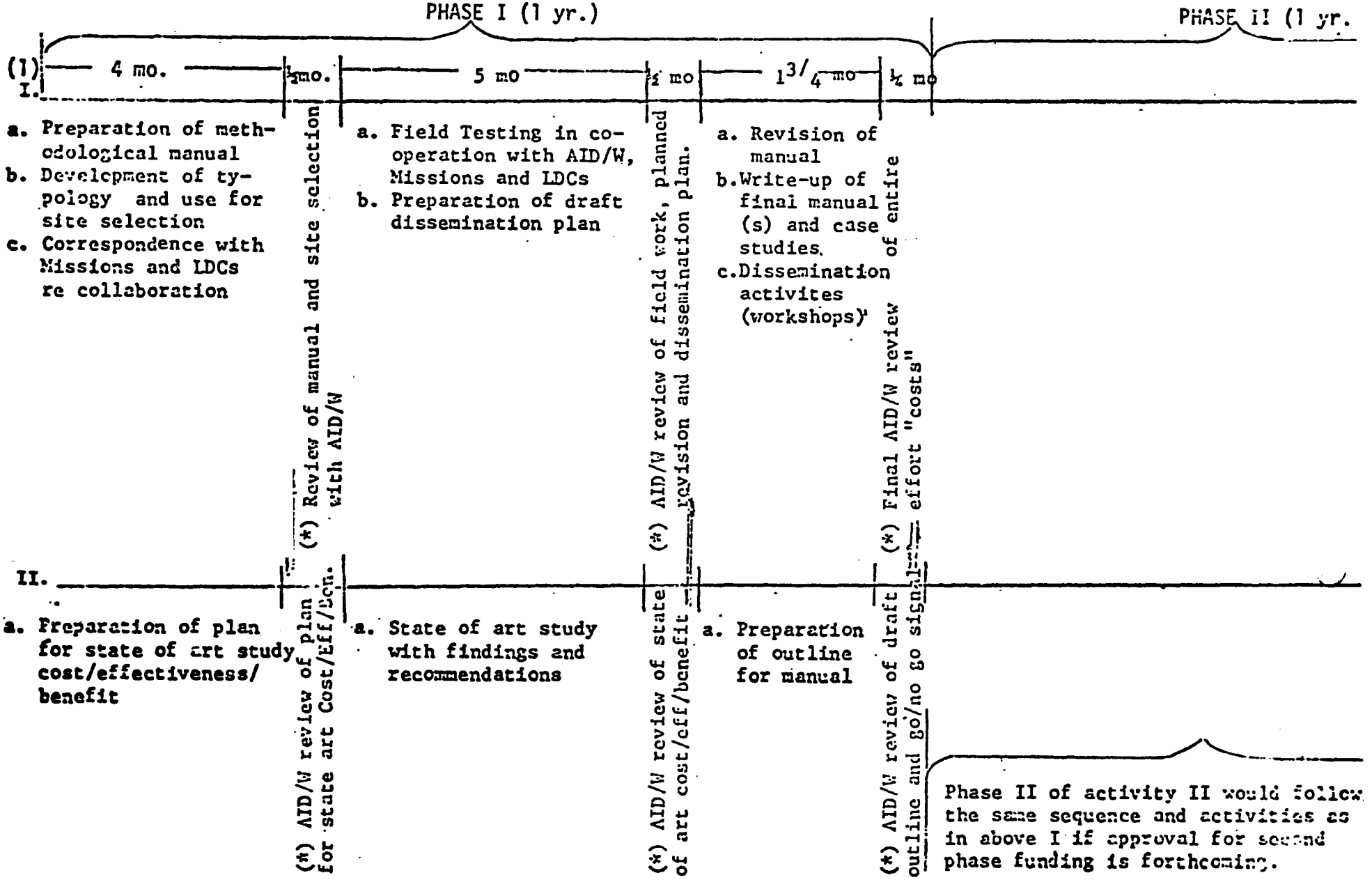
6. At the end of 24 months or the end of the contract, the contractor will submit to AID/W:

a. Twenty-five (25) copies of the final report for Phase II to include in addition to regular end of project reporting the following:

(1) Revision of manual based on field tests, results and feedback;
(2) Write-up of final manual(s) and case studies;
(3) Dissemination activities--status dissemination process and results of workshops and seminars.
(4) Actual reports of seminars and workshops.

7. The contractor will publish five hundred (500) copies of the finalized manuals from Phase I and Phase II. This will be done only after securing AID/W approval. In accordance with the dissemination plan developed by the contractor and approved by AID/W, the contractor will disseminate the manuals. The remaining copies from the published five hundred (500) will be provided to AID/TAB/EHR.

SEQUENCE OF ACTIVITIES IN PHASE I & II
(I = cost studies and II = cost effectiveness/benefit)



(1) Note: scope of ...

2. The tentative budget for the project is given below:

Total Project Costs[1]
(Items by Sources - thousands $)

Item	TA/EHR AID/W	Other AID/W Projects[2]	AID/LDC Missions[3]	Total
Senior Staff*	$ 60	$20	$20	$100
Research Asst.	15	10	10	35
Admin/Sec.**	12			12
Salary Subtotal	87	30	30	147
* Benefits @ 15%	9			9
**Benefits @ 12%	1.5			1.5
Salary Total	97.5	30	30	157.5
Consultants	10	5	5	20
Travel	20		10	30
Services	20		5	25
Materials & Publications	10	2	5	17
Overhead	42.5			42.5
GRAND Total	$200.0	$37	$55	$292.0

(1) Two years: Phase I $90 and Phase II $110.

(2) Represents AID/W contract sources for methodological services in the

D.2. Budget/Schedule

	Year 1	Year 2	Total
Salaries	40	57.5	97.5
Consultants	5	5	10
Travel	10	10	20
Field Srvc.	10	10	20
Mat. & Pub.	5	5	10
Overhead	20	22.5	42.5
	90	110.	200.

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PD-AAL-

380-1X (7-71)

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

PIO/T

PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES

1. Cooperating Country: TA Bureau

Page 1 of 10 Pages

2. PIO/T No.: 931-0090-73-3178405

3. [X] Original or Amendment No.

4. Project/Activity No. and Title: Cost Methodology-Education Technology No. 931-11-690-090

DISTRIBUTION

5. Appropriation Symbol: 72-11X1025

6.A. Allotment Symbol and Charge: 425-31-099-00-20-71

6.B. Funds Allotted to: [X] A.I.D./W [ ] Mission

7. Obligation Status: [X] Administrative Reservation [ ] Implementing Document

8. Funding Period (Mo., Day, Yr.) From 6/15/76 To 6/30/77

9.A. Services to Start (Mo., Day, Yr.) Between Ongoing and

9.B. Completion date of Services (Mo., Day, Yr.) June 30, 1978

10.A. Type of Action: [X] A.I.D. Contract [ ] Cooperating Country Contract [ ] Participating Agency Service Agreement [ ] Other

10.B. Authorized Agent: CM/COD/TAB

Estimated Financing $1.00=		(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date
11. Maximum A.I.D. Financing	A. Dollars		$29,~~500~~ 480		$29,~~500~~ 480
	B. U.S.-Owned Local Currency				
12. Cooperating Country Contributions	A. Counterpart				
	B. Other				

13. References

Memo from TA/EHR to TA/PPU, 12/1/76

Action Memo to AA/TA from TA/PPU, 12/2/76

See Attachments

14. Instructions to Authorized Agent

CM/COD/TAB is requested to amend contract AID/ta-c-1348 with Edutel Communication and Development Inc. to include the following specific provisions (these are in addition to those provided in the original contract)

a. Plan and administer a joint Edutel/ICEM (International Council for Education Media) conference to be held in Wash., D.C., in March 1977.

b. Provide $29,500 (See Attachment a) for this support.

c. Provide services requested in this amendment during the period December 8, 1976 through April 8, 1977.

15. Clearances – Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate
TA/EHR, Robert Schmeding 11/15/76
TA/EHR, Wilbur Waffle

B. Funds for the services requested are available
TA/PPU, Mary Mozynski MM 12/3/76

C. The scope of work lies within the purview of the initiating and approved Agency Programs
TA/PPU, Evelyn C. McLeod 11/24/76

D.

E.

F. Clearance: TA/EHR, D. Sprague

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to

Signature and date:

Title:

17. For the Agency for International Development

Signature:

Title: John N. Gunning, Chief Program Planning Analysis Division, TA/PPU/PPA

18. Date of Signature: 12/3/76

Recorded at 29,480 ... 12/17

GPO 867-286

380-1X (8-70) PIO/T	Cooperating Country Worldwide	PIO/T No.	Page 2 of 11 Pages
	Project/Activity No. and Title Cost Methodology-Education Technology No. 931-11690-090		

SCOPE OF WORK

19. Scope of Technical Services

A. Objective for which the Technical Services are to be Used To provide the contractor (Edutel) with the necessary resources (financial) to plan, implement and administer in collaboration with ICEM a joint Edutel/ICEM conference scheduled for Mar. 2-4, 1977.

B. Description ICEM and Edutel are planning a conference to be held in Wash., D.C. during the first week of Mar. 1977. (Both organizations are professionally involved and functionally responsible in the field of cost and cost/effectiveness in educational technology, the general focus of the conference.)

TA/EHR's contribution of $29,500 provided to Edutel in this amendment is for the joint planning, implementing and administering of the conference with ICEM. ICEM will provide $30,000 for the conference, to include:

1. Travel and per diem for non-U.S. participants.
2. Invitation letter to all participants.
3. Publication of the final report in two languages (French and English).
4. Preparation of meeting agenda and working documents in two languages (French and English).

cont. attachment

C. Technicians

(1) (a) Number (b) Specialized Field (c) Grade and/or Salary (d) Duration of Assignment (Man-Months)

See attached suggested budget for personnel and duration of specific services.

(2) Duty Post and Duration of Technicians' Services

U.S. and Paris (for executive planning meeting-three days)

(3) Language requirements

Interpreting services French-English

(4) Access to Classified Information

N/A

(5) Dependents - ☐ Will ☒ Will Not Be Permitted to Accompany Technician

D. Financing of Technical Services

(1) By AID - $29,500 (2) By Cooperating Country -

Project/Activity No. and Title
Cost Methodology-Education Technology
No. 931-11-690-090

20. Equipment and Supplies *(Related to the services described in Block 19 and to be procured outside the Cooperating Country by the supplier of these services)*

A. (1) Quantity	(2) Description	(3) Estimated Cost	(4) Special Instructions
N/A			

21. Special Provisions

☒ A. This PIO/T is subject to AID (contracting) (PASA implementation) regulations.

☒ B. Except as specifically authorized by AID, or when local hire is authorized under the terms of a contract with a U.S. Supplier, services authorized under this PIO/T must be obtained from U.S. sources.

☒ C. Except as specifically authorized by AID/W, the purchase of commodities authorized under this PIO/T will be limited to the U.S. under Geographic Code 000.

☒ D. Other *(specify)*: The contractor will review all travel plans with TA/EHR and obtain project monitror's approval. The project monitor will obtain any necessary AID clearances.

AID 1380-1X (9-70) PIO/T	Cooperating Country Worldwide	PIO/T No.	Page 4 of 11[illegible] Pages
	Project/Activity No. and Title Cost Methodology-Education Technology No. 931-11-690-090		

22. Reports by Contractor or Participating Agency (Indicate type, content and format of reports required, including language to be used if other than English, frequency or timing of reports, and any special requirements)

ICEM and Edutel will jointly compile and publish 500 copies of the final conference report. Both Edutel and ICEM have entries in their budget for this service.

Contractor shall submit three copies of all reports listed as being a product of the contract to the Documentation Coordinator, TA/PPU/EUI, Technical Assistance Bureau, Agency for International Development, Washington, D. C. 20523, or his designee. Such a report shall include a title page showing the title of the report, project title as set forth in this contract and the contract number. One copy of the report shall be clearly typed or printed on white paper so that it may be photographed to produce a micro-film master. Technical reports shall be accompanied by an author-prepared abstract.

23. Background Information (Additional information useful to Authorized Agent and Prospective Contractors or Participating Agency; if necessary cross reference Block 19.C(4) above.)

TAB/EHR

24. Relationship of Contractor or Participating Agency to Cooperating Country and to AID

A. Relationships and Responsibilities Approval of actions of the contractor-e.g., number and identity of U.S. participants, Meeting space and facilities, agenda for the conference and the naming of those that will present papers, will be required from the TAB/EHR project manager.

B. Cooperating Country Liaison Official

ICEM, Paris, Mr. R. Le Franc, General Secretary

C. AID Liaison Officials

TAB/EHR Wilbur Waffle

AID 1350-1X (9-70)	Cooperating Country	PIO/T No.	Page 5 of 11 Pages
PIO/T	Worldwide		
	Project/Activity No. and Title Cost Methodology-Education Technology No. 931-11-690-090		

LOGISTIC SUPPORT

25. Provisions for Logistic Support

A. Specific Items *(Insert "X" in applicable column at right. If entry needs qualification, insert asterisk and explain below in C. "Comments")*

		In Kind Supplied By		From Local Currency Supplied By	
		AID	Cooperating Country	AID	Cooperating Country
	(1) Office Space				
	(2) Office Equipment				
	(3) Housing and Utilities				
	(4) Furniture				
	(5) Household Equipment *(Stoves, Refrig., etc.)*				
	(6) Transportation in Cooperating Country				
	(7) Interpreter Services	X			
Other: *(Specify)*	(8) Secretariat	X			
	(9) Conference space	X			
	(10)				
	(11)				
	(12)				
	(13)				
	(14)				
	(15)				

B. Additional Facilities Available From Other Sources

N/A

C. Comments

19 b.

Edutel's share will include:
1. Travel and per diem for American Participants (Except those from Wash., D.C., funded by their own agencies).
2. Interpreter service (French and English).
3. The secretariat during the conference including receptionist, typing and translation for working papers during the progress of the conference.
4. A trip to Paris by representatives of Edutel for an Executive planning meeting with ICEM on Dec. 16 and 17.
5. The professional manpower and time to plan and administer the conference in Wash., D.C., including all hotel reservations and logistical support for foreign participants.

Attached to this request is a copy of Edutel's proposed budget together with the budget rationale. The following provides greater detail into the conference rationale.

EDUTEL_ICEM Conference on
Cost Methodology for Educational Technology
Washington, D.C.

CONFERENCE RATIONALE

In recent years there have been increased pressures on educational systems in both developing and developed nations. Rising enrollments and/or the rising costs of providing traditional resources have led to greater concern with the overall efficiency with which educational expenditures are allocated. For several decades many discussions and a considerable number of experiments have ensued over the potential of new technologies to transform the educational sector. Unfortunately, it has not been until quite recently that relatively comprehensive theoretical and empirical examinations of these educational alternatives have begun.

The economists' tools of cost, cost-effectiveness, and cost-benefit analysis have much to contribute to educational practitioners, planners, and technology innovators. The state-of-the-art of these types of analyses is just beginning to be assessed, as well as the potential for practical field utilization of such techniques. The proposed conference is intended to gather a small group of the most notable professionals working in this field-primarily economists, and also a few researchers in related fields and practitioners who have experience and interest in the economics of such endeavors-in order to examine the current state-of-the-art, the most significant problems and issues, the needs for further research, and the practicality of decision-maker utilization. The number of participants will be kept relatively low so as to facilitate as much interaction as possible.

AID-1300-4X (7-68) CONTINUATION SHEET	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	[X] Worksheet [ ] Instruction	PAGE 7 OF 11 PAGES
		1. Cooperating County	2.a. Code No.
FORM SYMBOL	TITLE OF FORM	2.b. Effective Date	2.c. [ ] Original OR Amendment No:
		3. Project/Activity No. and Title: PIO/T Cost Methodology-Education Technology No. 931-11-690-090	

Indicate block numbers.	Use this form to complete the information required in any block of a PIO or PA/PR form.
2nd 19 b.	This conference is proposed as a jointly sponsored venture by USAID and ICEM, developing from a history of involvement by both organizations in the forefront of economics of educational technology research and application. USAID sponsored a cost analysis state-of-the-art study which has just been completed. One of the principal recommendations of that study was that USAID should sponsor a conference such as that proposed here. ICEM is also recognized as a leading contributor to this field and had a successful initial conference in January, 1975 which they would like to follow-up on. Furthermore, the USAID present contract with EDUTEL, in this field, presents a compelling reason to organize what is certain to be an exceptional opportunity to benefit from the collective discussion and critical thinking of the best people in the field.

AID-1300-LX (7-69) CONTINUATION SHEET	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	[X] Worksheet [ ] Issuance	PAGE 8 OF 10 PAGES
FORM SYMBOL	TITLE OF FORM	1. Cooperating County: Worldwide	2.a. Code No.
		2.b. Effective Date	2.c. [ ] Original OR Amendment No.
		3. Project/Activity No. and Title: PIO/T Cost Methodology-Education Technology No. 931-11-690-090	

Indicate block numbers. Use this form to complete the information required in any block of a PIO or PA/PR form.

Attachment A.

EDUTEL ICEM CONFERENCE

Washington, D.C., March 2-4, 1977

BUDGET

Period Covered: Starting Date: December 8, 1976

Ending Date: April 8, 1977

U.S. Participants:

Domestic Travel

Number Flts.	Origination	Air Fare	Total
9	San Francisco	$384	$3456
1	Miami, Fla.	$186	$186
1	Boston, Mass.	$110	$110
1	Raleigh, N.C.	$100	$100
1	Newark, N.J.	$ 74	$ 74
2	Additional	$250	$500
15			$4426

Participants Cost

Expenses

15 people x 4 days x $42 per diem.....$2520
15 people x $50 for airport transfers and in-town transportation.....$750
$3270

TOTAL DOMESTIC TRAVEL.....$7696
INTERPRETERS 2 each x 3 days @ $150/day.....$ 900
TRANSLATION & FINAL REPORT EXPENSE.....$ 500

EDUTEL- ICEM Conference Budget (continued)

Conference Administration

Albert L. Horley	10 days @ $145	$1450	
Steven Klees	10 days @ $115	$1150	
Stuart Wells	10 days @ $115	$1150	
Administrative Assistant	4 months @ $916/month	$3664	
Subtotal		$7414	$7414
Fringe Benefits 21%		$1556.94	$1556.94

Conference Coordination Meeting in Paris

Travel

3 RT	SFO/Paris @ $963.43	$2890.29	$2890.29

Expenses

3 people x 4 days @ $62/day	$744	
3 people x $50 for local travel	$150	
	$894	$894

Subtotal, Direct Expenses	$21851.23
OverHead @ 35%	$ 7647.93
TOTAL	$29499.16

AID-1300-1X (7-69) CONTINUATION SHEET	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	☒ Worksheet ☐ Issuance	PAGE 10 OF 11 PAGES
		1. Cooperating County Worldwide	2.a. Code No.
FORM SYMBOL	TITLE OF FORM	2.b. Effective Date	2.c. ☐ Original OR Amendment No:
		3. Project/Activity No. and Title PIO/T Cost Methodology-Education Technology No. 931-11-690-090	

Indicate block numbers.

Use this form to complete the information required in any block of a PIO or PA/PR form.

BUDGET RATIONALE

Careful examination of the necessities for conference organization and participation of high quality have led to the cost estimates presented in this budget. The budget is extended through the entire month of March in order to keep the secretary on a sufficient length of time to enable reimbursement of the expenses of participants. Below, we present the specific rationale for each budgetary item.

Item: U.S. Participants

The tentative agreement with ICEM is to have AID finance the expenses and travel of U.S. participants. ICEM will finance the expenses and travel of other participants. The current list of participants includes eight people from the West Coast, four from the East Coast and eleven from Washington, D.C. We have included cost estimates for two additional participants to provide the flexibility of accommodating additions to the list of invitees after budget approval. The travel portion then consists of nine West Coast-to-Washington, D.C. air fares @ $384 (one trip is included for conference coordination), and four other trips from South Carolina, Boston, Tallahassee, and Newark. The total air fare expenditures will be $4426. For the fifteen out-of-Wash.participants, we have assumed expenses of $42 per day for four days, plus $50 for airport transfers and in-town transportation.

Item: Interpreters

The tentative agreement with ICEM calls for AID to fund interpreters and conference facilities. The cost of interpreters is assumed to be $150 per day for the three days of the conference. Both interpreters will have English-French ability.

Item: Conference Administration

As the nature of the conference ties in directly with the research activities at EDUTEL sponsored by AID, the three major participants from that contract will participate in the administration of this conference. Time is necessary to ensure scheduling of events and facilities to coordinate activities with the administrators in Paris, determine appropriate conference content, communicate with conference participants, and attend conference activities. All of these activities will involve at least ten days for each of the administrators. A secretary is necessary for communications, hotel and airline reservations, and to serve as a conference secretariat.

AID-1390-1X (7-69) CONTINUATION SHEET	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	☒ Worksheet ☐ Issuance	PAGE 11 OF 11 PAGES
		1. Cooperating County Worldwide	2.a. Code No.
FORM SYMBOL	TITLE OF FORM	2.b. Effective Date	2.c. ☐ Original OR Amendment No:
		3. Project/Activity No. and Title PIO/T Cost Methodology-Education Technology No. 931-11-690-090	
Indicate block numbers.	Use this form to complete the information required in any block of a PIO or PA/PR form.		

Item: Conference Coordination Meeting

It has been agreed to establish an executive committee consisting of LeFranc, Brunswic, Eicher, and Orivel from France, Horley, Klees, Wells and Waffle from the U.S., and Jamison of the World Bank. This meeting has been set for mid-December in Paris to determine conference content, organization, and scheduling details. Such a meeting of all the principals is considered essential by ICEM and EDUTEL to yield a smooth running, well-focused conference.

931-0090 (T)
PD-AAL-345

AID 1350-1X (7-71)

PIO/T

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES

1. Cooperating Country: Worldwide

Page 1 of 11 Pages

2. PIO/T No.

3. ☐ Original or Amendment No. 1

4. Project/Activity No. and Title: Cost Methodology-Education Technology No. 931-11-690-090 (11p)

DISTRIBUTION

5. Appropriation Symbol

6.A. Allotment Symbol and Charge

6.B. Funds Allotted to: ☒ A.I.D./W ☐ Mission

7. Obligation Status: ☒ Administrative Reservation ☐ Implementing Document

8. Funding Period (Mo., Day, Yr.): From 6/15/76 To 6/30/77

9.A. Services to Start (Mo., Day, Yr.): Between 15th Nov. '76 and 30th Nov '76

9.B. Completion date of Services (Mo., Day, Yr.) 31 Mar. '77

10.A. Type of Action: ☒ A.I.D. Contract ☐ Cooperating Country Contract ☐ Participating Agency Service Agreement ☐ Other

10.B. Authorized Agent: CM/COD/TAB

Estimated Financing $1.00=		(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date
11. Maximum A.I.D. Financing	A. Dollars	$100,000	$29,500		$129,500
	B. U.S.-Owned Local Currency				
12. Cooperating Country Contributions	A. Counterpart				
	B. Other				

13. Mission References

14. Instructions to Authorized Agent

CM/COD/TAB is requested to amend contract AID/ta-c-1348 with Edutel Communication and Development Inc. to include the following specific provisions(these are in addition to those provided in the original contract):

a. Plan and administer a joint Edutel/ICEM (International Council for Education Media)conference to be held in Wash., D.C. in Mar. 1977.

b. Provide $29,500 (See Attachment a) for this support.

c. Provide services requested in this amendment during the period 15th Nov. '76 and 31 Mar. '77.

15. Clearances – Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate
TA/EHR, Robert Schmedling 6/15/76
TA/EHR, Wilbur Waffle

B. Funds for the services requested are available
TA/PPU, Mary Moznski

C. The scope of work lies within the purview of the initiating and approved Agency Programs
TA/PPU, Lohva Wakefield

D.

E.

F. Clearance: TA/EHR, D. Sprague

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to

Signature and date:

Title:

17. For the Agency for International Development
TA/PPU, Carl Fritz

Signature:

Title:

18. Date of Signature

GPO 887-266

Project/Activity No. and Title
Cost Methodology-Education Technology
No. 931-11690-090

SCOPE OF WORK

19. Scope of Technical Services

A. Objective for which the Technical Services are to be Used To provide the contractor (Edutel) with the necessary resources (financial) to plan, implement and administer in collaboration with ICEM a joint Edutel/ICEM conference scheduled for Mar. 2-4, 1977.

B. Description ICEM and Edutel are planning a conference to be held in Wash., D.C. during the first week of Mar. 1977. (Both organizations are professionally involved and functionally responsible in the field of cost and cost/effectiveness in educational technology, the general focus of the conference.)

TA/EHR's contribution of $29,500 provided to Edutel in this amendment is for the joint planning, implementing and administering of the conference with ICEM. ICEM will provide $30,000 for the conference, to include:

1. Travel and per diem for non-U.S. participants.
2. Invitation letter to all participants.
3. Publication of the final report in two languages (French and English).
4. Preparation of meeting agenda and working documents in two languages (French and English). cont. attachment.

C. Technicians

(1) (a) Number	(b) Specialized Field	(c) Grade and/or Salary	(d) Duration of Assignment (Man-Months)

See attached suggested budget for personnel and duration of specific services.

(2) Duty Post and Duration of Technicians' Services
U.S. and Paris (for executive planning meeting-three days).

(3) Language requirements
Interpreting services French-English

(4) Access to Classified Information
N/A

(5) Dependents ☐ Will ☒ Will Not Be Permitted to Accompany Technician

D. Financing of Technical Services

(1) By AID - $ 29,500 (2) By Cooperating Country –

AID 1380-1X (9-70) PIO/T	Cooperating Country: Worldwide	PIO T No.	Page 3 of 11 Pages
	Project Activity No. and Title: Cost Methodology-Education Technology No. 931-11-690-090		

20. Equipment and Supplies *(Related to the services described in Block 19 and to be procured outside the Cooperating Country by the supplier of these services)*

A. (1) Quantity	(2) Description	(3) Estimated Cost	(4) Special Instructions
N/A			

B. Financing of Equipment and Supplies

(1) By AID – $ N/A

(2) By Cooperating Country –

21. Special Provisions

☒ A. This PIO/T is subject to AID (contracting) (PASA implementation) regulations.

☒ B. Except as specifically authorized by AID, or when local hire is authorized under the terms of a contract with a U.S. Supplier, services authorized under this PIO/T must be obtained from U.S. sources.

☒ C. Except as specifically authorized by AID/W, the purchase of commodities authorized under this PIO/T will be limited to the U.S. under Geographic Code 000.

☐ D. Other *(specify)*:

22. Reports by Contractor or Participating Agency (*Indicate type, content and format of reports required, including language to be used if other than English, frequency or timing of reports, and any special requirements*)

ICEM and Edutel will jointly compile and publish 500 copies of the final conference report. Both Edutel and ICEM have entries in their budget for this service.

23. Background Information (*Additional information useful to Authorized Agent and Prospective Contractors or Participating Agency; if necessary cross reference Block 19.C(4) above.*)

TAB/EHR

24. Relationship of Contractor or Participating Agency to Cooperating Country and to AID

A. Relationships and Responsibilities Approval of actions of the contractor-e.g., number and identity of U.S. participants, Meeting space and facilities, agenda for the conference and the naming of those that will present papers, will be required from the TAB/EHR project manager.

B. Cooperating Country Liaison Official

ICEM, Paris, Mr. R. Le Franc, General Secretary

C. AID Liaison Officials

TAB/EHR Wilbur Waffle

Cooperating Country	PIO/T No.	Page 5 of 11 Pages
Worldwide		

Project/Activity No. and Title
Cost Methodology-Education Technology
No. 931-11-690-090

LOGISTIC SUPPORT

25. Provisions for Logistic Support

A. Specific Items (Insert "X" in applicable column at right. If entry needs qualification, insert asterisk and explain below in C. "Comments")	In Kind Supplied By		From Local Currency Supplied By	
	AID	Cooperating Country	AID	Cooperating Country
(1) Office Space				
(2) Office Equipment				
(3) Housing and Utilities				
(4) Furniture				
(5) Household Equipment (Stoves, Refrig., etc.)				
(6) Transportation in Cooperating Country				
(7) Interpreter Services	X			
Other: (Specify) (8) Secretariat	X			
(9) Conference space	X			
(10)				
(11)				
(12)				
(13)				
(14)				
(15)				

B. Additional Facilities Available From Other Sources

N/A

C. Comments

19 b.

Edutel's share will include:
1. Travel and per diem for American Participants (Except those from Wash., D.C., funded by their own agencies).
2. Interpreter service (French and English).
3. The secretariat during the conference including receptionist, typing and translation for working papers during the progress of the conference.
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Cost Methodology for Educational Technology
Washington, D.C.

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The economists' tools of cost, cost-effectiveness, and cost-benefit analysis have much to contribute to educational practitioners, planners, and technology innovators. The state-of-the-art of these types of analyses is just beginning to be assessed, as well as the potential for practical field utilization of such techniques. The proposed conference is intended to gather a small group of the most notable professionals working in this field-primarily economists, and also a few researchers in related fields and practitioners who have experience and interest in the economics of such endeavors-in order to examine the current state-of-the-art, the most significant problems and issues, the needs for further research, and the practicality of decision-maker utilization. The number of participants will be kept relatively low so as to facilitate as much interaction as possible.

AID-1300-1X (7-69) CONTINUATION SHEET	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	[X] Worksheet [ ] Issuance	PAGE 7 OF 11 PAGES
		1. Cooperating County	2.a. Code No.
FORM SYMBOL	TITLE OF FORM	2.b. Effective Date	2.c. [ ] Original OR Amendment No:
		3. Project/Activity No. and Title: PIO/T Cost Methodology-Education Technology No. 931-11-690-09	

Indicate block numbers.	Use this form to complete the information required in any block of a PIO or PA/PR form.
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AID-1300-1X (7-69) CONTINUATION SHEET	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	☒ Worksheet ☐ Issuance	PAGE 8 OF 11 PAGES
FORM SYMBOL	TITLE OF FORM	1. Cooperating County: Worldwide	2.a. Code No.
		2.b. Effective Date	2.c. ☐ Original OR Amendment No:
		3. Project/Activity No. and Title: PIO/T Cost Methodology-Education Technology No. 931-11-690-090	

Indicate block numbers. Use this form to complete the information required in any block of a PIO or PA/PR form.

Attachment A.

EDUTEL ICEM CONFERENCE

Washington, D.C., March 2-4, 1977

BUDGET

Period Covered: Starting Date: October 1, 1976

Ending Date: March 31, 1977

U.S. Participants:

Domestic Travel

Number Flts.	Origination	Air Fare	Total
9	San Francisco	$384	$3456
1	Miami, Fla.	$186	$186
1	Boston, Mass.	$110	$110
1	Raleigh, N.C.	$100	$100
1	Newark, N.J.	$ 74	$ 74
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15			$4426

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15 people x 4 days x $42 per diem.....$2520
15 people x $50 for airport transfers and in-town transportation.....$750

$3270

TOTAL DOMESTIC TRAVEL.....$7696
INTERPRETERS 2 each x 3 days @ $150/day.....$ 900
TRANSLATION & FINAL REPORT EXPENSE.....$ 500

EDUTEL- ICEM Conference Budget (continued)

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Conference Coordination Meeting in Paris

Travel

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Expenses

3 people x 4 days @ $62/day	$744	
3 people x $50 for local travel	$150	
	$894	$894

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OverHead @ 35%	$ 7647.93
TOTAL	$29499.16

AID-1350-1A (7-69) CONTINUATION SHEET	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	☒ Worksheet ☐ Issuance	PAGE 10 OF 11 PAGES
		1. Cooperating County Worldwide	2.a. Code No.
FORM SYMBOL	TITLE OF FORM	2.b. Effective Date	2.c. ☐ Original OR Amendment No:
		3. Project/Activity No. and Title PIO/T Cost Methodology-Education Technology No. 931-11-690-090	

Indicate block numbers. Use this form to complete the information required in any block of a PIO or PA/PR form.

BUDGET RATIONALE

Careful examination of the necessities for conference organization and participation of high quality have led to the cost estimates presented in this budget. The budget is extended through the entire month of March in order to keep the secretary on a sufficient length of time to enable reimbursement of the expenses of participants. Below, we present the specific rationale for each budgetary item.

Item: U.S. Participants

The tentative agreement with ICEM is to have AID finance the expenses and travel of U.S. participants. ICEM will finance the expenses and travel of other participants. The current list of participants includes eight people from the West Coast, four from the East Coast and eleven from Washington, D.C. We have included cost estimates for two additional participants to provide the flexibility of accommodating additions to the list of invitees after budget approval. The travel portion then consists of nine West Coast-to-Washington, D.C. air fares @ $384 (one trip is included for conference coordination), and four other trips from South Carolina, Boston, Tallahassee, and Newark. The total air fare expenditures will be $4426. For the fifteen out-of-Wash.participants, we have assumed expenses of $42 per day for four days, plus $50 for airport transfers and in-town transportation.

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AID-1300-1X (7-69) CONTINUATION SHEET	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	☒ Worksheet ☐ Issuance	PAGE 11 OF 11 PAGES
		1. Cooperating County Worldwide	2.a. Code No.
FORM SYMBOL	TITLE OF FORM	2.b. Effective Date	2.c. ☐ Original OR Amendment No:
		3. Project/Activity No. and Title PIO/T Cost Methodology-Education Technology No. 931-11-690-090	

Indicate block numbers.

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Item: Conference Coordination Meeting

It has been agreed to establish an executive committee consisting of LeFranc, Brunswic, Eicher, and Orivel from France, Horley, Klees, Wells and Waffle from the U.S., and Jamison of the World Bank. This meeting has been set for mid-December in Paris to determine conference content, organization, and scheduling details. Such a meeting of all the principals is considered essential by ICEM and EDUTEL to yield a smooth running, well-focused conference.

9310090 (12)
PD-AAL-545

Date: October 29, 1975

MEMORANDUM FOR: Members of the Research and Development Committee

FROM: TA/PPU, Carl R. Fritz

SUBJECT: Approved Project Identification Document

Attached is a copy of a Project Identification Document (PID) which has been approved by the Assistant Administrator for Technical Assistance for project design and the drafting of a Project Paper (PP):

Project Title: **Cost Methodologies - Education Technology**

Project Number: **931-11-690-090**

Initial FY: **1976**

Responsible Office: **TA/EHR, W. Charleson**

If you have any comments, questions or issues which you would like to see addressed in the PP, please send them directly to the responsible office listed above with a copy to TA/PPU. They should be received by that office within two weeks ~~one month~~, so that the comments can be addressed by the drafter.

The draft PP will be submitted to the Research and Development Committee for review and comment. However, we encourage your comments as early in the design process as feasible so that the project can be responsive to Agency concerns.

Attachment: a/s

cc: TA Technical Office

MEMORANDUM DATE: 10/1/75

TO : AA/TA, Mr. Curtis Farrar

FROM : TA/PPU, John N. Gunning Cy

SUBJECT: PID Clearance

Project Title: Cost Methodologies - Educational Technology

Begins FY 1976.

1. The PID complies with the following AA/TA instructions if the appropriate block is checked. Otherwise, comments are attached.

   ☒ a. Main points of Program Guidance #3 covered.

   ☒ b. AA/TA budget review comments have been incorporated or adequately appealed in the narrative.

   ☒ c. Proposed funding is within limits described in TA Bureau FY 76/77 Program Submission to PPC and/or as amended by current OYB.

   ☒ d. Dates of PP development, approval and project initiation are realistic and consistent with the Program Submission.

☐ 2. This PID has been in TA/PPU and staff work is incomplete because of ☐ TA/PPU work pressure, or ☐ Tech office work pressure. We recommend you return the PID for further review prior to your final decision.

3. We recommend the following action:

   ☒ a. Approval

      ☒ (1) subject to evaluation after first year prior to starting Phase II. Possibility of combining Phase II of this project with Phase II of Cost Methodologies - NFE will be considered.

   ☐ b. Disapproval or delay for reasons specified in attached.

4. AA/TA Action

   ☑ Approved

   ☐ Subject to _____

   ☐ Disapproved

Curtis Farrar
Signature

10-1-75
Date

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT IDENTIFICATION DOCUMENT FACESHEET

TO BE COMPLETED BY ORIGINATING OFFICE

1. TRANSACTION CODE (ENTER APPROPRIATE BOX) — [X] ORIGINAL [ ] CHANGE [ ] ADD [ ] DELETE

PID DOCUMENT CODE: 1

2. COUNTRY/REGIONAL ENTITY/GRANTEE: Interregional GTS KPA 16

3. DOCUMENT REVISION NUMBER:

4. PROJECT NUMBER: 931-11-690-090

5. BUREAU — A. SYMBOL: TAB; B. CODE: 6

6. PROPOSED NEXT DOCUMENT — A. [ ] PRP [X] PP B. DATE (MO. YR.): 10 75

7A. PROJECT TITLE - SHORT (STAY WITHIN BRACKETS)

Cost Methodologies - Education Technology

8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION — A. INITIAL FY: 76 B. FINAL FY: 77

7B. PROJECT TITLE - LONG (STAY WITHIN BRACKETS)

Definition and Application of Cost and Cost Effectiveness Analysis to Formal And Nonformal Projects Using Ed. Tech.

Contractor: N/A

Project Manager: William Charleson TA/EHR

9. ESTIMATED COST (LIFE OF PROJECT) ($000 OR EQUIVALENT, $1 = ____)

PROGRAM FINANCING	AMOUNT
A. AID APPROPRIATED	200
B. OTHER U.S.	
C. HOST GOVERNMENT	
D. OTHER DONOR(S)	
TOTAL	200

10. ESTIMATED COSTS/AID APPROPRIATED FUNDS ($000)

A. APPROPRIATION (ALPHA CODE)	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE	FIRST YEAR D. GRANT	FIRST YEAR E. LOAN	ALL YEARS F. GRANT	ALL YEARS G. LOAN
EH			100		200	
	(FY 77 $100)					
TOTAL			100		200	

11. OTHER U.S. ($000)

A. PROGRAM TYPE	B. FIRST YEAR	C. ALL YEARS
TOTAL		

12. PROJECT GOAL (STAY WITHIN BRACKETS)

To foster evaluation, research and experimentation with various modes of education finance and to increase the usefulness and use of economic measurement tools in educational planning, decision making and management.

13. PROJECT PURPOSE(S) (STAY WITHIN BRACKETS)

In two phases to provide AID and LDC decision makers with the means to: (1) analyze the costs of projects using educational technology (phase I) and (2) analyze the cost effectiveness of alternative technological systems (phase II).

Countries involved: 3/4 LDCs to be determined.

14. PLANNING RESOURCE REQUIREMENTS (STAFF/FUNDS)

Design and monitoring shared by Education Technology and Finance KPAs.

15. ORIGINATING OFFICE CLEARANCE

SIGNATURE

TITLE

DATE SIGNED (MO. DAY YR.)

16. DATE RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION (MO. DAY YR.)

AID 1330-2 (5-75)

PID

Definition and Application of Cost Analysis and Cost Effectiveness Analysis to Formal and Non-Formal Education Projects Utilizing Educational Technology

Summary of Problem and Proposed Response

The questions of costs and cost effectiveness have always been crucial ones for developing country educational planners contemplating the use of educational technology. As the potential application of educational and communications technology expands to areas of development outside the formal school system, the need to derive some consensus about the major components of useful cost analysis and cost effectiveness analysis becomes vital.

The outputs of this project will be produced in two phases:

Phase I will see the development of a manual of alternative costing procedures which are appropriate for varying levels of LDC needs and capacities and which would permit LDCs to determine:

1. the real and monetary costs associated with the development of pilot educational efforts involving new or revised educational technology; and

2. the real and monetary costs associated with expansion of an existing technological system and/or the expansion to national levels of pilot technology systems.

Methodologies, with procedures for estimating the costs of employing the methods, will be field tested. Results of Phase I will be published in the form of methodological approaches with case studies.

Phase II will permit a contractor to develop for use by LDCs methodologies for assessing the cost effectiveness of alternative technological systems both current and proposed (e.g. pilot efforts). Methodologies and procedures for estimating the costs of employing them will be field tested in 3-4 on-going projects in LDCs

The dissemination of the manuals will include regional LDC seminars. The manuals will be reviewed at these seminars in draft form so that the inputs of the practioners can be included in the final versions.

II. Financial Requirements and Plans

1. The estimated project cost of the two phases is $200,000.
2. The total $200,000 will be financed by AID grant funds.
3. The country sites of the utilization conferences would be expected to provide some local services.

III. Development of the Project

1. This project builds upon a present TA/EHR activity in which a monograph and a preliminary / outline of a manual on costing methodologies is being developed.
2. The draft PP for phase I will be submitted in October 1975 and the final PP for phase I will be ready for FY 76 funding. Phase II funding will be contingent upon a review of phase I success. Phase II would be funded in FY 77.
3. With the staffs of both the Educational Technology and Educational Finance KPAs collaborating, no outside assistance will be necessary for developing the PP.
4. This project will be developed in collaboration with efforts undertaken in the cost of non-formal education project. While it is expected that Phase I of the cost methodologies for technology will be let to a contractor separate from the one chosen to non-formal education, every effort will be made to assure that both efforts are cooperatively developed. Depending upon the timing and phasing of both efforts, field testing of phase I may be undertaken jointly and/or phase II may develop under one contractor.

OPTIONAL FORM NO. 10
MAY 1962 EDITION
GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

Memorandum

PPU 9310090(73)
PID/T 0090-3178413
AID-ALL-595

TO : TA/EHR, Dr. Robert W. Schmeding

DATE: June 14, 1977

6p

FROM : TA/EHR, William R. Charleson

SUBJECT: Amendment to AID contract No. AID/ta-C-1348, Cost Methodologies - Educational Technology

This memorandum is to alert you to the need to amend the referenced contract and to obtain your concurrence in requesting the additional sum of $19,000.

1. The referenced project is to be fully reviewed in July - August, 1977 in conformity with the terms of the contract. Provision of second phase funding is contingent upon the review. It is, therefore, inappropriate to move now for second phase funding.

2. The contractor has advised AID/W that they will be overspent by some $15,000 in covering phase I (year one) contract activities. The details concerning overspending are attached (see letter to V. Perelli dated May 5 and budget breakdown by contract categories). The overspent position stems from increased travel costs due to Mission requests and direct labor costs occasioned by increased service to Missions.

3. In addition to the $15,000 I wish also to add $4,000 to cover the round trip fares of three EDUTEL staff to Paris in order that they may participate in the final rapporteurs' meeting of the Economic Analysis of Educational Media Conference (Washington, D.C., March 2-4, 1977). EDUTEL staff have agreed to make the trip for air-fare and per diem only. The purpose of the July Paris Meeting is to pull together the draft rapporteurs' report which has been circulated to conference attendees for comment and to develop a set of recommendations for the proposed Dijon Conference (1978) for consideration by donors.

4. This procedure has been discussed and cleared by TA/PPU.

Attachment: a/s

GYA EXPENSES

A/C		1 TOTAL PER GEN LEDGER 4/30/77	2 ACCRUALS	3 TOTAL	4 LESS UNALLOWABLES	5
601	INDIRECT LABOR	2810		2810		
611	VAC-HOL-SICK LEAVE	199551		199551		
621	PENSION PLAN	50000	324400	374400		
631	GROUP INSURANCE	119751		119751		
701	ADMINISTRATIVE LABOR	1473794		1473794		
714	V-H-S (ADMIN PER)	156002	101400	1170402		
731	INSURANCE (ADMIN PER)	51021	17191	68212		
751	PAYROLL TAXES	712976	92200	805176		
761	INSURANCE ON OFFICERS	16750		16750	16750	
762	GENERAL INSURANCE	22300		22300		
772	MAIL & COURRIER	35408	645	36053		
773	EQUIPMENT LEASE	28444	4611	33055		
775	REPRODUCTION	57473	24848	82321		
781	ADVERTISING & PROMOTION *	13840		13840		
782	ENTERTAINMENT	63979	7457	71436	63979	
783	INDIRECT TRAVEL & AUTO	40985	39060	80045		
784	INDIRECT MEALS & LODG	12691		12691		
785	COMMUNICATIONS	325216	63174	388390		
786	RENT	463680	66240	529920		
788	REPAIRS & MAINTENANCE	3022		3022		
789	STATIONERY & SUPPLIES	70827	20458	91285		
790	DUES & SUBSCRIPTIONS	14350		14350		
791	TAXES & LICENSES	4000		4000		
792	ACCOUNTING FEES	76500	144590	221090		
793	LEGAL FEES	11533	35600	47133		
795	DEPRECIATION		108700	108700		
796	AMORT ORGANIZATION EXP		11126	11126	11126	
799	OTHER MISC EXP	127130	4291	131421		
801	BID & PROPOSAL LABOR	34879		34879		
802	INTEREST EXPENSE	27514		27514	27514	
851	FEDERAL INC. TAX					
852	STATE FRANCHISE TAX	20000	10000	30000		
	TOTAL EXPENSES	4236426	1198891	6225417	119369	
LESS UNALLOWABLE EXPENSES				119369		
TOTAL ALLOWABLE EXPENSES				6106048		

DIRECT COSTS

		1	2	3	4	5
A/c		TOTAL PER GEN LEDG 4/30/77	ACCRUALS	TITAL		
501	LABOR	5620237		5620237		
502	MATERIAL	69108		69108		
503	TRAVEL & TRANSPORTATION	1764545	189500 1427253	2696298		
504	MEALS & LODGING	709792	385607	1095399		
505	COMMUNICATION	3606	24415	28021		
506	COMPUTER	18565	15225	33790		
508	CONSULTANTS	1413800	72300	1486100		
509	OTHER DIRECT COSTS	702680	63250	765930		
	TOTAL	10302333	1492550	11794883		
	ALLOWABLE GYA EXPENSES			6106048		
	GYA RATE (ALLOCABLE TO TOTAL DIRECT COST) (61,060 ÷ 117949)			52%		

EDUTEL
COMMUNICATIONS AND DEVELOPMENT, INC.
701 WELCH ROAD, SUITE 225, PALO ALTO, CALIFORNIA 94304 • 415/328-4972

June 4, 1977

MEMO TO: Bill Charleson, TAB/EHR
FROM: Al Horley
SUBJECT: Request for Financial Audit of EDUTEL Contract # ta-C-1348

An internal audit of our actual expenses shows that our proposal estimates of overhead and fringe benefits for Contract No. ta-C-1348 were low by substantial amounts.

We would therefore like to establish the accounting basis for future calculations and, therefore, are petitioning for a financial audit. Using the basis of calculation in the original proposal, we find we are experiencing an overhead rate of 52% rather than the 23% provisional rate established in the contract, and our fringe benefits, including vacation, sick leave, and holidays, are approximately 27.5% rather than the 21% estimated.

I am providing you with these figures for informational purposes only as the actual audit will fix the 1976-77 rates and I presume serve to help establish the 1977-78 rates. I will be happy to discuss with you the basis for these figures and to provide you with any additional financial data you feel would be useful to you.

Fisher

EDUTEL
COMMUNICATIONS AND DEVELOPMENT, INC.
701 WELCH ROAD, SUITE 225, PALO ALTO, CALIFORNIA 94304 • 415/328-4972

PROJECT EXPENDITURES UNDER
CONTRACT TO JULY 31, 1977

Categories	Contract Budget Amount	Estimated Expenses 7/31/77	Difference
Salaries & Wages	$43,625	$48,625	- $5,000
Fringe Benefits	8,919	10,211	- 1,292
Consultant Fees	6,425	6,175	+ 250
Travel & Transportation	11,500	20,500	- 9,000
Other Direct Costs	7,500	7,000	+ 500
G & A	18,528 42%	21,125 49%	- 2,597
Total Estimated Costs	96,497	109,636	13,139
Fixed Fee	6,902	7,703	- 801
Grand Total	103,399	117,339	13,940

Fisher

EDUTEL
COMMUNICATIONS AND DEVELOPMENT, INC.
701 WELCH ROAD, SUITE 225, PALO ALTO, CALIFORNIA 94304 • 415/328-4972

77 MAY 6 PM 2 33

May 3, 1977

SERVICES
SION
FM/CSD

Mr. James Boone, FMCSD
Agency for International Development
Room 608, Universal North Building
Washington, D.C. 20523

re: AID Contract # ta-C-1348

Dear Mr. Boone:

In accordance with paragraph (c) of the clause entitled "Limitations of Funds (June 1973)" we are hereby notifying you that within the next 60 days our costs will exceed 75% of the total amount allotted to this contract. The amount presently allotted under Article V, "Estimated Cost and Fixed Fee," is $100,000. The total bill to date is $74,145.45. The estimated amount necessary to complete the work during the first year's schedule is $15,000. We are sending this notice to you because there is no specific person called out in the "Limitations of Funds" clause to whom such notice should be sent. If you are not the proper person, please forward this notification to the right person.

We are in the process of completing our cost analyses for the first year's effort, and we expect that our actual overhead rates will be higher than the provisional rates given in the contract. We will advise you of the actual rates upon completion of our cost review.

Sincerely,

Albert L. Horley
President

ALH/veb

UNITED STATES GOVERNMENT

Memorandum

) : CM/COD, Virginia Perelli DATE: April 5, 1976

FROM : TA/EHR, James B. Chandler

10p

SUBJECT: Request for initiation of procurement of contract services for Project - Cost-Methodologies Education Technology No. 931-11-690-090

This memorandum is to request that your office initiate the procurement for contract services for subject project under the standard competitive bidding - RFP (Request for Proposal) regulations.

For your assistance in drafting the RFP, this memorandum will include the following sections:

I. Project Description.
II. Statement of Work.
III. Types of contractors needed.
IV. List of possible contractors to be included to those institutions receiving RFPs.
V. Personnel requirements.
VI. Special considerations.
VII. Contractor selection criteria.

I. Project Description

A. The purpose of this project is to provide, in two phases, LDC and AID education planners and decision makers with the methodological and procedural means to:

1. analyze the costs of projects using modern educational technology(1) (Phase I); and
2. analyze the cost effectiveness/benefits of using alternative technological systems instead of or in addition to current systems (Phase II).

(1) Educational technology here means the use of communication techniques employed in a delivery system designed and used primarily for reaching large numbers of people physically distributed over considerable geographical distances. Other technologies e.g. printed materials, PI, computer assisted instruction and programmed learning will, of course, be considered, where appropriate. In the main, however, this project will limit itself to the studying and developing of methodologies to be used in support of modern mass communications delivery systems techniques for reaching large numbers of people. In all cases, the decisions concerning the technologies to be studied will be made by the project advisory committee.

This project has been designed and would be implemented and evaluated to further the joint goals of the Education Technology and Finance KPAs. To assure a broad based participatory enterprise, representatives of TA/EHR, PPC and the Regional Bureaus will serve as a project advisory and review panel to monitor, evaluate and recommend during the implementation of the project.

This panel may be expanded to include representatives from LDCs and AID Missions if deemed advisable by the AID/W advisory panel. The panel will be constituted as a formal advisory and review panel which, meeting periodically, will be charged with monitoring project activities and, on the basis of project performance under Phase I, make recommendations for the scope and funding of Phase II activities.

The project will assign high priority to the development and use of costing methodologies to be used in conjunction with the planning and execution of proposed educational technology projects. Additionally, priority will be given to assisting Missions and LDCs which request assistance in modifying existing educational programs. In all cases selection of field sites for testing analytical methodologies will be approved by the project's advisory panel.

TA/EHR believes that by linking the development of the methodologies to their immediate utilization, through consulting of project staff to Missions and in field test applications of methodologies in support of new technology projects, otherwise theoretical methodologies will be tempered by operational reality; i.e., the views and experience of AID and LDC users.

This project has two parts:

1. Part I (which follows on the findings and recommendations of the aforementioned source "state of the art" study recently completed under a GTS contract)(1) will be directed toward the development of methodologies for costing education technology programs; the testing of the methodologies through field work undertaken collaboratively with LDCs and Missions; and the preparation and dissemination of the methodologies and field test results by means appropriate for use by LDC planners and decision makers.

Emphasis will be given to the development and testing of cost methodologies in a range of country settings which typify significantly different levels of analytical need and capacity in the area of costing educational programs.(2) Decisions concerning the sites selected will be based upon criteria developed by the contractor and approved by AID/W.

---

(1) Cost Analysis for Educational Planning and Evaluation: Methodology and Application to Instructional Technology (AID/TA/EHR Contract No. 931-11-999-987-73).

(2) The range of analytical needs and capacities will be developed as a typology. Needs will be described in policy terms; capacity of available data base, personnel, hardware, software, etc.

Where possible, efforts will be linked to providing cost analysis within educational projects funded by the Agency. The timing and phasing of this part of the project is given in the attached phasing chart.(1)

2. Part II of the project will consist of the development of methodologies for making cost/effectiveness and cost/benefit analysis of educational technology projects; the testing of the methodologies through field work undertaken collaboratively with LDCs and Missions; and the preparation and dissemination of the methodologies and field test results by means appropriate for use by LDC planners and decision makers. As in the development of cost methodologies, emphasis will be given to producing methodologies which are appropriate for a range of LDC capacity. It is expected that the criteria developed in the first part of the project will serve for site selection in part II.

The two aforementioned activities will be phased and funded in accordance with the following procedure. Phase II will be initiated only after formal Agency approval of the results of Phase I.

B. Outputs of the Project will be:

a. a set or sets of published methodologies for estimating the costs of educational technology projects to include (for Phase I):

(1) a range of methodologies which are related and relatable to a specified range of analytical need and capacity in LDCs;

(2) detailed case studies of specific applications of the methodologies;

(3) a procedural guide for assisting users to determine which of the offered methodologies is most appropriate for a particular country's analytical needs and capacities;

b. a set or sets of published methodologies for estimating the cost/effectiveness/benefit of educational technology projects to include (for Phase II):

(1) a range of methodologies which are related and relatable to a specified range of analytical needs and capacities in LDCs;

(2) detailed case studies of specific applications of the methodologies; and

(3) a procedural guide for assisting users to determine which of the offered methodologies is most appropriate for a particular country's analytical needs and capacities.

---

(1) See page 10

c. report on the development of a typology of analytical (costs and cost effectiveness/benefit) needs and capacities and its application with respect to the project's site selection for field trials of methodologies; seminar site selection and follow-on recommendations;

d. one or more seminar workshops (size, number and content to be determined during the course of Phase I in consultation with the project's advisory committee);

e. the provision of advisory services to other planned or on-going educational technology projects. That is, it is expected that the provision of methodological guidelines and guidance (during and upon completion of Phases I and II), an output of this project, will be used as inputs to on-going or planned technology projects (when called upon and funded by such other technology projects).

f. the provision of a limited amount of short term academic training for those Key LDC decision makers who may require such services in order to use the methodologies developed. In addition, in country training will be provided as needed. The amount and scope of both the academic and in country training will be a concern of TAB/EHR, the contractor, the LDCs involved and the project review and advisory panel.

II. Statement of Work

The contractor will perform the following services in the sequence given. Included also are the terms of the reviews and the one at the end of the first year at which time it will be decided as a result of the review by the project review panel as to whether the project: (1) will continue to phase II without change, (2) will continue to phase II with revisions in nature or in scope or (3) will terminate at that time (end of phase I.).

Phase I - Parts I and II -- one (1) year[1]

4 1/2 mos.

1. Preparation of a methodological manual for cost analysis in Education Technology.[1]
2. Development of a typology and its use for site selection.
3. Develop correspondence with Missions and LDC reference collaboration.
4. Preparation of plan for state of art study cost/effectiveness/benefit.

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* Review by AID/W project review panel.

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5. Field testing in cooperation with AID/W Missions and LDCs.

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(1) Note: State of art study completed under previously mentioned GTS project.

* Points of formal evaluation, planning and review by project review panel.

5 mos. 6. State of the art study - cost/effectiveness/benefit with findings and recommendations.

* Review of 5, 6, and 7 by review panel.

7. Revision of methodological manual.
8. Write-up of final manual(s) and case studies in cost analysis.
2 mos. 9. Dissemination activities (workshops).
10. Preparation of outline of methodological manual for cost effectiveness/benefits.

1) of entire "costs" effort.
* Final Review by panel: 2) review of efforts in cost effectiveness/benefits.

At this point, the panel can decide 1) to recommend to continue Part II to Phase II as planned or 2) continue but revise scope, nature or procedures.

Part II Phase II second (2) year

1. Preparation of methodological manual in cost effectiveness/benefits.
4 1/2 mos. 2. Development of typology and its use in site selection.
3. Develop collaboration through correspondence with Missions and LDCs.

* Review by project advisory panel.

4. Conduct field testing in cooperation with AID/W, Missions
5 mos. and LDCs.
5. Preparation of draft dissemination plan.

* Review by panel of field work, planned revisions and dissemination plan.

6. Revision of manual.
7. Write-up of final manual(s) and case studies.
8. Dissemination activities (workshops).
9. Final report.

* Final review of Part II of entire cost effectiveness/benefit effort.

Project terminates.

III. Types of Possible Contractor

The contractor should possess the following types of credentials:

a) Possess demonstrated experience working within the dimensions of LDC environments.

b) Should have foreign language capability - French and Spanish.

c) Should have qualified persons in the costs and cost effectiveness/ benefit - educational technology field - persons who have a demonstrated expertise in these fields.

d) Have the capacity to provide and/or manage both academic and short term training in the subject areas either state side or in LDCs.

e) Have the structure and capacity to mount and implement a project of the dimensions indicated above.

f) Provide individual staff members who are among the recognized leaders in their fields.

IV. Suggestions of Possible Bidders

In addition to or as a complement to the regular bidding process, it is suggested that the following agencies/institutions be forwarded RFPs.

a) Stanford
b) Indiana University
c) Florida State University
d) Drexel Institute
e) University of California at Berkeley

V. Personnel Requirements:

1. Proposal for staff requirements should specify:

a) Disciplines likely to be necessary to accomplish the tasks outlined above.

b) Man-months of services to be required for phases I and II.

c) Specification of likely tasks to be performed by the staff.

d) Salaries and benefits for services.

2. While it is expected that the proposers will provide the above, note a detail, bidders should understand that staffing patterns (kind and amount) will be jointly reviewed (and if necessary revised) with the contractor and the representatives from AID/W at the 4 1/2, 9 1/2, 12, 16 1/2, 21 1/2, and 24 months.

3. It is likely that project needs will require PhD. level staff in several if not most areas. Where staff are proposed with less than PhD credentials, the proposer should demonstrate that the individual's background and experience are appropriate for the tasks expected to be performed by the person.

VI. Special Conditions

1. The contractor should understand that project activities will be monitored by an advisory review panel made-up of members of the Regional Bureaus, PPC, and TA/EHR. While the project will be reviewed periodically, two full comprehensive reviews are planned in addition to the others as shown on page 10

a) Eight and one half to nine (8 1/2 - 9) months after project begins to review the state of art work in the cost effectiveness/benefit part II and to review, evaluate and revise, if necessary, the results of the field work testing and the dissemination plans in Part I.

b) At the end of one year, a full scale review and evaluation of Part I which is terminating at this point and a review of the draft outline of the manual(s) of methodologies in the cost effective/benefit part. At the review, it will be decided if changes should be made in the scope, in the nature or in the planned modus operandi for the 2nd year.

c) At the end of the project, approximately the 24 month point, a full scale end of project review will be held by the project review panel and to review and evaluate possible future actions and recommendations.

VII. Contractor Selection Criteria

The following criteria is given in a matrix form. Each criterion is given a weight - e.g. 25% of the total. The responsiveness to each criterion is, likewise weighted - e.g. if the proposal meets all of the requirements of a certain criterion, then a ten (10) point value is given, if the criterion is less satisfactorily met, then lessor points are awarded.

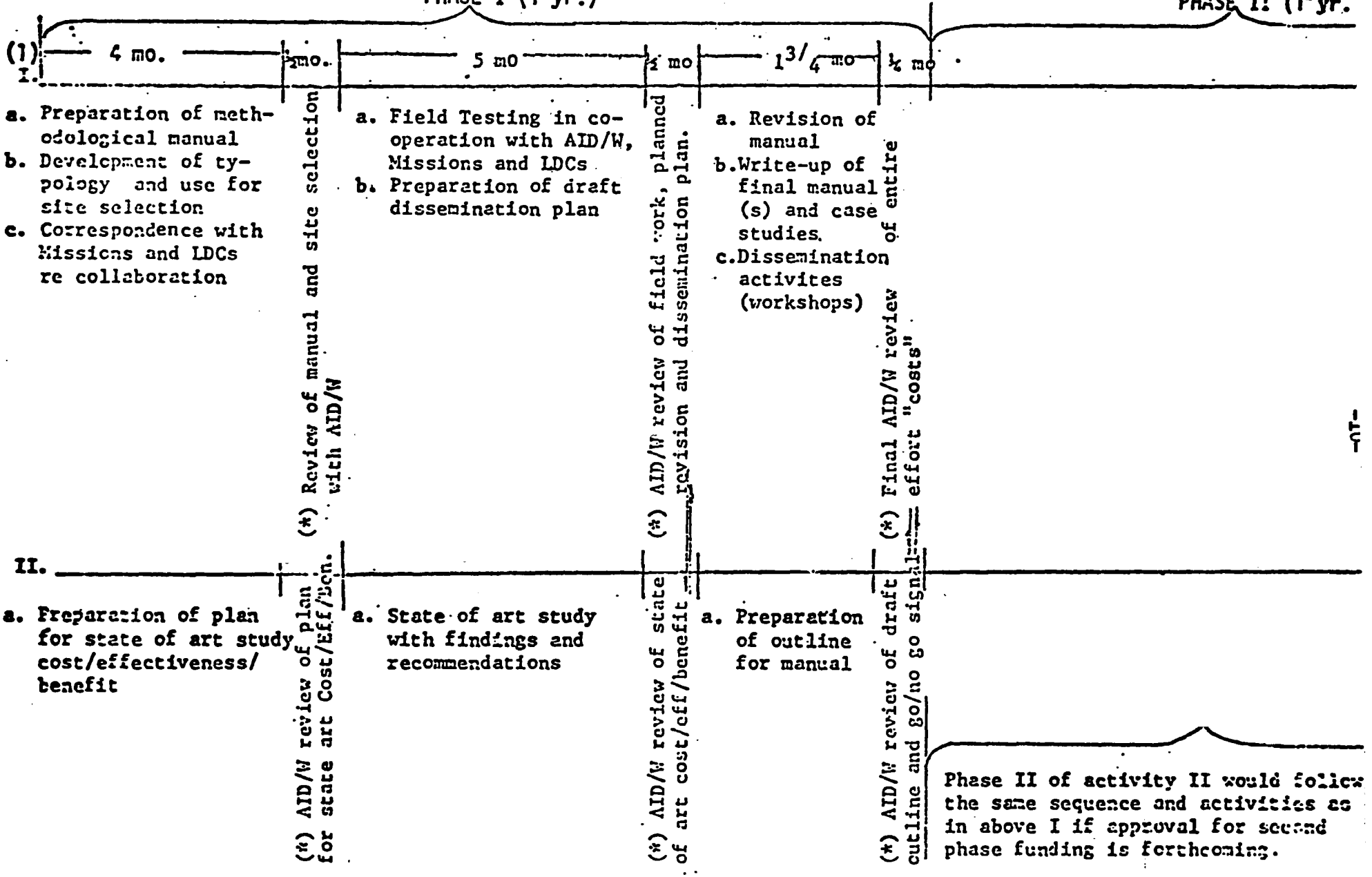
VII. CONTRACTOR SELECTION CRITERIA

Pts.	Responsiveness & Quality of Proposal 20 %	Experience & Background of Institution Field 20 %	Staff Capacity 30 %	Staff Organization 15 %	Teaching and Training Capacity 15 %
10 1.	Substantive design, procedural plan, draft staffing pattern, realistic program budget, responsive to all RFP requirements.	Educational technology, costing and cost-effective analysis experience in all geographical regions. Past contracts in either NFE or costing judged successful.	All PhDs or equivalent with LDC experience in cost and cost effectiveness plus foreign languages (i.e.-working knowledge Spanish and French).	All staff currently associated with same organization (e.g., faculty, department, center.) Willing to work overseas for extended periods. Willing to include LDC personnel.	All staff have taught appropriate courses. All staff have experience with LDC students. All staff willing to give short courses overseas.
9 2.	Same as above but poor design and lacking in detail.	Same as above but experience in only 2 regions.	Same as one except with no or limited language capacity.	All staff currently organization members willing to include LDC staff.	Same as one except no experience with LDC students.
8 3.	Proposal lacks one or more of elements as given for 10 pts.	Same as one but experience in only one region.	Same as one but with no LDC experience.	75% staff currently with organization. Willing to include qualified LDC personnel.	Same as one but unwilling to give short courses overseas.
7 4.	Proposal lacks responsiveness, budget, design and staffing pattern.	Same as above one but with only US experience.	Same as one but only 75% with PhD or equivalent.	50% staff currently with organization. Willing to include LDC personnel.	Same as one but no experience with LDC students and unwilling to give short courses overseas.
6 5.	Proposal unresponsive, of poor quality and (too general) to evaluate.	Same as two but with only fair evaluation of past contractor performance.	Same as one but only 50% with PhD or equivalent.	Same as one but unwilling to work overseas for extended period.	Experience limited to teaching undergraduate level but with experience with LDC students. Willing to give short courses overseas.
5 6.		Same as two but with poor contractor experience.	Same as two but very limited language capacity.	Same as two but unwilling to work overseas for extended period.	Same as five but unwilling to give short courses overseas.

CRITERIA CONTINUED -

Pts.	Responsiveness & Quality of Proposal 20 %	Experience & Background of Institution Field 20 %	Staff Capacity 30 %	Staff Organization 15 %	Teaching and Training Capacity 15 %
4 5.		Same as two but with poor contractor evaluations.	Same as two but no language capacity.	Same as three but unwilling to work overseas for extended period.	Same as five but with no experience with LDC students.
3 4.		Experience only in the U.S. and no contractor experience.	Less than 50% PhDs or equivalents and no language capacities.	Same as four but unwilling to work overseas for extended period.	Same as five but unwilling to give short courses overseas and no experience with LDC students.
NOTES:	Material to be submitted in support of props:				
	We will look for understanding of purposes of project and its relation to problems of LDCs. Proposal must reflect thoroughness of design and willingness to accept revision at appropriate times, i.e., as indicated in sequence chart.	Annual Reports, Evaluation of prior experience, or evidence of institutional and/or agency commitment and capacity.	Vita submitted for proposed staff, evidence of individual staff commitment to project, books or articles attesting capacity.	Letter from organization giving current staff pattern and proposed staff pattern for project activities.	Statement from members of proposed staff as to their understanding and commitment. Substance of courses taught or research done particularly to LDCs.

SEQUENCE OF ACTIVITIES IN PHASE I & II
(I = cost studies and II = cost effectiveness/benefit)



(1) Note: state of art study completed under prior small GTS project.

(*) Formal evaluation/planning meetings with TA/EHR, Regional Bureaus

9310090 (15)
PD-AAL-545

TA/PPU, Mr. John M. Gunning
TA/EHR, Dr. Robert Schmeding

December 1, 1976

TA/EHR, Wilbur Waffle

PIO/T Amendment Project No. 931-11-690-090
Cost Methodology - Education Technology

2p

1. The attached PIO/T Amendment requests that $29,500 be added to contract AID-ta-C-1343 ($200,000) for the purpose of conducting a conference in conjunction with ICEM (International Council of Education Media, Paris). The topic of the conference, to be held in Washington, D.C. on March 2-4, 1977, is Cost Methodology and Cost Effectiveness of Educational Technology.

2. The conference will bring together selected international planners, technology innovators, practioners and educational economists. Their research and practical experiences in the cost, cost-effectiveness and cost-benefit considerations of education technology practices will be reviewed/examined through presentation of papers and in related working groups. The number of participants will be kept low to facilitate maximum inter-action.

3. We believe that this conference will benefit the contract and TA/EHR in the following ways:

   (a) Provide the contract with a current understanding of what is being done by the leaders in the field in the U.S.A., e.g. universities, research agencies, individual experts and private concerns.

   (b) Provide the contractor with an understanding of the state of the art as developed and practiced by foreign experts and agencies in their environments.

   (c) Provide the contractor, by bringing together researchers and developers with practioners and implementers, a broader understanding of the research and design as related to the actual field support requirements.

   (d) Realize for the contract a saving in-as-much as both time and money will be minimized through the one conference as compared to making the same connections on individual basis.

   (e) Provide the contractor, before actual field testing of cost methodologies, with information concerning aspects of site

selection. This information could otherwise be obtained only at significant higher cost to the Agency.

(f) Provide various AID offices and personnel (TAB, PPC, Regional Bureaus, etc.) an opportunity to attend the conference at little or no cost since it will be held in Washington.

(g) Particular attention will be given to the subject of cost benefits. This aspect of educational technology research and application has been sparsely treated in the past. Little has been published in the field. As this is a main interest of the contract, this conference will provide an opportunity to benefit from the collective insights and the critical thinking of other key leaders in the field.

57p

RESEARCH PROJECT STATEMENT

June 9, 1976

SUMMARY

Title: Cost Methodologies - Non-Formal Education

Status: New Proposal

Project Directors: Dr. James Emery, Economics/Systems Analysis
Dr. John Summerskill, Education/Administration

Investigators: Mr. Victor Levine, Educational Economist
Dr. Marlaine Lockheed, Sociologist
Dr. Joyce Moock, Educational Anthropologist
Dr. Kan-Hua Young, Economist

Consultants: Dr. Peter Heller, Health Economist
Mr. H. Eugene Kessler, International Affairs/Business
Dr. Steven Klees, Economist
Dr. Ruth Mack, Economist/Public Administration
Dr. Peter Moock, Educational Economist
Dr. James Sheffield, International Education*

Duration: 36 months

Estimated Cost:

*unable to confirm the expected participation of Dr. Sheffield who is in Kenya at this time.

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SECTION I: STATEMENT OF WORK

1. NARRATIVE SUMMARY

The plight of rural families and the urban poor in LDCs, and the scarcity of educational resources, has greatly increased interest and investment in programs of non-formal education. However, the development of procedures to assess cost effectiveness/benefits for these programs has not kept pace. The purpose of this project is to provide, in two phases, LDC and AID education planners and decision-makers, at varying levels of analytical capacity, alternative methodological and procedural means to determine cost effectiveness/benefits in relation to proposed non-formal education projects. The alternative methodologies to be developed and presented will vary according to needs and capacities in specified LDCs. These methodologies will be tested in Phase II of the project in four selected field sites. Major products of the research will be a state-of-the-arts study; a report of typologies of LDC policy needs and capacities; a set of improved economic indicators and measurement techniques; methodological manuals including a procedural guide and detailed case studies; a series of seminars and workshops, advisory service, and short-term training on the methodologies developed. The work will be conducted, in close collaboration with AID/W, the project's consultative panel, and appropriate LDC personnel.

2. RESEARCH PURPOSE AND EXPECTED PRODUCTS

A. Purpose

The purpose of this project is to create and evaluate an effective and operational approach to improve the performance of the educational sector in developing countries by:

1. systematically compiling knowledge about a wide range of educational issues, about the relationships between various modes of education and economic growth and development, and about complementaries of various development activities including education;
2. improving the usefulness of economic measurement tools in educational planning, programming, and evaluation, particularly as such tools are applied to non-formal education programs;
3. providing LDC and AID planners and decision-makers with systematized costing techniques and cost/benefit methodologies for assessing the relative advantages of alternative education systems, and of non-formal education projects in particular; and
4. establishing guidelines which allow LDCs to determine which of the methodologies presented is most appropriate for the particular need and capacity situation of a given country or locale.

B. Objectives

The objectives of this project are:

1. to fill knowledge gaps specifically relevant to policy and project planning, execution, and evaluation in the educational sector and especially in regard to non-formal education;

2. to modify and develop costing techniques and cost/benefit methodologies with which LDC and AID planners and decision-makers may increase their diagnostic capacity regarding educational delivery systems, educational content, and educational provision; and
3. to involve LDC and AID personnel in the study of non-formal education problems and potentials, and in the development of operational guidance techniques for selecting educational policy and program priorities.

The products of this project will include:

1. a state-of-the-arts study that would contain a review of the literature, an account of the complexities of the problem, and an examination of past non-formal education experience;
2. a report of typologies of LDC policy needs and administrative and technical capacities with respect to the utilization of economic tools for estimating the cost effectiveness of existing and future educational programs;
3. a set of improved economic indicators and measurement techniques which would provide a systematic and operational framework for diagnosing present educational delivery systems and developing non-formal educational strategies, policies, and projects to complement other development activities;
4. methodological manuals, including:

   a) a procedural guide for determining which of the suggested

methodologies are appropriate for a given country's situation;

b) detailed case studies in four regional sites, of specific field applications of the proposed methodologies; and

5. seminars and workshops in conjunction with the field trials and revision of the methodologies, and the provision of advisory services to AID Missions and LDC personnel along with short-term training for LDC decision-makers, where such training is indicated.

3. SIGNIFICANCE OF AND RATIONALE FOR PROJECT

A. Development Problem

During the 1950s and early 1960s, expansion of the formal educational system was undertaken in an effort to spur economic development, to fulfill popular demand for education, and to meet the manpower requirements of an expanding money-wage sector in the LDCs. During the past decade, however, educational and development planners have become increasingly disappointed in the performance of the formal school structure as a vehicle for implementing change. Criticism of the formal system has focused on four critical areas:

1) Access: Despite rapidly growing educational budgets and a commitment to the principle of universal access to primary education, the provision of primary school places has been inadequate to serve the relevant age cohort in most LDCs.

2) Relevance: During the past decade, the unemployment rate among the young has risen rapidly. Many observers see the high incidence of observed unemployment (and underemployment) among primary and secondary school graduates as indicative of a lack of congruence between the formal schooling experience and the requirements of the marketplace.

3) Equity: Observed high positive correlations between family background (social status) indicators and participation rates in publicly supported educational facilities indicate that the existing system of finance and access to formal education may be biased in favor of elitist groups in many LDCs.

4) Efficiency: Substantial differences in the per student cost of places in the formal system (between countries of comparable income levels) suggest that a large range of potential improvement in educational efficiency may exist.

In attempting to develop new approaches to the problems of the past decade, educational planners in LDCs and donor agencies have become increasingly interested in the area of non-formal education (i.e., educational activities outside the established formal system) as a possible vehicle for meeting the educational needs of the future. Yet, there has been little guidance in systematically identifying investment priorities among or appropriate sequencing of alternative educational activities. It is becoming increasingly clear that non-formal programs will be undertaken and supported as alternatives and complements to the formal system on an expanded scale especially in efforts to reach previously neglected low income populations.

The generation of a sound and systematic set of procedures for applying costing and cost/benefit methodology to the development of non-formal programs can aid in increasing the effectiveness of such efforts. LDC educational decision-makers will need a systematic criterion by which to choose appropriate and complementary programs to improve educational performance, increase educational coverage, and meet the life-long learning needs of all sectors of their nation's population.

On an international scale, the development of a common approach to selection and evaluation will facilitate comparative study of non-formal programs under widely varying conditions. A commonality of pro-

cedures will allow low-cost documentation of innovations and experience and will facilitate the international sharing of knowledge. The provision of these vitally needed sets of procedures will avoid a costly duplication of efforts by different LDCs and donor agencies. The participation of LDC planners in project seminars will assist in building local institutional capacity for diagnosis and evaluation and will ensure that requests to donor agencies are submitted in a more standardized form allowing effective comparison of programs.

B. State of the Art

Costing techniques and cost/benefit analysis have been applied to educational programs (both formal and non-formal) on a wide scale during the past fifteen years. Although rate of return analysis has been applied to educational investments in the LDCs, the primary emphasis has been directed toward gauging the impact of education on productivity in the formal-wage sector. Educational economists have long recognized the importance of "externalities" as by-products of the educational experience, but difficulties in quantifying and defining these kinds of returns have tended to result in their exclusion from the explicit cost/benefit analysis.

To a greater extent the current interest in non-formal education is directly related to a recognition of the importance of non-marketed educational outcomes. A growing concern for economic equity, increased labor participation, and equality of opportunity has been an important factor in this trend. AID, for example, in accordance with Congressional

interest and Policy Determination No. 48 (October 1972), has placed increased emphasis on employment and income distribution in its programs. With specific regard to education and human resource development, Section 105 (b) of the International Development and Food Assistance Act of 1975 (HR9005) calls for the expansion and strengthening of non-formal education methods, "especially those designed to improve productive skills of rural families and the urban poor and to provide them with useful information." The application of costing and more specifically cost/benefit methodology to these non-marketed outputs requires the development of new approaches to gathering and evaluating data about the relationship of educational outcomes to social conditions. The evaluation of changes in income and opportunity distributions involves the expansion of existing methodologies which are presently directed primarily to evaluating changes in levels of production.

In short, although the technical methodology exists for systematically approaching the cost/benefit evaluation of non-formal education, definitions of the types of data needed and methods for quantifying these data are lacking. Phase I of this project will center upon the development of analytic procedures for identifying and ordering variables relevant to the multiple outputs of non-formal education.

4. TECHNICAL APPROACH

A. Theory

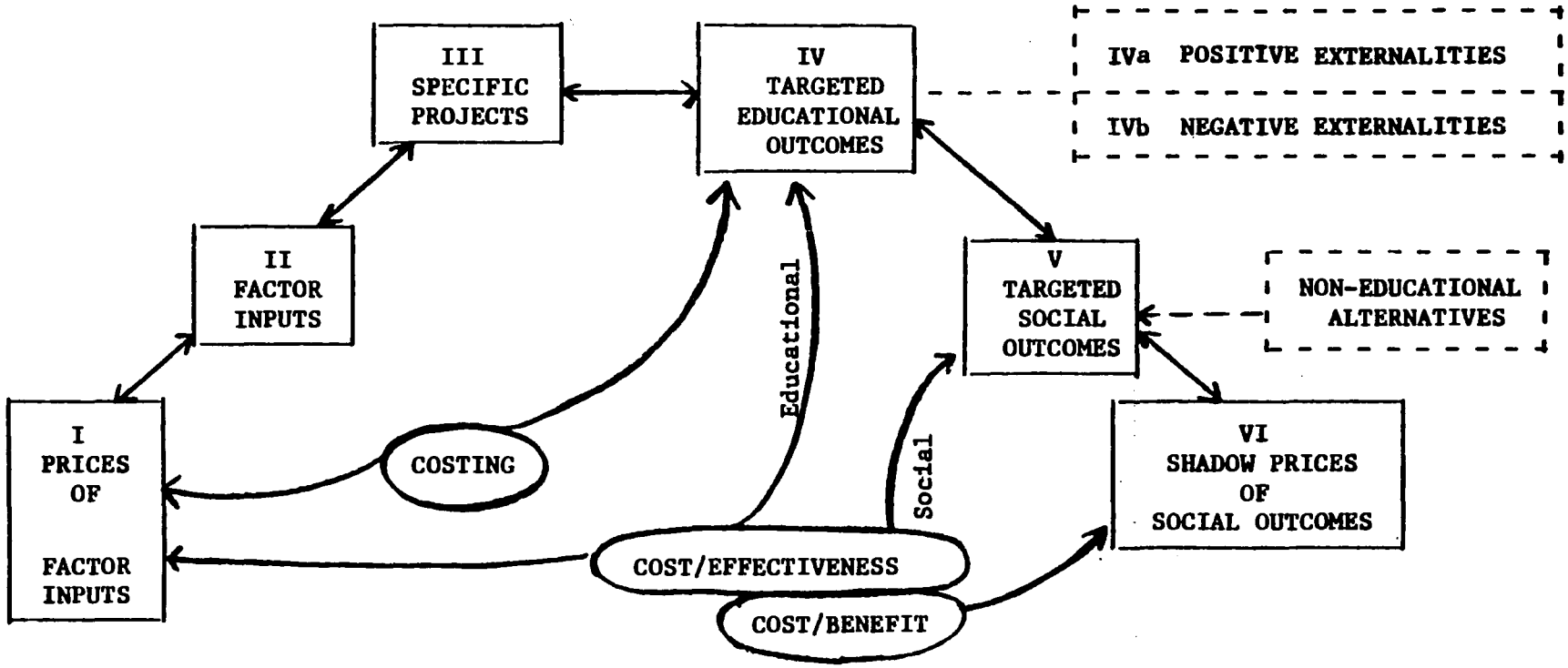
1. Integration of Process

The specifics of costing (C), cost/effectiveness (C/E), and cost/benefit (C/B) procedures will cover an enormous range of detail. The informational and technical requirements of a village leader who is considering the educational alternatives open to him in undertaking a small-scale local project is clearly quite different from those of a national planner who is evaluating a country-plan and is able to call upon the resources of his ministry or the national university for assistance. In assuming that a set of costing methodologies can be developed that will be of use in both situations (and applicable across countries and geographic regions), we implicitly presuppose that some thread of essential commonality runs through the educational costing and evaluation process. The first task of this project must be to define the nature of this commonality and to develop a theoretical structure that allows a basis for defining and comparing the details relevant to all users.

It is assumed that organizing the process within one central and theoretical structure will be essential for the following reasons:

- the essential costing process is the same in all applications
- the quality of decision-making by both the village leader and the national planner would improve if they had low-cost access to each other's information.
- the quality of data improves with the size of the data base
- the reliability of assumptions about relationships improves with experience

FIGURE 1-TYPOLOGY OF NFE VARIABLES (Illustrative)



- the quality of analytic procedure is related to the extent to which it is systematic and replicable.
- the value of any analysis is greatly increased if it is recorded and can serve as a data base to future analyses

Figure 1 is a schematic representation of the kind of common structure that must be established as a first step in the development of a workable costing procedure. Figure 1 will be used as an illustration of the technical approach which will be applied in fulfilling the requirements of this project. Naturally, Figure 1 is only illustrative; definition of the exact form of a unifying theoretical structure will be one of the major outcomes of Phase I of this project.

2. Costing

Costing is the process of assigning a "price tag" to an educational undertaking. The costing process will be applied to individual specific projects which constitute the basic building blocks of NFE. Category III in Figure 1 consists of a vector of different specific educational projects. This vector would be organized into different categories, depending on the size, nature, content, form, etc., of the project. By "specific project" we are referring to some explicitly defined activity in which a certain group of students learns certain well-defined skills in a certain way using specified materials and techniques during a specified period of time. The nature of different specific educational projects would, of course, vary depending upon their purpose, location, etc. The first step in costing any project is to explicitly state what that project is.

Once a specific educational project is defined, the second step in the costing process is that of listing all factor inputs that the project

will require. This listing must include description of type, quantity and time. For example, a project for teaching tailoring to women in a particular village might require:

Illustrative Non-Formal Educational Project

Factor Input	Type	Quantity	Time
meeting room	3 x 5 meters heated	two	4 hrs/day 3 days/week
office	2 x 3 meters heated (close to meeting room)	one	full time
sewing machines	Singer 241	ten	4 hrs/day 3 days/week
electric power	240 volt 50 cps	150 kwh/day	9:00 a.m. - 6:00 p.m. daily
sewing instructor	female, skilled Singer 241	one	3 days/week 9-6
cotton cloth	brushed poplin	sixty meters seventy meters ninty meters	week 1 week 2 week 3
students	female, married ages: over 35 yrs., less than 45 yrs.	ten	6 hrs/day 5 days/week

etc.,

The more complete, specific, and exact the list of factor inputs, the more accurate the ultimate costing. Although the relationship between a specific project (Category III) and its corresponding list of factor inputs (Category II) is almost definitional in theory, a fundamental problem in practical costing operations is the failure of planners to include all of the relevant factor inputs. A procedure that guided educational planners in recognition of the kinds of factor inputs relevant to a specific project would be of immense value.

The third step in costing is applying a set of prices to the complete list of factor inputs. Just as the list of factor inputs should be as complete as possible, every factor input on the list should be assigned a price (Category I). The price of factor inputs that are available on the market are fairly easily defined. Other inputs which are not marketed must have "shadow prices" assigned to them. The cost of a student's time for example, is conceptually difficult to price. Even though the students participating in a NFE program might not be employed, their time would still have an "opportunity cost". Factor inputs that are purchased later in a project's life must be costed at a "discounted price". The month's salary paid to an instructor in the second year of a project has a different "present value" than the same nominal salary in the first year. Similarly the cost of all inputs that occur at different points in time (cloth, thread, rent, electricity, etc.) should be "discounted" to a common point in time. Special expenditures that might be undertaken to allow implementation of the specific project, might have other immediate complementary uses. For example, charging the full cost of bringing electricity to the village, as a cost of this sewing project, would certainly be inappropriate.

The technical aspects of concepts like "shadow pricing", "opportunity costs", "discounting" (and appropriate discount rates), and differences between "accounting" and "economic" costs would have to be built-in as relatively simple and automatic steps of the most basic versions of costing methodologies. The present state of the art for costing NFE would be well served by introducing a standardized and common data

procedure. If accurate data are collected, more sophisticated analytical techniques are best applied later.

The basis of costing analysis therefore rests on the costing of specific projects. The fundamental methodological process will be that of defining the procedure whereby an educational decision-maker starting with a special project (III) assigns a specific "price tag" to it. The basic requirement therefore is for a set of analytical methodologies whereby, given a NFE project, a methodology is available to lead the client in an organized fashion through the steps needed to cost that project.

A METHODOLOGY is, therefore, a procedure for:

1) Explicitly defining what the NFE specific project consists of (e.g., who learns what, how, where, when, with what materials and techniques, for how long), (Element in Category III; Figure 1);
2) Listing Factor Inputs - once the specific project is defined, listing all the inputs that it will require, including the type, quantity and rate. (Vector of elements in II corresponding to each element in III);
3) Assigning Prices - a systematic method for associating a price with each element on the list of factor inputs. All of these "prices" would be discounted and ammortized when necessary to a common point in time; and their sum would be the cost of the project.

A SET OF METHODOLOGIES is, therefore, the entire collection of different methodologies that would be necessary to allow for the costing

of any NFE project that could be located in Category III. By following the steps in the appropriate methodology any NFE program could be costed.

3. Cost-Effectiveness (C/E)

The specific educational projects arrayed in Category III define an educational activity, not an outcome. For example, the NFE sewing project might describe a certain type of teacher conducting certain activities in front of a group of ten women. The outcomes that could be associated with that activity might vary greatly depending on environmental variables, e.g., literate women might learn to sew more quickly than illiterate women; women who thought that they might be able to gain wage employment might be more motivated than women who lived in a village with no jobs. The point is that the same NFE project might have the same cost in two different settings, but might have radically different outcomes. The process of determining what the costs of a project are, although an essential first step, is not a sufficient basis for determining whether the project is worth undertaking.

a. Educational-Cost Effectiveness (C/E)

Although it is operationally expedient to use the specific educational projects (III) as the starting elements in the costing process, educational projects are rarely conceived of as being independent of targeted outcomes. The design of specific projects will usually be in response to a set of educational outcomes that the educational planner wishes to effect. It might be desirable, for example, to bring about the following set of educational outcomes in some target group of people:

- literacy at a level that allows reading of a newspaper or instructions
- numeracy at a level sufficient for simple addition, subtraction, and multiplication
- vocational skill in the operation of a motor-driven sewing machine at a level which allows some specific production task at a certain rate
- etc.,

Such a set of targeted educational outcomes should be listed among an ordered collection of such educational outcomes in Category IV. The educational planner's first step, then, would be to determine which kinds of projects (Category III) would be capable of bringing about the desired educational outcomes in his particular situation. Access to a data source on NFE projects in other countries and areas would be extremely useful as a means of suggesting the options to be considered.

Once the planner had finalized a list of specific projects appropriate to his targeted educational outcomes, a costing methodology should be selected for each project. Even though a targeted educational outcome is identical for all of the specific projects, the nature of the projects might be different and therefore require different methodologies. Each project under consideration should be costed separately, and a comparison should then be made between the cost (I) and outcome (IV) of each approach.

In addition to technical difficulties associated with the costing process, comparison of the cost/effectiveness of different projects is complicated by the fact that different projects rarely provide the desired

educational outcomes in the same proportion. In addition, any given specific project is likely to provide some other outcomes besides those specifically targeted. Nonetheless, C/E analysis is a useful technique when there is a special emphasis on producing a particular educational outcome for a specific reason as, for instance, when vocational training in a specific skill is needed as part of a larger project (such as operating or maintaining generating equipment in a new power plant).

b. Social C/E

Beginning with a targeted set of desired social outcomes (e.g., entry into wage employment, reduction in birth rate, increase in use of fertilizers, increase in total acreage brought under cultivation, etc.), the first step in social C/E analysis would be explicit definition of the desired outcomes in operational and quantified terms. These outcomes should be located on a vector or social targets (Category V). Based on the available information on past relationships between educational and social outcomes, the location of desired social targets in Category V would suggest possible educational skills that might bring about these outcomes (Category IV). This relationship between targeted social outcomes and educational outcomes will always be highly uncertain and extremely specific to a host of environmental conditions.

IT SHOULD BE EMPHASIZED THAT EDUCATIONAL MEANS ARE ONLY ONE OF MANY MEANS OF AFFECTING SOCIAL OUTCOMES. In many cases the desired outcome can be brought about much more economically through policy changes or programs outside the educational sector. For example, use of fertilizers might be more economically encouraged by subsidizing the purchase price than by a farmer training program.

In addition to the difficulties associated with Educational C/E analysis, the social C/E analysis is complicated by the obvious lack of information concerning the relationship between educational and social outcomes, and by the fact that specific projects do not produce the same social outcomes in the same proportions.

Exact Social C/E analysis of NFE projects will always be beyond our analytical capacity due to insufficient data on the extremely complex relationships that exist between relevant variables. The justification for attempting to conduct such analysis in a formal and systematic manner lies in the fact that such a process will occur (and be used as a decision criterion) whether or not it is systematically undertaken. The present surge of interest in NFE is due in large part to our growing awareness of the importance of social outcomes as a product of the educational process. In the coming decade it is likely that the choice of educational options will be increasingly based upon the assumed impact of NFE projects on income distribution, equality of opportunity, birth rates and similar pressing social issues. If such decisions are to be made wisely, it is essential that we begin to apply systematic procedures in attempting to order and understand complex relationships between education and social outcomes.

4. Cost/Benefit (C/B)

The essence of C/B analysis is the comparison of the value of a project's cost (sum of relevant indicators in Category I) with the value of the project's final outcomes (Category VI). The comparison must be made with the values stated in the same units, and the most convenient common base is, generally, dollars at some fixed point in time. As in Social C/E

analysis, all assumed relationships are tentative, and the added step of assigning values to social outcomes usually increases the unreliability of the process.

The procedure for assigning values to non-marketed outcomes often relies on "shadow pricing". The assignment of these shadow prices (especially when related to NFE-type social outcomes) is usually determined by value judgements. The relationships between elements in Categories I through IV can theoretically be thought of as having some determined correspondence with each other and the relationship between social outcomes (V) and shadow prices (VI) depends entirely upon the value preferences of the person assigning shadow prices.

The conditions in many LDCs which have generated interest in non-formal approaches to education also necessitate utilization of these very difficult shadow-pricing techniques. In job markets where a substantial proportion of the educated manpower is employed in the public sector at administered wages levels, the technique of using earning increments as a social benefit measure is inadequate*. Similarly, when the distribution of output, as opposed to the level of output, is the object of evaluation, shadow prices must be assigned. Social outcomes related to birth rates, equity, migration patterns, job participation rates, are increasingly becoming the object of educational projects. The development of a systematic methodology for evaluating these outcomes requires the use of shadow prices.

*The use of this approach presupposes that wages accurately reflect the marginal productivity of the educated worker.

5. Methodology

The methodology for C, C/E, and C/B analyses of any project involves three basic steps:

1) identifying the variables that are relevant to that specific project,
2) determining the relationships between the relevant variables,
3) systematically combining knowledge about the variables and their relationships in a process that generates the appropriate decision criterion.

Ideally a costing methodology would be a custom designed set of step-by-step instructions that is perfectly related to the project under consideration. The list of variables that might be relevant to a NFE electronics project would be different than that related to a NFE national literacy corps. The methodology employed in evaluating a project must be determined by the nature and needs of the project. Similarly, the format, the degree of detail, and the intricacy of procedural sophistication will vary with the capacity of the individual or institution conducting the costing analysis. Quite obviously, projects designed at the local level cannot be subject to the sophisticated analysis required for multi-million dollar projects at the national level.

6. Identification of Variables

An essential first-step in systematizing the costing process is the development of a comprehensive inventory of the kinds of information relevant to NFE. This information, in order to be useful, must be organized in a systematic framework.

Using the illustrative framework developed in Figure 1, all of the

variables relevant to NFE would be identified within the four categories (II, III, IV, V). The form of the organizational structure would naturally be modified and developed in concert with members of the Advisory Panel and based on the inputs of expert consultants and field personnel. It is expected that revision and enlargement of these structural categories would follow the field testing of Phase II. The methodological need to identify all relevant variables and to organize this identification in a systematic and cogent structure is most important.

7. Ordering the Variables and Their Relationships

Any analysis requires that estimates be made of the relationship that exists between the individual variables. Using the structure described in Figure 1, an educational planner, in identifying the desired educational outcomes in Category IV, would need to identify the projects in III that are associated with the desired outcomes. He would also estimate the extent to which each individual project (III) could be expected to affect outcomes (IV).

Within the Figure 1 structure, five sets of relationships are implied:

1) The relationship between the set of project-specific factor inputs (II) and their prices (I).
2) The relationship between specific projects (III) and the specific factor inputs that each would require (II).
3) The relationship between educational outcomes (IV) and specific projects (III). The development of this set of relationships is likely to be one of the major benefits of this project.

4) The relationship between educational outcomes (IV) and social outcomes (V) is still very poorly understood even in developed countries where a great deal of study has been conducted. This project will be concerned with determining the kinds of educational outcomes that are related to existing and past NFE projects together with procedures for estimating their effectiveness.

5) The relationship between any social outcome (V) and the value that is assigned to it (VI), is primarily normative.

To varying degrees, all of these estimated relationships among relevant variables will remain "best guesses". Although the object of this project will be to improve the quality and reliability of these guesses, all costing methodologies require assumptions about the relationship among variables and the quality of analysis is naturally dependent upon the quality of these assumptions.

8. Analytical Methodologies

Common to any of the three analytical techniques described in the theoretical section (A) is the basic process of costing. Before projects can be compared, or benefit ratios considered, an estimate of the basic "price tag" of every specific project option must be developed. The basic unit of methodological operation must therefore be the costing process. The basic building block of any NFE undertaking is clearly the specific project (Category III).

Again, to summarize, methodology would be an orderly, defined procedure, by which an educational planner could determine the cost of a specific project. It would most effectively resemble a step-by-step

diagram for getting from some element in III to the corresponding set of elements in I. Since the size, intent, scope and form of different specific projects (III) would be quite broad, a Set of Methodologies would be needed so that a costing methodology suitable for each specific project can be employed.

The theoretical foundation of cost analysis rests largely on the concept of "cost function" which has been frequently discussed by economists. Traditionally, cost function is used to describe the relationship between total cost and output level. Practically, however, many empirical studies of educational projects have attempted to estimate the relationship between total cost and the levels of various inputs, rather than output. Following this type of analysis, the essential tasks of a cost analysis merely involves the construction of a comprehensive list of factor inputs and a careful determination of appropriate unit costs for all relevant factor inputs. In principle, these tasks are straightforward, though they are likely to be difficult to implement in any actual project evaluation. There are many issues that must be dealt with carefully in order to accomplish a cost analysis with reasonable success.

In general, the factor inputs can be classified into one of the two broad categories: durable and non-durable. These two types of inputs correspond roughly with the non-recurring cost and recurring cost respectively. In many early studies of cost analysis for education, the non-recurring capital costs were frequently ignored, resulting in gross under-estimation of educational cost. The treatment of recurring cost is relatively easy, since the purchased price and replacement cost or market value are not likely to be very different. On the other hand, the treatment of non-recurring capital expenditure is much more difficult, even at a conceptual

level.

There is general agreement among economists that "accounting cost" cannot be expected to represent "economic cost" without considerable adjustments. Generally speaking, the use of market value or replacement cost is preferable to purchased cost or historical value. Furthermore, since non-recurring cost usually involves capital inputs which cover an extended period of useful lifetime, an appropriate discounting and annualization procedure must be adopted. In the proposed study, we shall consider carefully how this and other economic principles can be applied to cost analysis of non-formal education for LDC's. In case international comparison is involved, the problem of currency conversion must also be carefully considered. Economists are mindful of many pitfalls that are associated with using official exchange rates for currency conversion. In the proposed study, alternative approaches will be explored.

Existing literature of empirical cost study or project evaluation is extensive. Traditionally, the data sources come from either historical records or technical considerations based on expert opinions (e.g., engineers, public administrators, educational specialists). Historical records include both time-series and cross-sectional (different projects at the same time period). In the case of innovative future educational delivery systems, no closely related experience may be available as a guide for cost determination. Therefore, in this instance heavy reliance on expert opinions may have to be used. When the available data set includes a significant number of observations, more sophisticated approaches such as regression and other statistical techniques can be employed for cost analysis. Furthermore, more refined theoretical frameworks (including an explicit formulation of the

production function, input demand or requirement functions, and input supply functions, etc.) can be developed. In fact, for a reasonable long-range projection of factor input prices, the factors affecting both the demand and the supply of factor inputs must be considered. But in the initial stage, these input prices can be taken as given.

9. Procedural Guide for the Selection of Appropriate Methodology

The type of information about variables and relationships needed in costing a special project would determine which particular methodology (out of the set) would be appropriate. A typology of project functions would be developed; the specific methodology assigned to a given specific project would be determined by its location within this typology. The first phase of this research would include the development of costing methodologies and a procedural guide that could be used in determining which methodology in the set is best suited to a particular NFE project. The range of the set should be broad enough to cover the range of most NFE projects.

An individual methodology should be organized so that it elicits from its user a comprehensive list of the variables and factor inputs relevant to the special project under consideration. A systematic approach to determining the appropriate price of each factor input would be included in the methodology. Descriptions of type, quantity, and rate of usage, would be defined in a fill-in-the-blank format. The same format might be used for "plugging-in" factor prices. When the appropriate costing methodology had been completed, the user would have a comprehensive description of the project's activities, factor input needs, and cost. The basic form of individual methodologies would be standardized, which would allow for an efficient comparison of comparable

programs.

Each individual methodology (in this set of ten or fifteen) might be available in parallel forms, varying only in the level of sophistication and detail. Once a methodology had been located in the procedural guide based on its position in the needs typology, its exact form would be selected based upon the data capacity of the agency or individual conducting the evaluation.

10. Standardization and Electronic Data Processing

The illustrative technical approach described in relation to Figure 1, involves the following elements:

- a procedure for identifying variables in categories II through V
- a procedure for ordering and the relationship between elements in I through VI
- a set of methodologies for costing specific projects (III to I)
- a procedural manual for selecting the appropriate costing methodology based on a typology of needs, and the specific form of that methodology based on a typology of capacities.

From its inception the work undertaken in implementing these products will be designed to allow the use of standardized identifiers. The elements in individual categories, relationship between elements, various methodologies and typologies will be developed with the intent of providing easy introduction of electronic data processing techniques. This commonality of identification will allow the integration of information from all regions into a common data network.

During the initial stages of the project it is unlikely that the volume of data collected would justify the development of a data processing system.

As the project matures, however, it may well be necessary to formalize processing procedures to deal with a growing data base.

A number of possible features could be included in a data processing system. At the most basic level, a system could be implemented to maintain and update the data base. New data will enter the system during the course of the project, and so provision must be made to add the data to the data base. The maintenance function would also concern itself with the correction or updating of old data.

Routine reports and analyses could be prepared from the collected data base. For the most part, however, it will be difficult to anticipate the exact requirements for reports. Rather, special studies will give rise to the need for special-purpose reports or analyses that were not included in the routine data processing system. It will be important, therefore, to design the system in a way that permits ad hoc report preparation. High-level retrieval languages are currently available that permit flexible and relatively easy preparation of such reports.

A final extension of the system would be the ability to handle interactive modelling. Such a capability is especially important when dealing with highly intangible factors such as the benefits of non-formal education. An analyst should be able to perform trade-off studies and ask "what if ---" questions in the course of his or her investigation. For example, an interactive model might permit trade-off studies to assess the intangible effects of educational expenditures on income distribution versus increased gross national product.

The project team collectively has had a great deal of experience with sophisticated data processing systems. The team's bias will always be to keep the system as simple as possible, but if the need arises advanced systems could be brought to bear on the project.

11. Organizational and Operational Structure

The goal of this project is the development and dissemination of methodologies which provide education decision-makers with the basic tools for improving the quality of NFE projects and the efficiency with which educational funds are allocated. Phase II of this project will include the field testing and refinement of the procedures, methodologies, and manuals which are produced.

A key element of the Phase II activities will be participation of field personnel in the development and improvement of these materials. This two way flow of materials and information between AID/W and educational decision-makers in the field must be channelled through an organized communications structure. The specific organization of this structure will vary depending upon specific LDCs, but in all cases NFE costing information will need to flow through an office with an interest and knowledge of costing. The project should probably include the training of a cost consultant (a LDC national) at each field site.

Local Client

Let us assume that a provincial planning department in a LDC has developed plans for instituting a small-scale shirt manufacturing industry. Capital and detailed plans for equipment, plant, and marketing structure, have been developed, and implementation of the plan requires the training of 100 machine operators. The local planning officer would contact the costing consultant and based on a description of the desired educational outcome, the costing consultant would provide the client with descriptions of the alternative projects that might be used for teaching sewing. The client would review the options in the list of specific projects and a costing methodology for each option under consideration. Based on the

level of data and analytical capacity of the client, the consultant would select a methodology and a procedural guide appropriate to this client's needs. The methodologies provided by the consultant would give the client a systematic, step-by-step procedure for costing each of the options under consideration. The cost consultant would use the standardized identification number of the targeted educational outcome to request information on other NFE projects that had been used for this purpose. Once information had been transferred to this data processing format, such information requests could be responded to at low cost with minimum turn-around time.

The information developed by the client would be returned to the consultant as part of his/her funding request. This information would become available to future network users, and would provide a record of the details of the project under consideration.

12. Cost Consultants

The proposed consultants would serve as resources for clients considering NFE projects. They would also serve as links in the international NFE data network and would provide the clients with methodologies for costing educational projects. The consultants would be able to compare a client's assumptions about the relationship of specific variables using information from complimentary sources.

Using the information provided in the client's costing of a project, the consultant could conduct a verification of the costing with a higher level of sophistication and certainty. While the published Costing Methodology would be geared toward a "paper and pencil" approach to serve a wide range of client users, the consultant's analysis could employ

electronic techniques where appropriate. If the consultant were affiliated with a university or other institution with computer facilities, a standardized C, C/E and C/B program might be made available by AID/W. Even in situations where such equipment is not available, recent developments in relatively inexpensive calculators suggest the potential for low-cost, custom-designed hardware to support analysis in the field.

13. AID/W

A comprehensive bank of NFE data could be built up by AID/W, organized by number within the identification system common to all NFE methodologies and variables in categories I through IV. Once such a data set was operationalized, it could be used for the following functions:

- As requests arrived from consultants for information on past NFE projects (coded by variable numbers), relevant information could be selected and returned based on the need and capacity of the client.
- All formal requests for AID funding of NFE projects could come to AID/W by way of affiliated cost consultants.
- These requests would be provided in a standardized and comparable form, since they would have been prepared using a standardized methodology.
- Incoming requests could automatically be screened by data processing equipment. The use of uniform formats and identification numbers would eliminate the need for recoding incoming information.
- The following kinds of analyses could then be easily conducted:
  1) Verification of costing estimates
  2) Estimates of project cost/effectiveness in terms of specific educational or social goals

3) Estimates of the project's C/B ratio in terms of specific policy objectives in the requesting region

4) Estimates of the long-range impact of the specific project on social outcomes

The use of data processing equipment to conduct these analyses, would not change the fact that they are heavily dependent on assumptions and value judgments but it would permit the systematic and consistent treatment of different projects in a uniform and low-cost manner. As the data base upon which these assumptions were based grew the quality of the estimates would improve.

5. PROJECT DESIGN

Overview

The project will be conducted in two phases. In the 15 months of Phase I work will proceed towards three ends:

1) A state-of-the-arts-study to provide a theoretical and empirical base for describing the complexities related to educational development within the context of national development strategies, and for evaluating the effectiveness of policies and programs within the educational sector. The study will include a review of economic and educational development literature and an examination of past applications of costing methodologies, particularly with respect to non-formal education in developing countries.

2) A report of typologies of LDC policy needs and administrative and technical capacities regarding the utilization of costing techniques, to sharpen the focus and applicability of measuring devices for evaluating educational systems and programs.

3) Methodology manuals consisting of (a) improved economic indicators and sets of systematic procedures, to institute a long-term process of improving data collection, data processing, and data feedback for more accurate estimation of various educational costs and benefits; and (b) procedural guidelines to offer operational guidelines for LDC and donor planners in determining methodological adjustments appropriate to a country's particular need and capacity situation.

In the 21 months of Phase II, efforts begun during Phase I will be extended by three major activities:

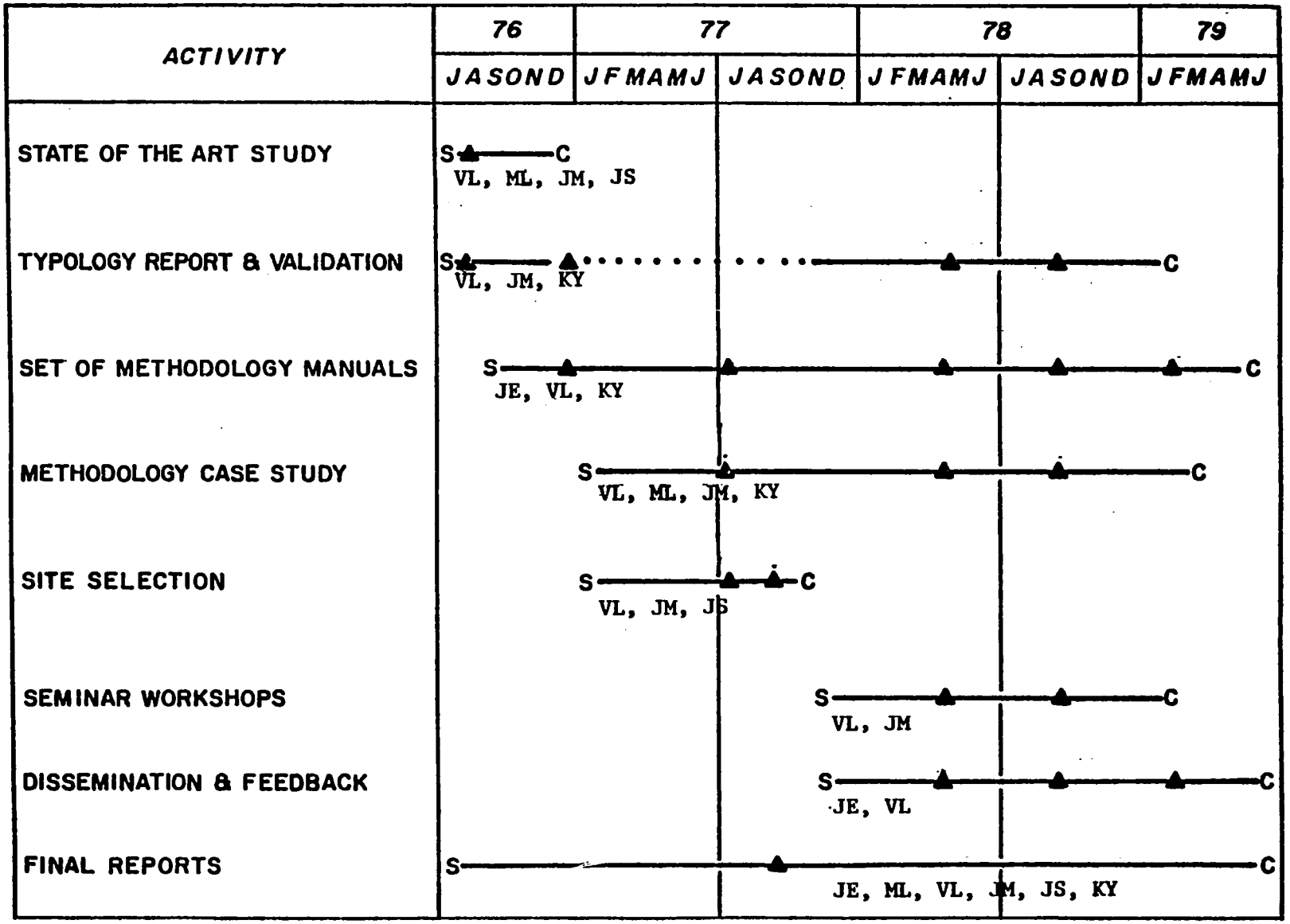
1) The field testing of methodologies in four regional sites which will provide detailed case studies in applying the suggested data collection and processing procedures under conditions of widely ranging policy needs and administrative and technical capacities.

2) The revision of the typology report, methodology manual, and procedural guidelines, according to the results of the case studies.

3) Seminars and workshops in conjunction with the field tests and refinement of final drafts of the manuals, and the provision of advisory services to AID and LDC planners along with short-term training for LDC personnel in the selection and use of the methodologies, where such training is indicated.

LIKELY ASSIGNMENTS OF STAFF

MILESTONE LIFE-OF-PROJECT SCHEDULE



JE = James Emery, VL = Victor Levine, ML = Marlaine Lockheed, JM = Joyce Moock, JS = John Summerskill, KY = Kan-Hua Young

NB: Consultants will be assigned as needed.

PHASE I

The contractor will develop a state-of-the-arts study, a report of need and capacity typologies, and methodological manuals (including procedural guidelines) during the first 15 months of the project. Approximately 30 worker-months would be devoted to this effort by an interdisciplinary team with a broad range of geographic and functional expertise. The result of the research in Phase I would help specify the exact nature of the work in Phase II. Phase I tasks are described in the following sections.

TASK A: STATE-OF-THE-ARTS STUDY

The contractor will undertake a state-of-the-arts study as a first step in laying a firm foundation upon which to design sound and applicable costing methodologies for educational systems in developing countries. Such a study would consist of two major tasks. First, existing knowledge regarding the relationships between education and economic development, and between formal and non-formal educational systems, would be reviewed and organized into a frame of reference useful for carrying out subsequent steps in the project. Utilizing existing inventories and reports, there will be a categorization of different types of educational structure, organization, content, clientele, policy as they exist within countries and across countries. The interplay of various cultural, educational, economic, political, ecological, social, and historical factors will be identified and described in order to develop a spectrum of pre-conditions, priorities, complementaries, and trade-offs among educational activities. Further, past experiences in costing specific educational projects of a formal or non-formal nature in both industrialized and developing countries would be examined. Particular attention would be paid to persistent errors in disregarding certain types of variables or variable clusters and in miscalculating vital costs. In addition, there would be an attempt to identify constraints and potentials in organizing data collection systems by reviewing diverse types of technical and administrative structures and capacities among LDCs.

TASK B: A REPORT OF TYPOLOGIES

Based upon the state-of-the-arts study, the contractor would outline a preliminary typology of LDC needs and capacities with respect to the utilization of costing techniques for educational systems and activities. The establishment of such a typology is not intended simply as an academic exercise in comparative political and administrative systems or comparative national development strategies. Rather, such categorization will provide operational guidance for designing sets of methodological procedures applicable for diverse utilization under varied conditions. To put is simply, we would like to design simple tools and complicated tools--appropriate to the tasks at hand.

The preliminary typology report, including policy needs and administrative and technical capacities across and within LDCs, will provide a basis for selecting the different field testing sites for Phase II of the project. It will also serve to sharpen the focus of the methodological techniques in light of actual policy requirements and implementation capacities of specified LDCs.

TASK C: METHODOLOGICAL MANUALS AND PROCEDURAL GUIDE

1. Set of Analytical Methodologies

The contractor will develop a set of costing methodologies (in user manual form) to be used by educational planners in LDCs for systematically identifying and ordering the variables relevant to a specific NFE project and for calculating an estimate of that project's cost. Each manual in the set will provide a simple, step-by-step format for gathering and processing data. The entire set of manuals will be broad enough to cover the full range of potential NFE projects. Several versions of each manual will be developed, each version varying in the level of its comprehensiveness and technical sophistication.

2. Procedural Guidelines

The contractor will develop procedural guidelines to be used by the proposed NFE costing consultants in LDCs to assist in four areas:

1) providing clients with information and data on alternative methods in NFE projects to meet their educational and/or social goals.
2) providing clients with a specific methodology manual appropriate to each specific NFE project under consideration. The selection of specific methodologies from the set (1. above) would be based on the nature of the specific project under consideration.
3) Conducting high level systematic costing cost/effectiveness and cost/benefit analyses of NFE projects based on the data provided by clients (ordered according to the methodological manuals).

4) Submitting formal assistance requests to AID with all relevant data in standardized form so they can be processed with electronic data processing equipment.

TASK D: DEVELOPMENT OF METHODOLOGY STUDIES

Methodology studies will be developed to reflect input from the state-of-the-arts study and the typology. A maximum of four studies will be developed cooperatively with the LDCs. The final design of these studies will be reviewed by the Agency Advisory Panel and by the AID missions in the LDCs.

TASK E: PRELIMINARY SITE SELECTION

Recommendations for site selection will reflect the typology of different levels of analytical needs and capacities for costing non-formal education programs. The recommendations will be reviewed by the Agency Advisory Panel and by the AID missions in the LDC prior to final site selection. Where possible, sites will be selected to utilize educational projects funded by the Agency.

TASK F: FINAL REPORT

At the completion of Phase I, a final report will be submitted to the Agency for review by the Advisory Panel and by the missions. This report will include all work and activities done in Phase I and will include copies of correspondence with missions and LDCs to indicate the degree to which collaboration was employed. Included will be the state-of-the-arts study, the typology, recommendations for sites, recommendations for the scope of the manuals, draft write-up of the manuals, development of the methodology studies, and recommendations and plans for Phase II.

PHASE II

During the last 21 months of the project, the contractor in conjunction with LDC professionals will undertake the application of the methodology which has been developed in a series of field tests. We will revise the typology report and methodology manuals according to the field test results. The contractor will also provide workshops, seminars, advisory services, and a limited amount of short-term training as needed. Approximately 40 worker-months will be devoted to this effort by the contractor team. Phase II tasks are described in the following sections.

TASK A: FINAL SITE SELECTION

The final site selection will reflect the input of the LDCs and the missions. If modifications of the recommended site selections from Phase I are required, they will be made so as to include sites which are representative of both need and capacity variability. Sites will be selected where possible from Agency projects in Latin America, West Africa, East Africa, and South-East Asia.

TASK B: METHODOLOGICAL CASE STUDIES

Applications of methodological procedures will be undertaken by the contractor in cooperation with LDC decision-makers in four regional field sites which typify different levels of analytical need and capacity in the area of costing non-formal education. Where possible, the contractor will link these field trails to educational projects funded by AID. The tests will focus upon the utility of the methodologies in costing existing education programs, programs under expanded conditions, and potential programs to meet targeted outcomes.

The exact schedule of the field testing will be established in consultation with LDC personnel and the AID/W Advisory Board. ETS suggests two ten-day site visits to each of four sites selected from Latin America, West Africa, East Africa, South-East Asia, or other LDC areas, as determined through the site selection process. A team of two investigators will visit each site.

Field testing is proposed to be an iterative process, whereby revisions and modification of the methodological manual(s) will reflect the field team's evaluation following each of the first three field tests. LDC personnel will be utilized during the field testing of the methodological manuals.

TASK C: TYPOLOGY VALIDATION AND REVISION OF MANUALS

The contractor would revise the preliminary report, manual, and guide outlined in Phase I according to the outcomes of the field tests. Draft refinement would incorporate test findings regarding such things as the field management of data collection, inconsistencies between national strategies and local needs, hidden costs, and unexpected outcomes, as well as perceptions of LDC personnel as to the use and utility of the methodologies.

TASK D: WORKSHOPS AND SEMINARS

The contractor would provide up to four seminar workshops in conjunction with the results of the field tests and the refinement of the typologies, methodologies, and procedural guidelines. In addition, the contractor would provide for advisory services to other planned or on-going NFE projects, and for a limited amount of short-term academic and in-country training for LDC decision-makers in the use of the recommended methodologies as needed.

TASK E: DISSEMINATION

As part of this project, 500 copies of the manuals will be published after securing AID/W approval. Preparatory to sending these manuals to appropriate agencies in LDC, a dissemination plan will be developed to be reviewed and approved by AID/W.

Recipients of the manuals will be asked to provide feedback regarding the usefulness of the manuals. As an outcome of the dissemination, recommendations for further follow-up will be made.

TASK F: FINAL REPORT

At the end of Phase II a two part final report will be prepared. The first part of this report will include a description of all work and activities in Phase II. The second part of this report will summarize the work and activities and results, of the entire project.

Included in the report of Phase II will be sections covering the final site selection and revisions needed, the field testing of the methodologies and revisions needed, the validation of the typology, the seminar workshops, the final manuals, the dissemination of the manuals and feedback from users, and recommendations for further follow-up.

Included in the final report of the entire project will be the report of Phase I activities (Task F, Phase I) and the report on Phase II (Task F, Phase II).

SECTION II: PERSONNEL

RESOURCE REQUIREMENTS

The project is complex because the variables to be identified and ordered, both inputs and outputs, are diverse and, in some cases, not easy to measure. Further, the functional scope of non-formal education is extremely broad since it may encompass farming practices, craft skills, health habits, nutritional standards, family planning, public administration, credit financing, machinery maintenance, cooperative marketing, language fluency, and on and on.

As a consequence, we believe that the tasks before us will require a wide array of expertise and experience and an interdisciplinary team has been assembled. The team, as it presently exists, has expert knowledge in educational administration and planning, social anthropology, cost/benefit analysis, data processing, educational economics, health care administration, international education, nontraditional education, sociology, systems analysis, and women's studies. These capabilities are described in detail in the curriculum vitae in Appendix A. As the RFP indicates, the staffing pattern can be modified and strengthened where necessary after consultation with AID.

It is of interest that members of the team have had extensive in-country experience (excluding short visits) in Afghanistan, Colombia, Costa Rica, Ethiopia, India, Kenya, Korea, Malawi, Taiwan, Tanzania, and Tunisia. Survey research and other short-term work has taken members of the team to a great many more LDCs. Although the team was not assembled primarily on the basis of language fluency, there are team members with a reading knowledge of Spanish and French and some of our consultants speak these languages.

Preliminary estimates indicate a total of 30 man months devoted to Phase I over 15 calendar months. Phase II will require 40 man months over a period of 21 calendar months.

The division of labor among the team members over 36 calendar months will be approximately as follows:

A.	Emery Summerskill	Co-director Co-director	12 man months
B.	Levine Lockheed Moock Young	Principal Investigators	58 man months

The co-directors will assume overall responsibility for the design and conduct of the research, reporting, and dissemination of findings. The principal investigators noted in Group B above will have major responsibility for collection and ordering of data, statistical analyses, ongoing participation in field research, report writing, and dissemination.

The co-directors and principal investigators will be members of the ETS team during the life of the project if the Educational Testing Service is selected as contractor. Mr. Emery is with EDUCOM which is located at ETS and he will work on subcontract with ETS. The two principal investigators who are presently at Columbia University will accept ETS appointments for the duration of the contract.

The consultants listed will be used extensively (up to 30 days a year in Phase I) and will be considered members of the team in designing an effective piece of research. We would like the flexibility of adding additional consultants, with AID approval, to assist with methodological problems as these develop.

UTILIZATION PLANS

We intend to provide LDC and AID education planners and decision-makers with alternative methodological and procedural means to cost non-formal education projects. To ensure a high utilization rate of the methodologies developed we will work hand-and-glove, in both phases of the project, with the Advisory Panel convened by AID/W. In addition, there will be valuable advice with respect to utilization from the project investigators and consultants, who, as a team, have had a substantial amount of experience in teaching, administration, and community work in LDCs.

The potential usefulness of project outcomes will be tested rigorously at the end of Phase I. Analytical procedures for identifying and ordering the variables which determine cost effectiveness/benefits, the procedures for assisting LDCs in determining the most appropriate methodologies--all will be subject to review and discussion by the project's consultative panel before Phase II is approved.

The crucial utilization test is, of course, Phase II. Here there must be agreement between the LDCs, AID, and the contractor, that the analytical procedures developed in Phase I will have location-specific meanings. The four field tests to be undertaken will deal with the reality behind the numbers. The measured impact of non-formal education on maize yields among the landless poor, in health status and family planning practice, in vocational and technical skill.

We understand that this project must produce procedures which are <u>useful</u> to planners and administrators who make the difficult decisions in allocating scarce educational resources. We believe procedures can be designed which will be both useful and valuable in this decision-making process.

When methodologies have been revised in accordance with the results of the field tests, the contractor must ensure wide utilization of the procedures through publications, working seminars, advisory services, short term training, and other means of dissemination. The Educational Testing Service has had extensive experience in all those activities designed to familiarize practitioners with the outcomes of research. Thus, ETS publishes a large number of manuals and research reports each year; conducts workshops and training institutes both nationally and internationally; provides consulting and field advisory services to educational and governmental institutions and agencies. The contractor's Henry Chauncey Conference Center has become a hub of such training and dissemination for a wide variety of educational organizations. We are confident that the reports, consulting and training responsibilities outlined in this RFP can be carried out fully and effectively.