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FINAL REPORT

SEPTEMBER 1976 - SEPTEMBER 1979

CONTRACT NO. AID/ta-c-1355

PROJECT NO. 931-11-540-239

TEACHING COMMUNITY MEDICINE, PHASE III

CENTER FOR EDUCATIONAL DEVELOPMENT IN HEALTH
BOSTON UNIVERSITY
BOSTON, MASSACHUSETTS

SEPTEMBER 1979

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I. Introduction

This is the final report on activities related to the Project 931-11-540-239, TEACHING COMMUNITY MEDICINE, PHASE III, supported by the Agency for International Development under Contract/ta-c-1355 with the CENTER FOR EDUCATIONAL DEVELOPMENT IN HEALTH (CEDH), BOSTON UNIVERSITY.

This report is divided into two main parts, specifically, a "Summative Report" reflecting the outputs of this three-year contract, and an "Interim Report", comprising all the activities of the last contract period, April-September, 1979.

A. Historical Overview

The Teaching Community Medicine contract sponsored by the Agency for International Development (AID) encompassed three major phases:

Phase I (1972-1974)

In 1972 AID entered into a contract with Harvard University to prepare a manual of instructional materials suitable for training health professional teachers from LDCs in concepts and procedures for defining competency-based curricula. A draft manual was prepared and tested at Harvard. This constituted Phase I.

Phase II (1974-1976)

The draft manual was extensively field-tested in seven LDCs (Cameroon, Columbia, Honduras, Lebanon, Malaysia, Nepal and Indonesia) to determine the appropriateness of the methodology for use in LDCs and to make revisions accordingly. The text was subsequently published in 1975 as Systematic Course Design for the Health Fields (SCD).

Phase III (1976-1979)

This phase was contracted with Boston University, which had become the parent University for the Center for Educational Development in Health (CEDH). CEDH's practical training methodology is problem-oriented rather than discipline-oriented, which made Boston University a more appropriate institution to conduct this type of activity.

This new phase of this contract came as a response to requests from LDCs to teach a methodology for applying modern educational technology using a systematic course design in training the trainers of health professionals, paramedicals, and auxiliaries.

The project was funded for three years beginning September 1976. AIDTO Circular A-600, dated November 17, 1976 was then sent to the field in order to provide AID Missions with details regarding the availability of this resource.

The response from the field was encouraging with a total of 25 inquiries being received, resulting initially in 10 technical field visits and assistance in developing programs.

Under this contract, CEDH trained LDC health professionals; developed, tested, and published a teacher's manual to accompany the SCD manual; developed, tested and published a simplified version of the SCD. Additionally, AID requested that CEDH conduct regional workshops for LDC decision-makers who were in a position within their respective countries, to encourage the implementation of the CEDH approach in teacher training. In August 1978, CEDH conducted one regional workshop in Cali, Colombia. A second workshop of this scope and magnitude was given in Kuala Lumpur, Malaysia, March 12-16, 1979.

B. Output Measurements

The original AID/CEDH contract read as follows:

"to teach an innovative educational methodology for trainers of health professionals and para-professionals in developing countries in order to enable those trained to be more responsive to the health needs of their population."

To fulfill this contract CEDH's responsibilities were broken down into six main tasks (also classified as "Statement of Work") as follows:

Task a "organize and conduct training courses in curriculum design and teaching methodology for LDC teachers in countries selected by AID. Fifty to one hundred teachers shall be trained on site each year. This training shall be accomplished by LDC Field Directors in close collaboration with the Contractor. The Field Directors shall be selected by the Contractor, in consultation with the Cooperating Government. The Contractor may provide short-term training for Field Directors, if required."

A contract amendment/modification signed 9/27/78 amended the Statement of Work to require that the Contractor shall train 25-30 field directors on location in various LDCs; a PIO/T dated 6/21/78 indicated that these field directors would be trained in the third year rather than 4-6 as earlier programmed.

The following table shows how CEDH satisfied this first project objective:

TABLE 1: NUMBER OF TEACHERS TRAINED BY YEAR AND COUNTRY
 BROKEN DOWN BY FIELD DIRECTORS (F.D.) AND
 PARTICIPANTS (P.)

April 24, 1979

C O U N T R Y	Y E A R					
	01		02		03	
	F.D.	P.	F.D.	P.	F.D.	P.
Bangladesh					3	
Bolivia	2	22	6	29		
Brazil			6			
Chile			1			
Colombia			8			
Ecuador			1			
Egypt					3	65
El Salvador			3			
Fiji					1	
Honduras	1	28	4	35		
Indonesia					7	
Malaysia					2	
Nepal	13	9	19	21	30	3
Nicaragua			3			
Nigeria			1			11
Papua New Guinea					2	
Peru			4			
Philippines					6	27
S. Korea					3	
Thailand					5	
Togo					25	
Tonga					1	
Venezuela			2			
TOTAL	16	59	58	85	88	106

By the end of the third year of the contract, 23 countries were visited, 162 Field Directors were trained and 250 persons had participated in the workshops and training sessions. Field Directors were identified by MOH and AID Missions officials or by CEDH staff members during reconnaissance visits. Participants were selected on the basis of their roles as teachers, instructors, as supervisors or as program officials concerned with the graduates of such institutions.

Task b "A simplified version of the Manual Systematic Course Design for the Health Fields...shall be researched and developed in the first year. The text shall be simplified and adapted to serve health teachers with lesser educational background and with a poorer understanding of English than professionals. More illustrative material shall be developed which is representative of training problems in LDCs. The simplified manual shall be field tested during the second year and published during the third year."

Table II (on page 6) shows the activities that were carried out by CEDH over the three years of the project in the process of preparing a simplified version of the Manual (Task II) and in developing a Leader's Guide (see Task C below).

The Systematic Course Design for the Health Fields' Manual underwent the following major adaptations:

- 1) the original manual of almost 400 pages now contains fewer than 200 pages;
- 2) the original version was designed to be used as the basic text for courses on curriculum design in health fields; thus it contained theoretical as well as practical information. The simplified version presents only a method for designing courses which can be used by health teachers;
- 3) terminology has been greatly simplified by reducing educational jargon and substituting appropriate sixth-grade level vocabulary and sentence structure;

TABLE II: TASK B, C WRITE, FIELD TEST, PUBLISH
SIMPLIFIED EDITION OF THE MANUAL ON
SYSTEMATIC COURSE DESIGN AND A LEADER'S GUIDE

Simplified Edition	Write	Developmental Test	Field Test	Revise	Publish
Systematic Course Design (SCD)	6/77 - 4/78 Boston CEDH	6/78 - 7/78 Washington, D.C. University of the District of Columbia	9/78, 11/78 Beersheva, Israel Ben Gurion University School of Health Science 1/79 - 2/79 Offa, Nigeria School of Health Technology 2/79 Manila, Philippines Ministry of Health	5/79 - 8/79 Boston CEDH	9/78 Boston CEDH
Leader's Guide SCD	9/76 - 9/77	9/77 Kathmandu, Nepal Institute of Medicine	11/77 Kuala Lumpur, Malaysia Institute of Public Health	1978	9/78
*Leader's Guide Simplified Edition	12/78		1/79 - 2/79 Offa, Nigeria School of Health Technology	5/79 - 8/79 Boston	9/79 Boston
*Spanish Edition SCD					June 1978 LiMusa Pub. Co., Mexico
*French Edition SCD Simplified Edition	1/79 - 4/79 (translate)		6/79 Lomé, Togo Teacher Training Ctr		

* Not required by Contract

- 4) illustrative materials shown and discussed are more specifically focussed at the non-physician population in LDCs, in contrast to the original version of SCD which included mini-cases such as "Hospital Quality Control System" and "Industrial Hygiene";
- 5) references to books, journals and annotated bibliographies have been eliminated. This is particularly desirable because such sources are neither generally nor easily available in LDCs;
- 6) technical terms, examples and passages have been generally eliminated;
- 7) references to generally-unavailable media and resources such as films and filmstrips, programmed instruction, individualized instruction, etc. (explained in detail in the original version of SCD manual) have been generally eliminated in the "Methods" section.

Task c "A Teachers Manual to accompany the manual Systematic Course Design for the Health Fields shall be researched, developed and field tested during the first year. This manual is intended to assist Field Directors and others using the text to teach SCD methods. As in the simplified text, the Teachers Manual shall include LDC specific exercises and examples. The Teachers Manual shall be published during the second year."

The Teachers Manual was field tested in Nepal and Malaysia. It is now called "Leader's Guide". It contains a typical workshop program which identifies activities, assignments and teaching approaches for each individual training session, as well as "Resources/Reminders" for the instructor; in addition, a section on "Evaluation Materials" includes forms for biographical data, evaluation of participant products and participant evaluation of the workshop.

Task d "The Contractor shall provide assistance to LDCs in curriculum development or revision, as requested by AID. Requests may vary in scope and complexity, from relatively small components of a curriculum to the development of revision of an entire curriculum for a health technician.

"Services may include some or all of the following:

- Regular on-site consultation during the process of curriculum development or revision.
- Bibliographic support
- On-site workshops on production of instructional materials and test construction, and
- Editorial assistance while work is in progress."

The following table indicates the magnitude of the services provided by the Contractor under this "task" and suggests the geographic spread of the activities,

TABLE III SERVICES PROVIDED LDCs UNDER TASK D
SHOWING COUNTRY AND YEAR

April 24, 1979

∞ - Reconnaissance trip
✓ - Consult

SERVICE	COUNTRY	YEAR		
		01	02	03
A. On Site Consultation	Bahrain	∞		
	Bolivia	∞	✓	
	Ecuador			∞
	Egypt		∞	✓
	El Salvador	✓		
	Guatemala	∞		
	India		∞	
	Indonesia		∞	
	Nepal	✓	✓	✓
	Nicaragua	∞		
	Peru	✓		
Philippines		∞	✓	
B. Bibliographic Support	Bahrain	✓		
	Bolivia	✓		
	Egypt		✓	
	Honduras	✓	✓	
	Nepal	✓	✓	
	Philippines			✓
C. On Site Workshop	Bolivia	✓		
	Egypt			✓
	Honduras	✓	✓	
	Nigeria			✓
	Nepal	✓	✓	✓
	Philippines			✓
D. Editorial Assistance	Bolivia	✓		
	Egypt		✓	
	El Salvador	✓		✓
	Honduras	✓		
	Nepal	✓	✓	
	Philippines	✓		✓

Task e "At the request of AID, three to five formal or informal linkages shall be formed each year with LDCs on country-specific health manpower development problems. Consultation and specialized training services shall be provided to AID Missions, geographic desks, and bureaus on country-specific health manpower development problems. Consultation (to LDCs implied - ed.) by Contractor staff will take one or more of the following forms:

- Followup of teacher training workshops in the LDCs
- Performance analysis...
- Evaluation of education programs...
- Bibliographic support...
- Consultation with AID Missions and AID Washington."

As referred to in Boston University's Annual Report, 1978, under the topic of "specialized health in manpower development" --- "CEDH assisted in health manpower component of a proposed loan to extend health services to rural areas."

TABLE IV: SERVICES PROVIDED TO AID OFFICES AND TO
LDCs UNDER TASK V BY YEAR AND BY COUNTRY

A. Consultations (Services to AID)

<u>Services Provided</u>	<u>AID Unit Assisted</u>
Year 1: *Conference on Behavior Change in Nutrition	DSB/Education AID
Year 2: *Help write PID and PP	Somalia Mission
*Develop English and Spanish Slide Tape Show on CEDH services and capabilities	DSB/Health AID
*Course "Curriculum Problems and Instructional Modes in International Development"	DSB/Health AID and Boston University
Year 3: *Evaluate AID Contractor	Haiti Mission
*Workshop on curriculum design at annual meeting in Los Angeles	APHA International Division
*Consult with MOH officials on manpower & training needs	Jamaica Mission

B. Consultations (to LDCs)

Year 1: Workshop on SCD; workshop on evaluation and workshop on modern educational methods	Nepal
Workshop on SCD	Bolivia
Evaluation Design	El Salvador
Workshop on evaluation	Honduras
Year 2: Evaluation auxiliary nurses curricula; health education	Bolivia
Workshop on evaluation	Honduras
Consult on health assistant and auxiliary health worker curriculum	Nepal

* Not required by the Contract.

B. Consultations (to LDCs)

Services Provided

Year 3: Workshop on SCD

Consult on Health Assistant
and Auxiliary Health Worker
Curriculum

Teach workshop on SCD

Teach workshop on SCD

16-country Workshop on
Village Health Worker
Training

AID Unit Assisted

Egypt

Nepal

Nigeria

Philippines

Togo and other
West Central African
countries

Task f "Upon request of AID missions, geographic desks, or bureaus, and their (sic) host countries, specialized short-term training shall be tailored to the specific needs of the individual(s) involved."

Table V shows the numbers of trainees for whom specialized short-term training was provided, in Boston, by project year.

TABLE V: SPECIALIZED SHORT-TERM TRAINING ACTIVITIES
CARRIED OUT UNDER TASK f, BY YEAR

Year 01	Honduran M.D. (1)
	Bolivian R.N. (2)
Year 02	Bolivian R.N. (3)
	Honduran R.N. (2)
	Nigerian M.D. (1)
Year 03	Philippinos (1)
	Course on Inter- National Develop. (9)

The following charts further illustrate and summarize CEDH Project outputs under AID Contract ta-c-1355 from September 1976 until September 1978. A schedule of activities covering the period of September 1978 to September 1979 is also included.

() = number of individuals trained

<u>Site</u>	<u>Reconnaissance Visits</u>	<u>Conferences and Workshops Overseas</u>	<u>Consultation Overseas</u>	<u>Training of Field Directors/Teaching</u>	<u>Research/Publication</u>
Nepal	X	a) Systematic Course Design (12) b) Evaluation c) Educational Methods (20)			Field Test Leader's Guide for Systematic Course Design
El Salvador			developed evaluation design for rural health aides program		
Bolivia	X	Workshop in Systematic Course Design (SCD) (22)			
Honduras		Workshop in Evaluation (28)			
Peru	X		Curricula for inservice training		
Nicaragua	X				
Guatemala	X				
Bahrain	X				
Boston				Honduran M.D. (1) Bolivian R.N. (2)	Develop Leader's Guide for Systematic Course Design

() = number of individuals trained

September 1977 - September 1978

<u>Site</u>	<u>Reconnaissance Visits</u>	<u>Conferences and Workshops Overseas</u>	<u>Consultations Overseas</u>	<u>Training of Field Directors/Teaching</u>	<u>Research/Publications</u>
Colombia (Regional)		Conference for health manpower policy makers on SCD (34)			
Nepal		Workshop on SCD for new faculty (29)	Consult on Auxiliary Health Worker and Health Assistant Curriculum		Basic Science Curriculum for Health Assistants
Malaysia					Field Test Leader's Guide Systematic Course Design
Israel					Field Test Simplified Edition SCD
Honduras		Workshop on evaluation (35)			
Mexico					Publish Spanish Version SCD (LiMusa)
Bolivia			Evaluation of auxiliary nurses; curricula health educators		
Somalia			plan P.I.D.		
Brazil	X				
India	X				
Indonesia	X				
Philippines	X				
Boston				Bolivian RN (3) Honduran RN (2) Nigeria MD (1)	Field Test Edition Simplified Edition of SCD

<u>Site</u>	<u>Reconnaissance Visits</u>	<u>Conferences and Workshops Overseas</u>	<u>Consultations Overseas</u>	<u>Training of Field Directors/Teaching</u>	<u>Research/Publication</u>
Malaysia (regional)		Conference for policy makers on competency-based methods (45)			
Philippines		Workshop on SCD (25)			Field Test Simplified Edition SCD
Brazil		Workshop on SCD (20)			
Peru		Workshop on SCD (20)			
Indonesia		Workshop on SCD (45)			
Nepal			Develop curricula for auxiliary health workers and health assistants		Field Test curricula for auxiliary health workers and health assistants
Nigeria		Workshop on SCD (11)			Field Test Simplified Edition SCD
Togo		Workshop for Village Health Worker Trainers (25)			
South Korea	X				
Ecuador	X				
Boston				Indonesian (3) Philippines (1) Course on International Dev. (9)	Publish Leader's Guide Simplified Edition SCD Paper on 1974-1976 Field test overseas
Egypt	X	Workshop on SCD (65)			

<u>Outputs</u>	<u>Required by Contract</u>	<u>1977</u>	<u>1978</u>	<u>Projected 1979</u>
Field Directors trained in Boston	4-6 per year	3	6	5 9 (course on international development)
Teachers trained in Workshops overseas	50-100 per year	82	98	256
Reconnaissance Visits	-----	6	4	3
Countries assisted by consultations or workshops (not including Reconnaissance Trips)	3-5 per year	5	6	9
Publications	Simplified SCD text Leader's Guide SCD	---	Spanish version SCD (not required)	Simplified SCD text Leader's Guide SCD French version SCD (not required by contract)
Course or Curricula for International Development at B.U.	-----	---	---	(not required by contract) 1
Research	-----	Field test Instructor's Guide	Field test Simplified Edition of SCD	Evaluate new curricula for Nepal.

The following list presents the travel schedule of CEDH professional staff to meet the objectives of this Contract.

Travel

on

AID Contract: AID/csd-3613

Program in the Teaching of Community Medicine and Public Health

July 1, 1974 - June 30, 1975

<u>Name</u>	<u>Dates</u>	<u>Location</u>	<u>Purpose</u>
Jaime Arias	Sept. 1974	Colombia- Boston- Colombia	To attend the Field Directors Workshop held at the Harvard School of Public Health.
Nguyen Dien	Sept. 1974	Vietnam- Boston- Vietnam	Same as above.
Jorge Haddad	Sept. 1974	Honduras- Boston- Honduras	Same as above.
Lazare Kaptue	Sept. 1974	Cameroons- Boston- Cameroons	Same as above.
Nabil Kronfol	Sept. 1974	Lebanon- Boston- Lebanon	Same as above.
Francisco Yepes	Sept. 1974	Colombia- Boston- Colombia	Same as above.
Lori Vanderschmidt	10/1/74-11/16/74	Malaysia	To plan an AID contract workshop on Systematic Curriculum Design.
Jorge Haddad	10/31/74-11/3/74	Tegucigalpa- Bogota- Tegucigalpa	Meeting to plan translation into Spanish and editing of "Systematic Curriculum Design"
Dodge Fernald	12/1/74-12/15/74	Bogota, Colombia	To conduct a training institute in Bogota.

<u>Name</u>	<u>Dates</u>	<u>Location</u>	<u>Purpose</u>
Dieter Koch-Weser	12/5/74-12/14/74	Bogota, Colombia	Participation in a workshop in Bogota.
Dodge Fernald	1/5/75-1/24/75	Honduras	To serve as consultant/advisor to a teaching workshop in Tegucigalpa.
Ascher Segall	1/16/75-2/13/75	Beersheva, Israel-Boston-Geneva-Beersheva, Israel	a) planning, implementation and evaluation of progress of AID sponsored workshops b) planning of CEDH participation in workshops. c) meeting with AID project officers. Geneva: Meeting with WHO officials to discuss WHO collaboration in workshops.
Lori Vanderschmidt	2/10/75-3/29/75	Boston-Nepal-Vietnam-Malaysia-Nepal-Boston	To monitor Nepal and Malaysia to assess training needs and to visit the AID office in Saigon.
Pat McArdle	3/7/75-4/11/75	Kuala Lumpur-Tel Aviv, Israel	To consult to the AID workshop held in Kuala Lumpur and consult in Beersheva, Israel.
Dodge Fernald	3/20/75-4/10/75	Yaounde, Cameroons	Consultant for workshop in Cameroons.

July 1, 1975 - June 30, 1976

<u>Name</u>	<u>Dates</u>	<u>Location</u>	<u>Purpose</u>
Dieter Koch-Weser	7/14/75-7/27/75	Beirut; Bahrain	Consultant for the AID workshop in Beirut, Lebanon.
Lori Vanderschmidt	2/1/76-2/8/76	Cameroons	To monitor AID field trial in Yaounde, Cameroons.
Dieter Koch-Weser	2/21/76-3/2/76	Colombia	To monitor the Colombia field trial with the Colombia Field Directors.
Jaime Arias	April, 1976	Colombia- Boston- Colombia	To participate in the CEDH/AID Field Directors Workshop held at Harvard University.
Jorge Haddad	April, 1976	Honduras- Boston- Honduras	Same as above.
Lazare Kaptue	April, 1976	Cameroons- Boston- Cameroons	Same as above.
Eddy Lo	April, 1976	Kuala Lumpur- Boston- Kuala Lumpur	Same as above.
Shekhar Rizyal	April, 1976	Kathmandu- Boston- Kathmandu	Same as above.
Francisco Yepes	April, 1976	Colombia- Boston- Colombia	Same as above.

Travel

on

AID Contract: AID/tc-c-1355

teaching Community Medicine Phase III

September 20, 1976 to September 19, 1977

<u>Name</u>	<u>Dates</u>	<u>Location</u>	<u>Purpose</u>
Dieter Koch-Weser	11/18/76-12/3/76	Boston-LaPaz- Sta Cruz-LaPaz- Boston	Consultant on USALD Project in Bolivia.
John Massey	1/11/77-1/26/77	San Salvador	Consultation on Health Worker Evaluation for AID.
Lori Vanderschmidt	2/23/77-3/21/77	Boston-Washing- ton-San Fran- cisco-Hawaii- Malaysia-Nepal- Birgunj-Tansen- Bahrain-Boston	To assess the possibility of field testing Teacher's Manual in Malaysia and Bahrain. To discuss parallel AID projects with Dr. Smith in Hawaii. To plan long range program in Nepal.
John Massey	2/27/77-3/4/77	Boston-Guatemala- Nicaragua- Boston	Consultation on Rural Health Assistant for AID.
Mavdee de Crespo	4/5/77-5/1/77	Santa Cruz- Bolivia-Boston and return	To attend a workshop at CEDH.
Marguerita de Milan	4/5/77-5/1/77	Bolivia-Boston and return	To attend a workshop at CEDH.
Dieter Koch-Weser	5/1/77-5/16/77	Cali, Colombia	Follow-up of workshop in Bogota of 1974 and discussion of possible workshop for South Colombia in Cali.

<u>Name</u>	<u>Dates</u>	<u>Location</u>	<u>Purpose</u>
John Massey	5/11/77-6/4/77	Boston-Tegucigalpa-Nicaragua-El Salvador-Guatemala-Boston	Consultation on health manpower programs in Honduras, Nicaragua and Guatemala. Technical assistance to ongoing project in El Salvador.
Judith Carey	5/21/77-6/18/77	El Salvador	Implementation of a training program for AID in El Salvador.
Dieter Koch-Weser	6/28/77-7/16/77	Boston-New York-La Paz- Santa Cruz-Sao Paulo Rio de Janeiro-New York-Boston	Workshop on course design for rural health workers.
John Massey	6/28/77-7/16/77	Boston-La Paz-Santa Cruz-Montero-Bolivia	To give a workshop on Systematic Course Design for staff of the Ministry of Health Training Schools in Bolivia.
Judith Carey	8/12/77-9/17/77	San Salvador	To continue consultation on Rural Health Aide Curriculum in El Salvador.
John Massey	8/17/77-8/27/77	La Paz-Tegucigalpa-Boston	To give a workshop on Evaluation to Teaching Staff of Ministry of Health in Honduras.
John McCollum	8/25/77-10/4/77	Kathmandu, Nepal	
Lori Vanderschmidt	8/25/77-10/7/77	Boston-Nepal-Malaysia-Hawaii-Boston	3 workshops on Evaluation, Modern Instructional Method and Systematic Course Design, consultation-Nepal; arrange for field test of Leader's Guide - Malaysia; meet with Dr. Smith - Hawaii.
Judith Carey	9/14/77-9/24/77	Boston-Lima-Arequipa-Lima-Boston	Lima - to present a workshop on Systematic Course Design. Arequipa - to meet with representatives of the Medical School and ASPEFEME for future collaborations.
Dieter Koch-Weser	9/14/77-9/21/77	Lima, Peru	Workshop for INPROMI and health professional schools under AID contract.

<u>Name</u>	<u>Date</u>	<u>Location</u>	<u>Purpose</u>
Judith Carey	8/12/77-9/1/77	San Salvador	To continue consultation on Rural Health Aide Curriculum in El Salvador (follow-up visit).
<u>September 20, 1977 to September 19, 1978</u>			
John McCollum	2/17/78-3/11/78	Nepal	
Lori Vanderschmidt	2/17/78-3/11/78	Nepal	To work with the Institute of Medicine Faculty in developing curricula for the training of Health Assistants and Auxiliary Health Workers for Nepal.
Jocelyn Carlson	3/4/78-3/31/78	Somalia	To consult for AID in Somalia to serve as a Health Manpower Training specialist on the PID team.
John McCollum	5/20/78-8/16/78	Nepal, Bangkok, Djakarta, Manilla, Guam	
Dieter Koch-Weser	6/4/78-6/22/78	Boston-Salvador-Brazil-Peru-Colombia-Venezuela-Boston	Preparation for the Cali Conference to be held in Cali, Colombia August 14-19, 1978. Visit with participants of the conference and potential instructors.
Lori Vanderschmidt	6/10/78-7/28/78	Boston-Malaysia-Nepal-India-Boston	To plan Malaysian Conference; To assist in development of curricular materials for Health Assistants and Auxiliary Health Workers in Nepal.

<u>Name</u>	<u>Date</u>	<u>Location</u>	<u>Purpose</u>
John Massey	7/8/78-7/18/78	Washington, D.C.- Tegucigalpa-El Salvador-Boston	Conduct workshop for nursing instructor staff in Honduras; follow-up evaluation of Rural Health Aide Program in El Salvador.
Dieter Koch-Weser	8/9/78-8/19/78	Cali, Colombia	To participate in The Cali Workshop held in Cali, Colombia.
John Massey	8/9/78-8/20/78	Cali, Colombia	Same as above.
Jorge Auza Lopez	8/13/78-8/18/78	Bolivia-Cali, Colombia-Bolivia	To attend the Cali Workshop held in Cali, Colombia.
Jorge Quinteros Canedo	Same as above.	Same as above.	Same as above.
Margarita Ruiz De Millan	Same as above.	Same as above.	Same as above.
María Aurora De A. Holloway	Same as above.	Brasil-Cali, Colombia-Brasil	Same as above.
Fabiola De Aguiar Nunes	Same as above.	Same as above.	Same as above.
Juracy Dos Santos Rocha	Same as above.	Same as above.	Same as above.
Clara Wolfovitch	Same as above.	Same as above.	Same as above.
Gilka Xavier Da Silveira	Same as above.	Same as above.	Same as above.
Maria Terezinha De Amaral Moreira	Same as above.	Same as above.	Same as above.
Ernesto Medina Lois	Same as above.	Chile-Cali, Colombia- Chile	Same as above.
Ceneyda M. De Jaimes	Same as above.	Colombia	Same as above.
Luz Helena Sanchez	Same as above.	Same as above.	Same as above.

<u>Name</u>	<u>Date</u>	<u>Location</u>	<u>Purpose</u>
Vincente Zapata S.	8/13/78-8/18/78	Colombia	To attend the Cali Workshop held in Cali, Colombia.
Miguel Almeida	Same as above.	Ecuador-Cali, Colombia-Ecuador	Same as above.
Elizabeth Angela Ascencio S.	Same as above.	El Salvador-Cali, Colombia-El Salvador	Same as above.
Zoila Blanca Fuentes	Same as above.	Same as above.	Same as above.
Celia Osorio De Salazar	Same as above.	Same as above.	Same as above.
Concepcion De Maria Segura	Same as above.	Honduras-Cali, Colombia-Honduras	Same as above.
Nelson Velasquez G.	Same as above.	Same as above.	Same as above.
Myriam Fonseca Lopez	Same as above.	Nicaragua-Cali, Colombia-Nicaragua	Same as above.
Adilia Lopez De Somarriba	Same as above.	Same as above.	Same as above.
Jaime Manzanares Aviles	Same as above.	Same as above.	Same as above.
Renato Castro De La Mata	Same as above.	Peru-Cali, Colombia-Peru	Same as above.
Rodolfo L. Gonzalez Enders	Same as above.	Same as above.	Same as above.
Graciela Risco De Dominguez	Same as above.	Same as above.	Same as above.
Miguel Santillana	Same as above.	Same as above.	Same as above.
Carlos Luis Gonzalez	Same as above.	Venezuela-Cali, Colombia-Venezuela	Same as above.
Elio Velasquez Villaroel	Same as above.	Same as above.	Same as above.

September 20, 1978 to Present

<u>Name</u>	<u>Date</u>	<u>Location</u>	<u>Purpose</u>
John McCollum	10/27/78-12/78	Nepal	
Lori Vanderschmidt	11/3/78-12/15/78	Nepal	To assist the Institute of Medicine in Nepal with the development of Health Assistant curriculum.
John McCollum	1/6/79-4/1/79	Nepal, Manila, Singapore, Kuala Lumpur, Tokyo	
Lynne Gilbert	1/10/79-2/28/79	Nigeria	To conduct a workshop in Nigeria.
Lori Vanderschmidt	1/19/79-3/24/79	Nepal, Manila, Malaysia	Nepal: To review progress of Health Assistant Basic Science and Clinical Task Forces in development of curriculum. Philippines: To teach the Ministry of Health trainers the SCD method; develop a curriculum for a 10 week course for Municipal Health Officers in Management and Community Development. Kuala Lumpur: To deliver an Asia Regional Workshop on competency based health professional curricula to representatives from 10 Asian countries.

<u>Country and Name</u>	<u>Date</u>	<u>Location</u>	<u>Purpose</u>
<u>Bangladesh:</u>			
Sneha Banu	3/11/79-3/16/79	Bangladesh-Kuala Lumpur-Bangladesh	To attend the CEDI AID conference held in Kuala Lumpur, Malaysia.
T.R. Chowdhury	Same as above.	Same as above.	Same as above.
Dr. M.A. Rahim	Same as above.	Same as above.	Same as above.
<u>Fiji:</u>			
Isikeli Leweniquila	Same as above.	Fiji-Kuala Lumpur-Fiji	Same as above.
<u>Indonesia:</u>			
Hasnan Said	Same as above.	Indonesia-Kuala Lumpur-Indonesia	Same as above.
Sumarti Sudomo	Same as above.	Same as above.	Same as above.
Fardiah Yasin	Same as above.	Same as above.	Same as above.
Putu Lawa Udayana	Same as above.	Same as above.	Same as above.
<u>Nepal:</u>			
Moin Shah	Same as above.	Nepal-Kuala Lumpur-Nepal	Same as above.
Bishma Prasai	Same as above.	Same as above.	Same as above.
<u>Papua New Guinea:</u>			
K.K. Beri	Same as above.	Papua New Guinea-Kuala Lumpur-Papua New Guinea	Same as above.
Joel Banam	Same as above.	Same as above.	Same as above.

<u>Country and Name</u>	<u>Date</u>	<u>Location</u>	<u>Purpose</u>
<u>Philippines:</u>			
Santiago Casin	3/11/79-3/16/79	Philippines- Kuala Lumpur- Philippines	To attend the CEDH/AID Conference held in Kuala Lumpur Malaysia.
Remy Dequina	Same as above.	Same as above.	Same as above.
Pedro Gaton	Same as above.	Same as above.	Same as above.
Corazon P. Gonzalez	Same as above.	Same as above.	Same as above.
Winifreda Marquez	Same as above.	Same as above.	Same as above.
<u>South Korea:</u>			
Kyo Ho Han	Same as above	South Korea- Kuala Lumpur- South Korea	Same as above.
Chong-Dal Park	Same as above.	Same as above.	Same as above.
Kilbyoung Yoone	Same as above.	Same as above.	Same as above.
<u>Thailand:</u>			
Pairatana Gunakasem	Same as above.	Thailand- Kuala Lumpur- Thailand	Same as above.
Narintr Tima	Same as above.	Same as above.	Same as above.
Paichit Pawabutra	Same as above.	Same as above.	Same as above.
Pensri Pichaisanit	Same as above.	Same as above.	Same as above.
Khun Manee Choothai	Same as above.	Same as above.	Same as above.
<u>Tonga:</u>			
Laumesi Malolo	Same as above.	Tonga-Kuala Lumpur- Tonga	Same as above.
<u>Washington, D.C.:</u>			
Ramona Arnett	Same as above.	Washington, D.C.- Kuala Lumpur- Washington, D.C.	Same as above.

<u>Name</u>	<u>Date</u>	<u>Location</u>	<u>Purpose</u>
Dieter Koch-Weser	3/26/79-4/2/79	Ecuador	To travel to Ecuador to discuss CEDH involvement.
Jose Carneiro	3/26/79-4/2/79	Ecuador	Same as above.

II. SUMMATIVE REPORT

What follows is a brief description of all program activities from April to September 1979 related to the AID/CEDH Contract ta-c-1355.

A. Asia

CEDH received requests from various Asian countries to provide further assistance in curriculum development, teacher training, evaluation and health manpower training. However, due to the lack of funds the Center was unable to satisfy these invitations. The following countries originated the requests:

- Indonesia - National Family Planning and Coordinating Board - BKKBN
- Nepal - Institute of Medicine
- Philippines - Ministry of Health;
- Office of Education and Personnel Training;
- Food and Nutrition Research Institute.
- Thailand - Mahidol University School of Public Health

B. Latin America/Caribe

● Bolivia:

Dr. Julio Ceitlin, Director of the Panamerican Federation of Medical Schools (FEPAFEM) expressed interest in organizing a workshop/seminar on "Curriculum Design System" for the Bolivian Association of Medical Schools (ABOLFAM).

Contacts were made to obtain financial support from AID/Bolivian Mission. Unfortunately, the lack of funds has forced ABOLFAM and CEDH to postpone this workshop until alternative funding sources can be identified.

● Ecuador:

During April 1979, by invitation of Dr. Miguel Almeida, General Director of Health, Ministry of Health of Ecuador and on recommendation of the Ecuadorian AID Mission, Dr. Dieter Koch-Weser and Mr. Jose T. M. Carneiro paid a reconnaissance visit to the health officials of the Ecuadorian government.

The main purpose of the trip was:

"To discuss in detail with MOH authorities CEDH's contribution and support in the preparation and development of health manpower training programs, competency-based curricula programs, assistance to faculty in planning, implementation and evaluation of health-related courses and curricula."

It has been agreed that a seven (7) day workshop on "Systematic Course Design" will take place in Quito, Ecuador during October 14-20, 1979. Approximately thirty (30) Ecuadorian health professionals plan to attend. The workshop will be jointly sponsored by AID/Ecuador Mission, Ecuador Ministry of Health and AID/Washington Latin America Bureau.

● Jamaica:

By invitation of Jamaica's Ministry of Health and sponsored by the American Public Health Association, Dr. John McCollum, consultant to CEDH, paid a reconnaissance visit to Jamaica (August 12-25, 1979). His main objective was to assess this country's needs in the area of health manpower training and development.

Dr. McCollum will return to Jamaica September and November 1979 to further carry on and implement training programs.

● Haiti:

On May 18, 1978, Dr. Evariste Midy, Director of the Bureau of Planning and Evaluation, Haitian University of Health, visited the offices of CEDH in Boston. Dr. Midy's objectives for his visit are summarized as a) to familiarize himself with the Center's resources, b) to acquire literature, publications on competency-based training applied to the health field, and c) to seek technical support for future programs on curriculum development for the Department of Community Medicine. Following his visit to AID/Washington, Dr. Midy had planned to inform CEDH of the outcome of his encounter with AID officials regarding CEDH's future involvement with the Haitian government.

In addition, during April 1979, by invitation of Pacific Consultants (Washington, DC), Ms. Jocelyn Carlson of CEDH visited Haiti (Port au Prince). The main objective of this visit was to evaluate a Westinghouse project on "Strengthening Health Services" - an administrative and managerial analysis of the MOH administrative structure.

C. Africa

Lome

Under the auspices of the Strengthening Health Delivery Systems in Africa (SHDS), Health Policy Institute, Boston University, a conference-workshop for policymakers and trainers of Village Health Workers took place in Lome this past June 22-27, 1979. This workshop was conducted by Drs. Adjou-Moumouni (Lome coordinator), El Neil (OMS), Segall, Ericsson, Vanderschmidt (CEDH), and Mr. Helfenbein (SHDS). Twenty-three participants representing sixteen countries were present.

Objectives

The following objectives were defined:

1. be familiar with the procedure used to develop the materials for training VHWS in the 20 countries;
2. be able to compare the above-mentioned procedure with the one used in their own countries to develop materials for training rural community health workers;
3. give feedback to the material developers for revisions to improve the said materials;
4. inform the producers of the materials how it may be used in their own countries;
5. inform the workshop organizers of their country's need for cooperation in training VHWS or primary health workers.

Activities and Results

Objectives 1 & 2

After statements made by the participants and by the organizers, and through the discussions during the conference-workshop, it was noted:

- a. that the participants have a clear knowledge of the procedure followed in designing the different documents presented for their consideration;
- b. that all the participating countries are in the process of taking, or have already taken measures to offer health care down to the most peripheral level, in this case the village;

- c. that certain countries are already training village health workers and have teaching material;
- d. that certain countries are in the process of developing programmes;
- e. that countries which have presented material have in practice followed the same procedure as that adopted for the preparation of the teaching materials at the Center in Lome, which is based on a systematic approach, namely:
 - identifying the problem
 - assigning tasks
 - defining objectives
 - preparing the teaching material
 - training instructors
 - evaluating the activities

Objective 3

The participants were requested to pay special attention to the Course Objectives which define the performance expectations of the VHW at the end of his training, and the Course Outline, which defines the constraints which need to be considered in developing courses and adapting the training materials to specific conditions in each country. At a special session after some days during which participants in groups studied the Course Objectives in detail, comments were obtained which related to:

- particular details on the selection of appropriate terms
- the general structure and order of presenting the course objectives
- cultural customs and practices
- the concepts of the role of the VHW
- the concepts of primary health care
- the relationship between the VHW and the health services
- concepts of medical practice and general hygiene
- economic constraints
- the concepts of training methods
- the balance between preventive and curative care
- the balance between intellectual and technical skills.

Some of these comments may be considered during the revision of documents and others during the adaptation of the materials to the concepts and needs of each country.

In regard to the Course Outline, the participants' critique centered to a great extent on the preoccupations and constraints which had to be faced in planning and developing training programmes in each country. As expected, the conference established important differences in their concerns and constraints among the participating countries. Principal differences in views emerged in the consideration of the following points:

1. the possibility of training VHWs in a hospital setting when local health facilities cannot be used. The participants of six countries insisted that under no circumstances should training take place in a hospital because the emphasis would inevitably be placed on curative rather than preventive practice;
2. the degree of literacy of the VHWs. Participants of four countries asserted that the VHW should be literate. Others expressed the view that although they may have to train illiterate villagers, they preferred someone who could read and write at least in the local language.

Objectives 4 & 5

It became clear during the course of the conference that the manner in which individual countries will relate to the WHO-SHDS Project will depend on the stage of development of the national training programme for village health workers. Three stages can be distinguished:

- Stage 1: No formal plan for training and utilizing village health workers has been developed or if a plan does exist, no steps have been taken towards its implementation.
- Stage 2: Village health workers are being trained and utilized on a limited scale in pilot areas. Rudimentary training programmes and instructional materials have been developed.
- Stage 3: At least several years of experience in the training and utilization of village health workers have been acquired. If this experience has been limited to certain geographical areas it is anticipated that the use of village health workers will be extended to the rest of the country within a defined time period as part of a national health plan. Formal training programmes exist and instructional materials have been both developed and field tested.

Conclusions and Recommendations

On the basis of the discussions held during this workshop, the following conclusions have been drawn pertaining to the workshop objectives, and the continuing role of the WHO regional training centers and Project for Strengthening Health Delivery Systems in West and Central Africa, in the development of VHW training programs:

1. Training and instructional materials for VHWs, which are developed at a regional level, can be most effectively used if they can be adapted to the performance expectations of the VHW, the constraints surrounding the development of VHW programs, and the social, economic and health policy goals of the countries in the region.
2. Training and instructional materials for VHWs, which are developed at the country level, may be useful as models for development of similar training materials in other countries of the region.
3. The WHO regional training centers in Lome and Lagos can facilitate the development of national VHW programmes through the training of VHW trainers at the centers and the provision of assistance in training larger cadres of trainers within each country at national, regional or local level.
4. The Project for Strengthening Health Delivery Systems in West and Central Africa offers a framework for the continued development of training and instructional materials for VHWs through:
 - a) the development of required materials adaptable to individual country needs and the development of training materials at the country level; and
 - b) the provision of training opportunities to train trainers of VHWs at the regional level and assistance in developing or expanding country training programs.

The following recommendations are made on the basis of the above conclusions:

1. The regional training centers should continue to develop the standardized training material, taking into account the observations of the participants relative to those aspects which should be considered in order to assure their adaptability to individual country conditions.
2. The participants should bring the training materials developed at the Center to the attention of others in their countries concerned with the training of VHWs, for further study as to their adaptability to country training needs.
3. The regional training centers should make available to the participant countries when requested technical staff to:
 - a. study local primary health care programs;
 - b. review training needs and participate in the training of additional VHW trainers;
 - c. discuss methods of adapting training materials to country needs; and
 - d. develop special training materials for training trainers and training VHWs, required by individual countries.

NB: A complete report on this conference-workshop is available at the Center for Educational Development in Health, Boston University.

D. Near East

Egypt

During the last six months of this Contract, Dr. Ascher Segall, Director, CEDH, visited Egypt twice.

Dr. Segall's first visit occurred during May 15-23, 1979. It had two main objectives:

1. To establish and develop training programs on Systematic Course Design for 60 faculty members of the University of Suez Medical School. This effort represented the final preparatory steps before the opening of the Medical School September 1980.
2. To plan and elaborate a follow-up program for future collaborative and technical support to the Suez Medical School.

Dr. Segall's second visit took place during July 19-24, 1979. The main purpose of this second contact was to elaborate and plan strategies and schedules for future curriculum development efforts at the University of Suez.

Another relevant and important commitment of CEDH through the person of Dr. Segall is the Beersheva Project in Health Manpower Development. In general and broad terms, this is a pilot and experimental six-year medical curriculum that focuses on the training of primary care physicians in the Negev region of Israel. This experimental curriculum is based largely on the Systematic Course Design model which outlines a systematic approach to curriculum development.

This program is now in its fourth year.

III. IN-HOUSE TRAINING

● Philippines

For a period of two (2) weeks (June 25-July 6, 1979), CEDH provided technical assistance and training on the Systematic Course Design approach of teaching to Mrs. Ofelia Valdecanas.

Mrs. Valdecanas is Chief of the Community Nutrition Research Section, a component of the Food and Nutrition Research Institute, Ministry of Health, Philippines.

● Jamaica

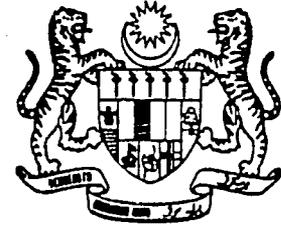
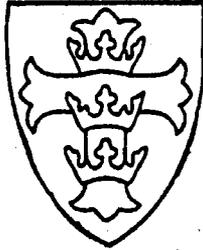
Hyacinth Stewart Bulgin, Director of Training Division, Ministry of Health, Jamaica, will spend approximately two (2) weeks at CEDH's central offices whereshe will be trained in Systematic Course Design techniques.

IV. PUBLICATIONS

The final revised edition of the Systematic Course Design for the Health Fields - Overseas Edition was completed April 1979.

A French version was translated this past April 1979 by Dr. F. Almeida. It is presently being used in Lome, Togo, Africa at the WHO Regional Teacher Training Center for purposes of training Village Health Worker Trainers. A simplified Spanish version of the Systematic Course Design for the Health Fields was translated (May 1979) by V. Zapata, Professor, University of the Valle, Colombia, where it is presently being used.

BOSTON UNIVERSITY



MINISTRY OF HEALTH

PROCEEDINGS

ASIA REGIONAL WORKSHOP ON
COMPETENCY-BASED HEALTH PROFESSIONAL CURRICULA

KUALA LUMPUR, MALAYSIA
MARCH 12-16, 1979

SPONSORED BY:

MINISTRY OF HEALTH, MALAYSIA

AND

BOSTON UNIVERSITY, CENTER FOR EDUCATIONAL
DEVELOPMENT IN HEALTH

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EDITOR: JOSÉ T.M. CARNEIRO, M.H.S.A.
CENTER FOR EDUCATIONAL
DEVELOPMENT IN HEALTH

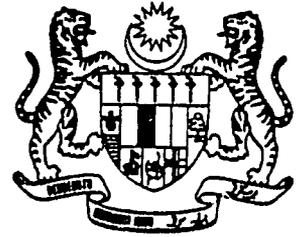
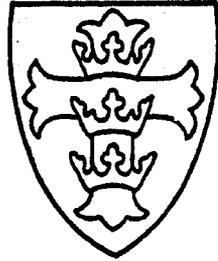
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- A) Products Developed by Participants
- B) Recommendations
- C) Evaluation of Workshop

BOSTON UNIVERSITY



MINISTRY OF HEALTH

REGIONAL WORKSHOP

ON

COMPETENCY BASED HEALTH

PROFESSIONAL CURRICULA

12 – 16TH MARCH 1979
HOLIDAY INN, KUALA LUMPUR, MALAYSIA.

SPONSORED BY
MINISTRY OF HEALTH, MALAYSIA.
CENTRE FOR EDUCATIONAL
DEVELOPMENT IN HEALTH. (CEDH)
BOSTON UNIVERSITY, USA

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**Message From Y.B. Tan Sri Chong Hon Nyan, PSM, JMN,
Minister of Health, Malaysia**

I thank the Organising Committee of the Conference on Competency-Based Methods for Curriculum Design for inviting me to send the participants of this Conference a message and I would like to welcome all our overseas visitors to Malaysia, especially those who are here for the first time. I very much regret not being able to meet them personally, however as I shall be abroad on other official duties at this time but am certain that they will find much to share with their Malaysian counterparts in the problems of manpower development both in numbers and in professional competence. In common with other developing countries, Malaysia is facing a shortage of professional manpower in an expanding economy and the Ministry of Health is in a particularly acute situation at this juncture in our development.

Whilst we are evolving long-term manpower programmes to overcome this problem in due course, it is still necessary to evaluate on a continuing basis the content and core curriculum of such training programmes to produce a sufficient number of skilled and competent professionals and sub-professionals for specific areas of work within our particular environment.

I am gratified in the circumstances that the Ministry of Health can once again co-sponsor this Regional Workshop with the Centre for Educational Development in Health (CEDH) of Boston University with its main objective to enable participants from developing countries to exchange views and experience and evaluate for themselves the CEDH model of systematic course design in health, with its emphasis on competency-based learning.

I understand that participants will be able to visit some of our rural health centre and training institutions to see for themselves how such training is correlated to a Malaysian setting. I hope that their stay in Kuala Lumpur will be both enjoyable and memorable and this Workshop will prove constructive and useful to all concerned.

(TAN SRI CHONG HON NYAN)
Menteri Kesihatan



Message From Dr. Hannelore Vanderschmidt,
Associate Professor and Associate Director,
Center for Educational Development in Health,
Boston University, Boston, Massachusetts, USA.

In behalf of the Center for Educational Development in Health (CEDH) of Boston University it is a pleasure to welcome you to the Asia Regional Workshop on Competency Based Health Professional Curricula. Representations from eleven nations are assembled here including Bangladesh, Fiji, Indonesia, Malaysia, Nepal, Papua New Guinea, Philippines, South Korea, Thailand, Tonga and the United States of America.

For more than 15 years CEDH has been working with faculty from all over the world to develop competency based primary health training programs. Many of those assembled here have been long time friends and colleagues while students at Harvard School of Public Health and Boston University, or as task force members of one of the overseas projects with which CEDH has been involved. Your wisdom and experience have guided our curriculum design efforts and our publications. Competency based approaches to the training of health professionals focus on enabling individuals to work effectively on the job. This approach requires reappraising certain cherished practices of academics such as:

- the tendency to emphasize general and long term courses in basic sciences and in the liberal arts.
- the emphasis on didactic training as exemplified by courses taught predominantly by the lecture method.
- the tendency to focus on the Western approach to the training of primary health workers without substantial changes being made in these approaches.

Our methods attempts to assist you the policy makers in the health fields to develop a cadre of trained workers who will be able to develop efficient and effective training programs;

- tailor-made to your country's health manpower needs and culture.
- incorporating new approaches.
- adapting the best of existing approaches.

We hope this week to demonstrate not only the strength of competency based learning, but to share with you the problems which frequently accompany the development and implementation of new systems.

Competency based learning is not a panacea nor an instant solution to a country's training needs, but is a reasoned and reasonable approach allowing health professionals to utilize the scientific method to solve their training problems.

Finally, we appreciate the support, assistance and cooperation from the Ministry of Health, Malaysia in making it possible to conduct this workshop in Malaysia and the support CEDH's activities.

Hannelore Vanderschmidt

II. OBJECTIVES OF THE WORKSHOP

General Objective: A regional conference on the application of competency-based techniques for developing health professional curricula.

Specific Objectives:

- (1) To present the Systematic Course Design approach to health manpower training which has been developed by the Center for Educational Development in Health (CEDH) in several countries.
- (2) To consider the relevancy of the Systematic Course Design and methods for training programmes of the countries and institutions of the participants.
- (3) To explore possibilities of implementing this method in the countries of the participants.
- (4) To enable participants to exchange information on health manpower development plans and problems, current efforts, projects and solutions.

IV. PROGRAMME FOR OPENING CEREMONY

VENUE: Chempaka Room, Holiday Inn, Kuala Lumpur, Malaysia.

DATE: MONDAY, 12 MARCH, 1979

0915 Participants and Guests to be seated.

0930 Arrival of Y.B. DR. SULAIMAN BIN HJ. DAUD the DEPUTY MINISTER OF HEALTH, MALAYSIA.

0935 Welcoming address by the Chairman of the Organising Committee.

0940 Address by DR. HANNELORE VANDERSCHMIDT Associate Director, Center For Educational Development in Health, (CEDH), Boston University, Boston, Massachusetts, USA.

0950 Address by Y.B. DR. SULAIMAN BIN HJ. DAUD THE DEPUTY MINISTER OF HEALTH, MALAYSIA, who will then officially Declare the Workshop open.

1000 Refreshment.

V. WORKSHOP PROGRAM

11 March 1979 SUNDAY

ARRIVAL OF PARTICIPANTS AND CHECKING INTO THE HOLIDAY INN, KUALA LUMPUR, MALAYSIA.

12 March 1979 MONDAY

0830 - 0910

HOLIDAY INN CHEMPAKA LOUNGE, FIRST FLOOR:
WORKSHOP REGISTRATION

0915 - 1045

CHEMPAKA ROOM
OPENING CEREMONY (SEE ABOVE)

12 March, 1979 MONDAY

1045 - 1230 SESSION I INTRODUCTION OF PARTICIPANTS:
DR. EDDY K.C. LO.

1230 - 1330 LUNCH (Chempaka Room)

1330 - 1430 SESSION II ISSUES IN CURRICULUM DEVELOPMENT

A. DR. EDDY K.C. LO,
Assistant Director of Health (Epidemiology)
Ministry of Health
Malaysia
Health Manpower issues.

B. DR. JOHN MC COLLUM,
Consultant CEDH,
Boston University
Approaches To
Curriculum Development.

1430 - 1445 TEA BREAK

1445 - 1630 CONTINUATION OF PREVIOUS SESSION:
DISCUSSION

1930 DINNER: HOTEL EQUATORIAL

HOST: MINISTRY OF HEALTH, MALAYSIA.

13 March 1979 TUESDAY

0900 - 1030 SESSION III Chempaka Room, Holiday Inn:

APPLICATION OF COMPETENCY BASED
CURRICULA IN THE HEALTH FIELDS:

DR. HANNELORE VANDERSCHMIDT,
Associate Director, CEDH.

1030 - 1045 TEA BREAK

1045 - 1230 CONTINUATION OF SESSION III:
SMALL GROUP EXERCISES.

GROUP 1 (Function Room 1, Ground Floor)

MS. RAMONA ARNETT,
Director of Development,
CEDH: Boston, Massachusetts.

GROUP 2 (Function Room 2, Ground Floor)

DR. SANTIAGO CASIN,
Associate Director,
Project Management Staff,
Ministry of Health, Manila,
The Republic of the Philippines

GROUP 3 (Asean Room, Lobby Floor)

DR. EDDY K.C. LO.

GROUP 4 (Asean Room, Lobby Floor)

DR. JOHN MC COLLUM.

GROUP 5 (Banquet Room, First Floor)

MR. DEVI SHRESTHA,
Campus Chief,
Dhahan Campus Institute of Medicine,
Tribhuvan University,
Nepal, Dhahan, Nepal.

GROUP 6 (Banquet Room, First Floor)

MS. CONSTANCE SWINTON,
Project Coordinator,
Surkhet Auxiliary Health Worker Project,
Nepal, Canada, Kathmandu, Nepal.

GROUP 7 (Banquet Room, First Floor)

DR. HANNELORE VANDERSCHMIDT.

1230 - 1330

1330 - 1430

1430 - 1445

1445 - 1630

LUNCH (To be announced)

CONTINUATION OF SESSION III

TEA BREAK

Chempaka Room

CONTINUATION OF SESSION III

DISCUSSION OF PRODUCTS

A. DR. EDDY K.C. LO
Chairman.

B. Group Raporteurs.

14 March 1979 WEDNESDAY

0900 - 1030 SESSION IV Chempaka Room, Holiday Inn

A CASE STUDY: NEPAL'S EXPERIENCE WITH
THE SYSTEMATIC COURSE DESIGN APPROACH

- A. DR. MOIN SHAH
Institute of Medicine,
Tribhuvan University,
Kathmandu, Nepal
Chairman.
- B. DR. BIMALA SHRESTHA,
Lecturer in Medicine,
Tribhuvan University,
Kathmandu, Nepal.
- C. MR. DEVI SHRESTHA,
Campus Chief, Dahran,
Institute of Medicine,
University, Nepal.

1030 - 1045

TEA BREAK

1045 - 1230

CONTINUATION OF SESSION IV

PANEL DISCUSSION BY FACULTY MEMBERS,
INSTITUTE OF MEDICINE,
TRIBHUVAN UNIVERSITY,
KATHMANDU, NEPAL.

- A DR. JOHN MR COLLUM,
Moderator.
- B. PANEL MEMBERS:
 - 1. MS. BIJAYA JOSHI,
Lecturer in Chemistry.
 - 2. DR. C.B. PRADHAN,
Campus Chief,
Birgunj, Nepal.
 - 3. MR. YOGENDRA PRADHANANGA
Campus Chief, Surkhet,
Nepal.

4. DR. P. SAYAMI,
Assistant Lecturer in Medicine,
Tansen Campus,
Tansen, Nepal.

5. DR. BIMALA SHRESTHA,

6. MR. DEVI SHRESTHA.

1230 - 1330

LUNCH (Chempaka Room)

1330 - 1430 SESSION V

Chempaka Room:

OTHER EXPERIENCE WITH COMPETENCY
BASED CURRICULA.

A. DR. HANNELORE VANDERSCHMIDT,
CHAIRMAN.

B. PANEL MEMBERS:

1. DR. SANTIAGO CASIN

2. DR. EDDY K.C. LO

1430 - 1445

TEA BREAK

1445 - 1630

Chempaka Room:

GENERAL SESSION & OTHER EXPERIENCE
WITH COMPETENCY BASED CURRICULA.

A. DR. HANNELORE VANDERSCHMIDT,
Chairman.

2000

BUFFET DINNER
Host: CEDH

15 March 1979 THURSDAY

0800 - 1630

FIELD VISIT: SEREMBAN, NEGRi SEMBILAN.

A. DR. EDDY K.C. LO
Chairman.

- B. DR. P. RATNAJOTHY,
Co-Chairman
Director of Medical & Health Services
Negeri Sembilan, Malaysia.
- C. DR. ABDUL AZIZ MAHMUD,
Principal,
School of Training for Hospital Assistants,
Rembau, Negri Sembilan, Malaysia.
- D. DR. LORI VANDERSCHMIDT,

Summary

16 March 1979 FRIDAY

0900 - 1030 SESSION VI

Chempaka Room:
CURRICULUM PLANNING

CHAIR PERSONS:

- A. DR. EDDY K.C. LO
- B. DR. HANNELORE VANDERSCHMIDT

SMALL GROUP EXERCISES

(Groups to be assigned).

1030 - 1045

TEA BREAK

1045 - 1230

Chempaka Room:
GENERAL SESSION

DR. JOHN MC COLLUM,
Moderator.

1230 - 1330

LUNCH (To Be Announced).

1330 - 1630

INDIVIDUAL PLANNING SESSIONS.

1900

CLOSING CEREMONY AND BANQUET

(SEE PAGE 10)

DR. JOHN MC COLLUM,
Chairman.

Programme for Closing Ceremony & Dinner

Venue:	Merlin Hotel, Kuala Lumpur, Malaysia.	
Date:	16 March 1979	
Time:	1915	Participants & Guest be seated.
	1930	Arrival of TAN SRI DR. RAJA AHMAD NOORDIN, Director General of Health Services, Malaysia.
	1935	Speech by Representative of the Participants.
	1940	Speech by CEDH Representative.
	1950	Speech by TAN SRI DR. RAJA AHMAD NOORDIN, Director General of Health Services, Malaysia who will then close the Workshop.
	2000	Dinner.

VI. LIST OF RESOURCE PERSONS

1. RAMONA ARNETT,
Director of Development,
Center for Educational Development in Health,
Boston University.
2. ABDUL AZIZ BIN MAHMUD, M.B.B.S., M.P.H.,
Principal School of Training for Hospital Assistants,
Rembau, Seremban,
Malaysia.
3. SANTIAGO CASIN, M.D.,
Associate Director,
Project Management Staff,
Ministry of Health, Manila,
The Republic of the Philippines.
4. BIJAYA JOSHI, M.Sc.,
Lecturer in Chemistry,
The Institute of Medicine Maharajgunj,
Campus, Kathmandu, Nepal.
5. EDDY K.C. LO, M.B.B.S., D.P.H., M.Sc.,
Assistant Director of Health Services (Epidemiology),
The Ministry of Health,
Kuala Lumpur, Malaysia
6. JOHN MC COLLUM, Ph.D.,
Consultant,
The Center for Educational Development in Health,
Boston University, Boston,
Massachusetts, USA.
7. OMAR B. MOHD. SALLEH, M.B.B.S., M.P.H.,
Deputy Director of Training & Manpower,
Ministry of Health,
Malaysia.
8. C.B. PRADHAN, M.B.B.S.
Lecturer in Medicine,
Birgunj Campus,
Institute of Medicine,
Tribhuvan University,
Birgunj, Nepal.

9. **YOGENDRA PRADHANANGA, M.A., M.P.H.,**
Campus Chief,
Surkhet Campus,
Institute of Medicine,
Tribhuvan University,
Surkhet, Nepal.
10. **P. RATNAJOTHY, M.B.B.S., D.P.H.,**
Director of Medical and Health Services,
Negri Sembilan,
Malaysia.
11. **P.S. SAYAMI, M.B.B.S.,**
Lecturer,
Tansen Campus,
Institute of Medicine,
Tribhuvan University,
Tansen, Nepal.
12. **MOIN SHAH, M.B.B.S., F.R.C.S.,**
Institute of Medicine,
Tribhuvan University,
Kathmandu, Nepal.
13. **BIMALA SHRESTHA, M.B.B.S.,**
Lecturer in Medicine,
Institute of Medicine,
Tribhuvan University,
Kathmandu, Nepal.
14. **DEVI B. SHRESTHA, M.S.,**
Campus Chief,
Dahran Campus,
Institute of Medicine,
Tribhuvan University,
Dahran, Nepal.
15. **CONSTANCE SWINTON, B.N., M.P.H.,**
Project Coordinator,
Nepal – Canada Surkhet Auxiliary Health Worker Project,
Kathmandu, Nepal.
16. **HANNELORE VANDERSCHMIDT, Ph.D.,**
Associate Professor and Associate Director,
Center for Educational Development in Health,
Boston University, Boston,
Massachusetts, USA.

VII Organizing Committee

- Chairman: - - HAJI DR. ABDUL TALIB BIN LATIFF,
Director of Health.
- Members:
1. DR. EDDY K.C. LO,
Assistant Director of Health Services,
Ministry of Health, Malaysia.
 2. ENCIK WAN MAMAT BIN WAN MUDA,
Principal Assistant Secretary,
International Health Section,
Ministry of Health, Malaysia.
 3. ENCIK ABDUL KASIM BIN BUANG,
Assistant Secretary,
International Health Section,
Ministry of Health, Malaysia.
 4. DR. P. RATNAJOTHY,
Director of Medical and Health Services,
Negri Sembilan.
 5. DR. ABDULLAH BIN ABDUL RAHMAN,
Director,
Public Health Institute,
Kuala Lumpur, Malaysia.
 6. DR. OMAR BIN MOHD. SALLEH,
Deputy Director of Training & Manpower,
Ministry of Health, Malaysia.
 7. UNGKU ABU BAKAR BIN ABDUL RAHMAN,
Chief, Public Health Inspector,
Malaysia.
 8. ENCIK ISHAK BIN YUN,
Executive Officer,
Administration Section,
Ministry of Health, Malaysia.

VIII ACKNOWLEDGEMENTS

The Organizing Committee of the Regional Workshop wishes to thank the CEDH, Boston University and all the staff of the Ministry of Health, Malaysia for their contribution to the success of the workshop. We also wish to thank the following CEDH staff members for their excellent help:— Ms. Jocelyn Carlson, Instructor in Education, Ms. Beverly Anderson, Secretary and Ms. Geri Duffy, Administrator.

A special thank you to DR. Sulaiman Bin Daud, Deputy Minister of Health, Malaysia for officially opening the Workshop.

2. COMMENTS FROM KEYNOTE SPEECH*

*Y. B. Dr. Sulaiman bin Haji Daud, Deputy of Health,
Kuala Lumpur, Malaysia*

I feel highly privileged and honored to have been invited to address this distinguished gathering of participants to the Regional Workshop on Competency-Based Health Professional Curricula and to officially declare it open. On behalf of the Government of Malaysia, I wish to extend a very warm welcome to all participants and particularly to our guests from overseas and resources personnel from the Centre for Educational Development in Health of Boston University to the Workshop. Malaysia is indeed proud to be chosen as the venue for this Workshop which is attended, I am told, by about 51 participants from 12 countries. I would like to thank the staff of the Center for Educational Development in Health of Boston University for having made possible the Workshop to be held here.

In the development of any health service, training and education of health personnel is an important and essential element. In fact, the whole process of manpower development is a key issue in ensuring the success of any health programme. Without adequate and appropriately trained health manpower one cannot see how resource investment in constructing or acquiring physical facilities can benefit the people. Furthermore, one cannot see how a health service can be effective if health service development is not coordinated with health manpower training.

This country has had considerable experience in health service development over the past 20 years. I am proud to say that we have made considerable progress in providing health services even to the remotest areas of the country. Perhaps our most outstanding achievement has been in building up a network of rural health units and clinics providing comprehensive health care both curative and preventive.

The Ministry is taking steps to strengthen its manpower planning capability and coordination between health service and manpower development. The present strategy of health service planning requires that we consider health service and manpower issues simultaneously, the issues of concern being type of personnel, number and mix. Labour costs within the health service being a major consumer of funds, one should consider the dollar issues of manpower and the ability of the country to sustain a particular type or types of health personnel. Only in this way can one be sure that health programmes are adequately and appropriately staffed and will be successful. To fulfill such training needs the Ministry of Health runs 8 Nurses Training Schools, 23 Assistant Nurses Training Centres, 19 Midwife Training Schools and 4 schools for the training of Rural Community Nurses while 3 more of such schools are under construction. In addition, the Ministry also has 2 facilities for the training of hospital assistants. Three more are being built for the training of junior hospital assistants. The Ministry is equally concerned with the supporting services, such as laboratory assistants, dispensers, radiographers, dental nursing, dental technicians, public health inspectors and public health overseers.

Excerpt from the speech given at the Official Opening of the Regional Workshop on Competency-Based Curriculum, Kuala Lumpur, March 12-16, 1979.

Educators or trainers of health personnel play a key role in manpower development, specifically, in manpower production. We have a total of 450 posts, specifically for teachers of health manpower, i.e., nurse tutors, teachers of radiography, physiotherapy, laboratory workers, etc. This number of fulltime and parttime teachers is likely to increase in the years to come.

The Ministry of Health, as an agent that has been entrusted by the government to look after the health of the people of this country, has at all times endeavored to look for ways and means to improve our services, improve our effectiveness, efficiency and productivity. In this respect, we sometimes get assistance and share our experiences with other agencies and governments. Currently, a three-week workshop on National Health Programme Management is being run in Penang with the assistance of WHO, with the overall objective of enabling senior health administrators to develop and improve their own individual skill and effectiveness through the acquisition of new knowledge, skill and attitudinal change in their planning and managerial concepts.

I was told that in 1975 the Ministry of Health co-sponsored with CEDH and Harvard University a field test of the book entitled Systematic Course Design for the Health Fields with emphasis on competency-based learning. And, again in 1977, the Ministry collaborated with CEDH, Boston University, to field test the instructor's guide on how to use the book. Our own Ministry of Health has on her own conducted a seminar on Task Oriented training in 1976 for a group of about 40 health professional teachers. I think all this was done in the interest of better health.

I would like to take this opportunity to thank the sponsors and all those involved in making this Regional Workshop possible. With this note, I have now the great pleasure in declaring this Workshop officially open and may I wish you all a very fruitful and profitable deliberation. At the same time I wish that you have a pleasant and memorable stay in Malaysia. Please take time off to see our country, our culture and our people. I wish you every success in achieving what you have set out to achieve. Thank you.

3. ANTECEDENTS

In collaboration with the Agency for International Development, Development Support Bureau/Health, a decision was made to offer regional workshops to policy makers in the health manpower field in Cali, Colombia and Kuala Lumpur, Malaysia. The purpose of these workshops was to maximize the utilization of the competency-based approach to curriculum design in the health fields in the Latin American and Asian Regions.

In the period 1974-1978, the Center for Educational Development in Health (CEDH) taught a number of country workshops in order to prepare teachers in the health professions. Whereas the multiplier effect of many of these workshops was excellent,* it was felt that CEDH was particularly effective in those cases where the individual initiating the workshop was highly placed and could apply the method once the workshop was finished in the development and implementation of health manpower curriculum projects.

In those cases where a group of individuals were trained with no common purpose or leadership, only a limited set of courses was prepared and taught.

Because of the perception that the leadership in a country or region needs to be harnessed if the competency-based approach was to be widely utilized, CEDH came to the conclusion that regional workshops would maximize the "spread effect".

Dr. Dieter Koch-Weser and Dr. John Massey organized the first regional conference in Cali, Colombia, with the Universidad del Valle, August 14-18, 1978. The conference involved 34 individuals from 10 countries. This conference generated 7 requests for services.

Dr. Lori Vanderschmidt and Dr. John McCollum, working in conjunction with Dr. Eddy Lo, Ministry of Health, Malaysia, organized a conference in Kuala Lumpur, Malaysia, March 12-16, 1979. The conference involved 47 participants from 10 countries. This conference generated 13 requests for services from 5 countries.

Program

The Program developed for this workshop sought to maximize the input of the Regional Coordinator (Dr. Eddy Lo) and of all the participants. It was decided to introduce participants to Competency-Based Training (CBT) by means of formal presentations and discussions, followed by an exercise in which participants used the Systematic Course Design method to solve a simple training problem. Products developed by the groups are included in Appendix A. A case study (Nepal) where CEDH had been working for 5 years was chosen to show the strength and limitations of the approach. Other experiences with CBT were also included in the program. A field visit to health manpower training programs in the region was made.

* Vanderschmidt, Massey, et al, "Competency Based Training of Health Professions Teachers in Seven Developing Countries", American Journal of Public Health, June, 1979, Vol. 68, No. 6.

At the final session of the workshop, participants were asked to make specific country and regional recommendations on the use of competency-based training. These recommendations can be found in Appendix B.

Evaluation of Workshop by Participants

- a) Informal Feedback Sessions were organized during the first two days of the workshop by Ms. Winnie Marquez (Philippines). Sessions were held at the conclusion of each day's activity for the gathering of suggestions for improving the workshop.
- b) Questionnaires were distributed to all participants on the final day of the workshop. Their responses are summarized in Appendix C. Participant responses to the workshop were positive.

4. LIST OF PARTICIPANTS

ASIA REGIONAL WORKSHOP ON COMPETENCY-BASED HEALTH PROFESSIONAL CURRICULA

KUALA LUMPUR, MALAYSIA

MARCH 12-16, 1979

(a) COUNTRY/NAME & TITLE	(b) OFFICE ADDRESS	(c) MAILING ADDRESS	(d) TYPE OF TRAINING RESPONSIBILITY
<p><u>BANGLADESH</u></p> <p>1. M. A. Rahim, M.B., Director of Health Services</p>	<p>88-Dhanmondira, Road-4, Dacca-5. Bangladesh. Tel. No: 317783</p>	<p>As in (b). Tel. No: DACCA-317784 (Home)</p>	<p>Director of Health Services Responsible for the administration and planning of health services in respect of prevention & health promotion, treatment, etc.</p>
<p>2. Taifur Rahkan Chaudhury, M.B.B.S., D.P.H., M.P.H. Deputy Director, Population (Training) Control and Family Planning Directorate, Ministry of Health, Population Control and Family Planning.</p>	<p>Green Supermarket, Green Road Dacca, Bangladesh. Tel. No: 317507</p>	<p>As in (b).</p>	<p>All types of M.C.H. and family planning personal, doctors, paramedics, field workers like domiciliary M.C.H. and F.P. workers.</p>
<p>3. Snehu Banu, M.B. Principal, Azimpur P.W.V., Training Centre, Dacca.</p>	<p>Azimpur F.W.V., Training Centre, Azimpur, Dacca, Bangladesh</p>	<p>Tel. No: 250612 (Home)</p>	<p>Paramedic for Clinical Family Planning and M.C.H. work.</p>

(a) COUNTRY/NAME & TITLE	(b) OFFICE ADDRESS	(c) MAILING ADDRESS	(d) TYPE OF TRAINING RESPONSIBILITY
<p>4. Charles Rahon Gurney, Chief, Population, Health and Women Division, U.S.A.I.D.</p>	<p>A.I.D. G.P.O. 2593 Ramna, Dacca 2, Bangladesh</p>	<p>Mail Through USA: Dacca-1 D, State Department, Washington, DC 20520</p>	<p>Village Level Workers, M.C.H./F.P. and their supervisors-trainers.</p>
<p><u>FIJI</u></p> <p>1. Isikeli Leweniqila, M.D., Medical Officer, Ministry of Health.</p>	<p>Korovou Hospital, Tailevu, Fiji, Fiji Island. Tel. No. 24.</p>	<p>As in (b) Tel. No. 33 (Home)</p>	<p>General-Medical, Hospital. Clinical and General Public Health to administration and supervision.</p>
<p><u>INDONESIA</u></p> <p>1. Hasnan Said, M.D. Director, Center for Physical Fitness and Recreation, Ministry of Education & Culture</p>	<p>Jalan Jenderal Sudirman Pintu 1- Senayan, Jakarta, Indonesia. Tel. No. 582469</p>	<p>Pusat Kesegagan Jasmani Dan Rekreasi, Janal Jenderal Sudirman, Senayan - Pintu 1, Jakarta. Tel. No 593709 (Home)</p>	<p>Research on Human Performance Capacity (Ergo-Physiology). Development of School of Educat</p>
<p>2. Sumarti Sudomo, M.D., Chief, Bureau of Contr- ceptive Services, National Family Planning & Coordinating Board.</p>	<p>B.K.K.B.N./ N.F.P.C.B./ JLN Haryono 8-9-10 Jakarta, Indonesia Tel. No. 11308.</p>	<p>B.K.K.B.N., M.T. Haryono 8-9-10, Jakarta, Indonesia Tel. No. 81576 (Home)</p>	<p>Consumer of input to Contraceptive Delivery System Workers (Clinical and non-clinical workers-Clinical and community based services.)</p>
<p>3. Putu Lawa Udayana, M.P.A., M.P.H. Head, Implementation and Guidance, Center for Education and Training/MOH</p>	<p>Jalan Hang Jebat III/ F III, Jakarta, Indonesia. Tel. No. 772152/ 777913</p>	<p>JLN. Danau Diatas 122, Pejompongan, Jakarta. Tel. No. 586757. (Home)</p>	<p>Pre-Service and In-Service training for health workers.</p>

(a) COUNTRY/NAME & TITLE	(b) OFFICE ADDRESS	(c) MAILING ADDRESS	(d) TYPE OF TRAINING RESPONSIBILITY
4. Fardiah Jasin, P.H.N., Head of Evaluation & Reporting Division, Center for Education & Training, Ministry of Health	JLN. Hang Jebat 3, Keb.Baru/ F III, Jakarta, Indonesia. Tel. No: 772152/ 777913.	JLN. Taman Wijaya-Kusuma 1/19, Clandak Laksel, Indonesia. Tel. No: 760100 (Home)	Nursing and Midwifery Manpower
5. L. Diane Cody-Roberts, R.N., M.P.H. Health Care Consultant, U.S.A.I.D.	U.S. Embassy-A.I.D. Jakarta, Indonesia. Tel. No: 340001 Ext. 365.	USA c/o 1100 Milam, Suite 3600, Houston, Texas. 77002, U.S.A. Tel. No: 776805 (Home)	Planning & Implementation Primary Health Care Program in Indonesia Nurse/Midwives, Village Health Workers, Nutrition Cadre.
6. Kenneth F. Smith, M.A.S.M., Acting Chief, Office of Health & Nutri- tion U.S.A.I.D.	U.S.Embassy, Jakarta, Indonesia. Tel. No: 340001 Ext. 365	HN/USAID/Indonesia, U.S. Embassy, Jakarta. A.P.D. S.F.C.A. 96356.	Managing all US AID Health Projec in Indonesia. Projects include tra ing for Primary Health Workers an Nurses, Sanitarians and Vaccinato for expanded program of immunizat
<u>MALAYSIA</u>			
1. Abdul Aziz Bin Mahmud, M.B.B.S., M.P.H. Principal, Hospital Assistant Training School, Seremban, Negeri Sembilan, Malaysia	General Hospital, Seremban, Negeri Sembilan, Malaysia. Tel. No: 75151 Ext. 315	Same as (b).	Paramedical Training (Hospital Assistant).
2. Ahmad Shukor, M.B.B.S. (Sidney), M.Sc. (P.H.), Senior Medical Officer of Health, Public Health Institute.	Public Health Institute, Jalan Bangsar,	Same as in (b).	Paramedicals and Auxiliaries; Public Health Inspectors; Publi Health Nurses; Health Educator Officers. In-service training for doctors public health sisters, etc.

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(a) COUNTRY/NAME & TITLE	(b) OFFICE ADDRESS	(c) MAILING ADDRESS	(d) TYPE OF TRAINING RESPONSIBILITY
<p><u>NEPAL</u></p> <p>1. Bijaya Luxmi Joshi, M.Sc., Lecturer, Institute of Medicine, Tribhuvan University</p>	<p>Maharajgunj, Kathmandu, Nepal. Tel. 13708 (Institute of Medicine, Maharajgunj)</p>	<p>14/100, Morutole, Kathmandu, Nepal</p>	<p>Health Assistant</p>
<p>2. Chandra Bahadur Pradhan, M.B.B.S., Assistant Lecturer, Institute of Medicine, Tribhuvan University</p>	<p>10M, P. Box 14, Birgunj, Nepal Tel. 2580</p>	<p>5/42-Birta, Birgunj, Nepal. Tel. 2715 (Home)</p>	<p>Community Medicine Auxilliary</p>
<p>3. Bhisma Raj Prasai M.B.B.S. Reader in Pathology Institute of Medicine, Tribhuvan University.</p>	<p>Institute of Medicine, Maharajgunj, Kathmandu, Nepal.</p>	<p>KA 1/147 Kopundol Lalitpur, Kathmandu.</p>	<p>Undergraduate in General and Community Medicine (M.D.)</p>
<p>4. Yogendra Pradhananga, B.Ed., M.A., M.P.H., Campus Chief, Institute of Medicine, Surkhet Campus, Tribhuvan University</p>	<p>Tribhuvan University, Institute of Medicine, Surkhet Campus, Surkhet, Nepal</p>	<p>1/30, Tekhapukhoo, Tekhacho, Bhaktapur, Kathmandu Valley, Nepal</p>	<p>Community Medicine Auxillaries (C.M.A.)</p>
<p>5. Prakash Sayami, M.B.B.S., Assistant Lecturer, Institute of Medicine Tribhuvan University.</p>	<p>CMA, Institute of Medicine, Tamsen, Palpa, Nepal</p>	<p>5/114, Thochhen, Kathmandu, Nepal</p>	<p>Teaching Community Medicine Auxilliary (CMA).</p>

(a) COUNTRY/NAME & TITLE	(b) OFFICE ADDRESS	(c) MAILING ADDRESS	(d) TYPE OF TRAINING RESPONSIBILITIES
6. Moin Shah, M.B.B.S., F.R.C.S., Institute of Medicine, Tribhuvan University Kathmandu, Nepal		P. O. Box 1240, Kathmandu, Nepal	Founding Dean (16 July 1972-22 Feb. 1979) Tribhuvan University Institute of Medicine Nepal.
7. Bimala Shrestha, MB, ChB L.R.C.P. & S.I., Lecturer Institute of Medicine, Tribhuvan University.	Institute of Medicine, Central Campus, Maharajgunj, Kathmandu, Nepal. Tel. 13708/12798	5/42, Tahachal, Kathmandu, Nepal. Tel. No. 14120/15688.	Teaching (Medical subjects & Community Medical), Field Supervision of Health Assistants at Institute of Medicine.
8. Devi Bahadur Shrestha, M.S. Campus Chief, Institute of Medicine, Tribhuvan University	Janapath, Dharan, Nepal. Tel. No: 93	2/67, Dharan, Nepal Tel. No: 77 (Home)	Auxiliary Health, Worker & Health Assistants.
9. Constance Alexa Swinton B.N., M.P.H. Project Coordinator Surkhet Auxiliary Health Worker Training Center Project, Canada - Nepal	G.P.O. Box 1535, Kathmandu, Nepal. Tel. No: 12735	same as (b) Tel. No: 14160 (Home)	Auxiliary Health Worker training for rural health posts
<u>PAPUA NEW GUINEA</u>			
1. Joel Latu Banam, H.E.O. Dean, College of Allied Health Sciences	P. O. Box 2033, Yomba, P. O. Maxdang, Papua New Guinea. Tel. No: 822797/ 822788	same as (b) Tel. No: 822022 Ext. 347 (Home)	Health Extension Officers, Health Inspectors, Malaria Health Workers.

(a) COUNTRY/NAME & TITLE	(b) OFFICE ADDRESS	(c) MAILING ADDRESS	(d) TYPE OF TRAINING RESPONSIBILITY
<p>2. K. K. Beri, BCK; B.Sc.; MBBS, DPH, MHPed, FRSH, FRI, PHH, Dean, College of Allied Health Sciences</p>	<p>P. O. Box 1034; Boroko, Papua New Guinea Tel. No: 256233 (Port Moresby)</p>	<p>College of Allied Health Sciences, P. O. Box 1034, Boroko, Papua New Guinea Tel. No: 255791 (Home)</p>	<p>Basic, Post Basic & Post Graduate courses for Allied Health Workers</p>
<u>PHILIPPINES</u>			
<p>1. Santiago F. Casin, MD, DPH Associate Director for Projects Development, Project Management Staff, Ministry of Health.</p>	<p>A. Mabini, Malate, Manila, Philippines</p>	<p>1933 L.B.B., Bldg., 2nd floor, A. Mabini, Malate, Manila, Philippines. Tel. No: 57-10-96 (Home)</p>	<p>Training of Health Personnel and Village Health Workers.</p>
<p>2. Remy B. Dequina, BSN, CPH, MN, Department Training Nurse & Chief Training Officer Designate, Office of Health Education & Personnel Training, Ministry of Health</p>	<p>Sta. Cruz, Manila, Philippines Tel. No: 266563/ 205682</p>	<p>33, Loyala Subd. Barangka, Marikina, Metro Manila, Philippines Tel. No: 697-1204 (Home)</p>	<p>All training program for Ministry of Health Personnel</p>
<p>3. Pedro T. Gatton, MD., Chief, Regional Health Training Centre Region VI., Training Coordinator, Push Project, Ministry of Health.</p>	<p>Jaro, Iloilo Philippines Tel. Nos. 75127/72157</p>	<p>Office of Health Education & Personnel Training Ministry of Health, Manila.</p>	<p>Staff development course for In-Service Personnel restructure Health Care, Delivery System (Primary Health Care) Panay Unified Services for Health (Banangay Health Workers Training).</p>

(a) COUNTRY/NAME & TITLE	(b) OFFICE ADDRESS	(c) MAILING ADDRESS	(d) TYPE OF TRAINING RESPONSIBILITY
<p>4. Corazon Paulina Gonzalez, MD Director, National Teacher Training Project for the Health Professions.</p>	<p>547, Pedro Gil, Malate, Manila, Philippines Tel. No: 50 00 11 Loc. 001</p>	<p>U.P. College of Medicine 547, Pedro Gil, Malate, Manila, Philippines. Tel. No: 78-72-74 (Home)</p>	<p>In-service training of teachers in the health professions in Educational Science</p>
<p>5. Winefrida M. Marquez, M.A. Social Psychology Project Manager, Development Academy of the Philippines</p>	<p>144, Amorsolo St. Makati MM, Philippines Tel. No: 88 01 60, 89 45 72 to 82</p>	<p>Development Academy of the Philippines, 144 Amorsolo St. Makati Philippines.</p>	<p>Government Officers</p>
<u>SOUTH KOREA</u>			
<p>26 1. Kyou Ho Han, MD, Senior Researcher Division of Planning & Evaluation Korea Health Develop- ment Institution.</p>	<p>2-10. 1-GA DO/Dong, Yong San Ku, (1st Building) Seoul, Korea. Tel. No: 22-1156</p>	<p>214-3, Non Hyen Dong, Kang Nam Ku, Seoul, Korea Tel. No: 58-6871 (Home)</p>	<p>Community Health Practitioner Mainly Evaluation</p>
<p>2. Chong Dal Park, MD, MPH, P.H.D. Chief, Department of Epidemiology Korean Institute of Tuberculosis.</p>	<p>121-150, Dongsan Dong, Young Deung-PO-Ku, Seoul, Korea Tel. No: Seoul 63-9461</p>	<p>121-150, Dongsan Dong, Young Deung-Po-Ku, Seoul, Korea Tel Seoul: 388-2670 (Home)</p>	<p>Teaching of epidemiology and tubercu- losis control in general for medical doctors (i.e. Health Centre Directors, Medical Students - Yonsei University Medical School) + Nurses, Health Center Workers + Nurse Aids, Health Care Workers.</p>
<p>3. Kilbyoung Yoone, Director, Division of Manpower Development Korean Health Development Institute</p>	<p>Korea Health Development Institute, 2-10, 1-GA, Do-Dong Yongsan-Gu, Seoul 140. Tel. No: 22-1138-6</p>	<p>Division of Health Manpower Development, KHDl. GPO Box 4576, Seoul, Korea. Tel. No: 93-0491 (Home)</p>	<p>In-charge of training Community Physi- cian, Community Health Practitioner, Community Health Aides for Korea in primary health care services.</p>

(a) COUNTRY/NAME & TITLE	(b) OFFICE ADDRESS	(c) MAILING ADDRESS	(d) TYPE OF TRAINING RESPONSIBILITY
<p><u>THAILAND</u></p> <p>1. Pairatana Gunakasem, MD, M.P.H. Head, Department of Microbiology Faculty of Public Health, Mahidol University.</p>	<p>Faculty of Public Health 420, Rajvithi Road, Bangkok, Thailand Tel. No: 2819200</p>	<p>Department of Microbiology Faculty of Public Health 420/1 Rajvithi Road Bangkok, Thailand Tel. No: 5114097 (Home)</p>	<p>Public Health Profession, MSPH degree, MPH degree, BSc in Public Health, Dip. of Public Health Nursing</p>
<p>27</p> <p>2. Pensri Phijaisanit, MD, M.P.H. Assistant Professor and Chairman, Department of Maternal & Child Health Faculty of Public Health</p>	<p>420/1 Rajvithi Road Bangkok, Thailand. Tel. No: 282-7829</p>	<p>Maternal & Child Health Department, Faculty of Public Health, 420/1, Rajvithi Road, Bangkok, Thailand. Tel. No: 4780981 (Home)</p>	<p>Graduate and undergraduate of medical and paramedic personnels</p>
<p>3. Paichit Pawabutr, MD, MPH, Provincial Chief Medical Officer for Korat Nakornratsima.</p>	<p>Provincial Chief Medical Office, Chompol Road Makornratsima Province, Thailand Tel. No: 242323</p>	<p>same as (b). Tel. No 242324 (Home)</p>	<p>Training of Trainers of Village Health Volunteers and Health Communications</p>
<p>4. Narintr Tima, MS Health Training Officer Health Training Division, Ministry of Public Health</p>	<p>Health Training Division, Ministry of Public Health, Bangkok 2, Thailand Tel. No: 2810220/ 2810596</p>	<p>same as (b).</p>	<p>In-service training of existing health personnel. Training of Trainers of Village Health Volunteers and Communicators</p>
<p>5. Miss Manee Choothai, MPH Health Training Officer Ministry of Public Health</p>	<p>Health Training Division, Ministry of Public Health Bangkok, 2, Thailand Tel. No: 281-0596</p>	<p>162/69, Tiwamonti Meaung District, Montaburi, Thailand</p>	<p>In-service training.</p>

(a) COUNTRY/NAME & TITLE	(b) OFFICE ADDRESS	(c) MAILING ADDRESS	(d) TYPE OF TRAINING RESPONSIBILITY
<p><u>TONGA</u></p> <p>1. Laumeesi Malolo, DSM (Fiji) CPH (Fiji), MPH (Hawaii) Special Grade, Medical Officer, Health Education</p>	<p>Viola Hospital, Nukualofa, Tonga. Tel. No: 200.</p>	<p>P. O. Box 1199, Muku Alofa, Tonga</p>	<p>Health Education in nursing school; Training paramedical personnel; Community organization; - Women in villages.</p>
<p><u>WHO</u></p> <p>1. Gunawan Nugroho Medical Officer, Intercountry Project, Primary Health Care, World Health Organization Regional Officer for Western Pacific</p>	<p>United Nation Ave., Manila, Philippines Tel. No: 59 20 41.</p>	<p>c/o WHO Regional Office (WPRO) P.O.Box 2932, Manila Tel. No: 87 79 03 (Home)</p>	<p>Primary Health Workers</p>

LIST OF OBSERVERS

(a) COUNTRY/NAME & TITLE	(b) OFFICE ADDRESS	(c) MAILING ADDRESS	(d) TYPE OF TRAINING RESPONSIBILITY
1. Abdul Hamid Bin Abdul Rahman, Deputy Dean, Faculty of Medicine, National University, Malaysia	Faculty of Medicine U.K.M. Jalan Raja Muda, Kuala Lumpur, Malaysia. Tel. No: 201815	same as in (b). Tel. No: 24476 (Home)	Academic responsibility Anesthetic practice Teaching
2. Chen Siew Tin, MBBS, MPH Associate Professor, Faculty of Medicine University of Malaya, Malaysia	Department of Paediatrics, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia. Tel. No: 774422/53431 Ext. 365/425	same as in (b). Tel. No: 768813 (Home)	Medical students M.P.H. students in MCH Student nurses Pediatric medical officers
3. Chong Choon Yen, Health Education Officer, Public Health Institute, Kuala Lumpur, Malaysia	Public Health Institute, Jalan Bangsar Kuala Lumpur, Malaysia Tel. No: 200833.	same as in (b)	Health Education for Public Health Nurses Public Health Inspector Post graduate course for Health Education Officers.
4. H. S. Ahluwalia, MBBS, DCP, FRC, Path., Senior Pathologist, Institute for Medical Research Kuala Lumpur, Malaysia	Institute for Medical Research, Jalan Pahang, Kuala Lumpur, Malaysia Tel. No: 986033.	same as in (b). Tel. No: 462496 (Home)	Clinical Pathology
5. Peter N. Danker, Senior Health Inspector, Public Health Institute, Kuala Lumpur, Malaysia.	Public Health Institute, Jalan Bangsar, Kuala Lumpur, Malaysia. Tel. No: 200833	same as in (b).	Observer

(a) COUNTRY/NAME & TITLE	(b) OFFICE ADDRESS	(c) MAILING ADDRESS	(d) TYPE OF TRAINING RESPONSIBILITY
<p>6. Kumarasamy Thavaraja Singhan MBBS, MMed, MRCP, FRACP</p> <p>Lecturer in Faculty of Medicine University of Malaya Malaysia.</p>	<p>Department of Medicine, University Hospital Kuala Lumpur, Malaysia Tel. No: 53431</p>	<p>same as in (b). Tel. No: 51366 (Home)</p>	<p>Medical students in their clinical years, and cardiac laboratory technologists.</p>
<p>7. Lye Munn Sann, Medical Officer of Health, Ministry of Health Kuala Lumpur, Malaysia</p> <p>30</p>	<p>Epidemiology Unit, Ministry of Health Jalan Young, Kuala Lumpur, Malaysia Tel. No: 203596</p>	<p>same as in (b).</p>	<p>Part time training - Public Health Inspectors and Nurses in Epidemiology</p>
<p>8. Sharifah Hasah Lecturer and Head, Department of Physiology National University Malaysia.</p>	<p>Medical Faculty, University Kebangsaan, Kuala Lumpur, Malaysia Tel. No: 201066</p>	<p>same as in (b).</p>	<p>Undergraduate (medical training) and medical laboratory technologists.</p>



IN FOREGROUND: DR. PENASI PHIJAISANIT, MS. CONSTANCE SWINTON
AND MS. BIJAYA JOSHI



LEFT TO RIGHT: DR. K.K. BERI AND
MR. JOEL BANAM

5. PROFILE OF PARTICIPANTS AND OBSERVERS

1) Types of Training Represented:

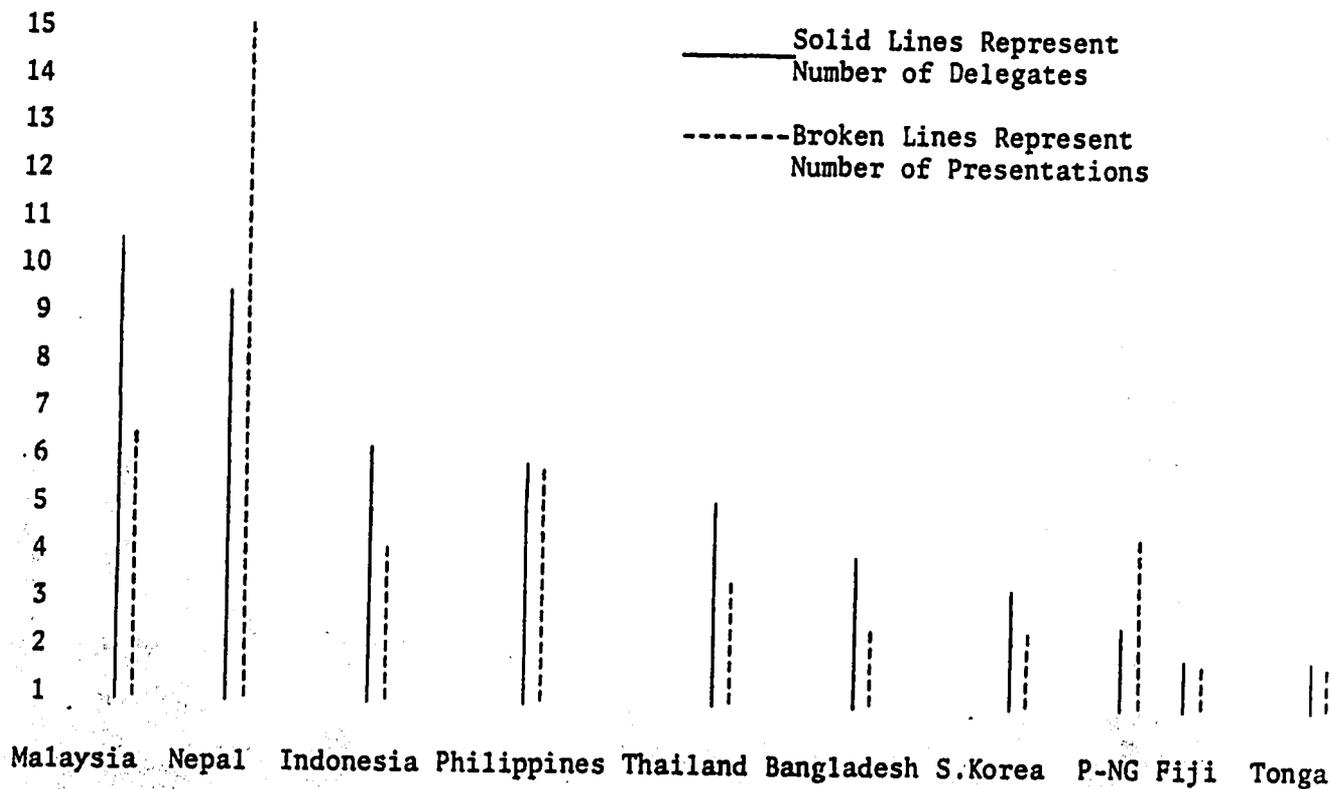
Primary Care Auxiliary or Paramedic	25
Public Health Worker	12
Village Health Worker	10
Nurse	10
Medical Doctor	7
Other (School of health, family planning, midwifery, nutrition, health education, lab tech.)	12
	<u>76</u>

2) Supporting Unit of Participant or Observer

Ministry of Health	12
Ministry of Education	9
School of Public Health	5
School of Medicine (all observers)	4
Health Institute	4
Paramedical School	4
A.I.D.	3
Teaching Training Center	2
Family Planning Center	2
World Health Organization	1
Canadian International Development Agency	1
	<u>47</u>

6. PRESENTATIONS BY PARTICIPANTS - TABULATION

<u>Country</u>	<u>No. of Delegates</u>	<u>No. of Presentations by Delegates</u>
Bangladesh	3 + 1 AID	2
Fiji	1	1
Indonesia	4 + 2 AID	4
Malaysia	2 + 8 Observers	6
Nepal	8 + 1 CIDA	15
Papua New Guinea	2	5
Philippines	5 + 1 WHO	6
South Korea	3	2
Thailand	5	3
Tonga	1	1
	<u>47</u>	<u>45</u>



7. ROLE OF PARTICIPANTS IN THE WORKSHOP

Monday, March 12

A.M. Session:

"Competency Based Education" by J.P. Eddy Lo (Malaysia)

P.M. Session:

"Competency Based Approach" - Discussion

Moderator: Mr. Yogendra Pradhananga (Nepal)

Dr. Corazon Gonzalez (Philippines)

After hours panel:

Chairperson: Ms. Winnie Marquez (Philippines)

The purpose of this panel was to react to the events of the day, to make suggestions, and to present criticisms.

The panel was composed of one representative of each participating country.

Tuesday, March 13

Following the selection of moderators and reporters, discussion groups were formed where all participants carried on an exercise on the use of Systematic Course Design. The Moderators were:

Ms. Ramona Arnett (CEDH)
Santiago Casin (Philippines)
Dr. Eddy K. C. Lo (Malaysia)
Dr. John McCollum (CEDH)
Mr. Devi Shrestha (Nepal)
Ms. Constance Swinton (Canada)

The Reporters were:

Dr. Lye (Malaysia)
Bimala Shrestha (Nepal)
Bijaya Joshi (Nepal)
Dr. K. K. Beri (Papua New Guinea)
Dr. C. B. Prahdan (Nepal)
Yogendra Pradhananga (Nepal)

The after hours panel remained the same.

wednesday, March 14

A.M. Session

"Nepali Case Study" was presented and discussed by the Nepalese delegation, i.e.,

Dr. Bishma Prasai
Dr. Bimala Shrestha, and
Mr. Devi Shrestha

The discussant panel was formed by:

Ms. Bijaya Joshi
Dr. C. B. Pradhan
Mr. Yogendra Pradhananga, and
Dr. P. Sayami

P.M. Session

"Experiences with Competency Based Curricula" was presented by:

Dr. Santiago Casin (Philippines)
Dr. K. K. Beri (Papua New Guinea)
Dr. Pensri Phijaisanit (Thailand)
Mr. Puta Lawa Udayana (Indonesia)
Mrs. Fardiah Yasin (Indonesia)
Mr. Kilbjoung Yoone (South Korea)
Mr. Narintr Tima (Thailand), and
Mr. Joel Banam (Papua New Guinea) was the moderator.

Thursday, March 15

"Field Visit" was presented by Dr. Abdul Aziz Nahmud from Malaysia.
The following participants were the discussants:

Dr. Laumessi Malolo (Tonga)
Dr. Isikeli Leweniquila (Fiji)
Dr. T. R. Chaudhury (Bangladesh)

Friday, March 16

Participants were grouped by country in order to prepare general and country recommendations on the use of the Competency Based Education techniques. The following individuals presented the final recommendations:

Dr. M. A. Rahim (Bangladesh)
Mr. Joel Banam (Fiji, Papua New Guinea, Tonga)
Dr. Sumarti Sudomo (Indonesia)
Dr. Lye Munn Sahn (Malaysia)
Dr. Bhishan Prasai (Nepal)
Dr. Corazon Gonzales (Philippines)
Mr. Kilbyoung Yoone (South Korea)
Dr. Pairetana Gunakasem (Thailand)

Friday, March 16

Closing Ceremony

Mr. Joel Banam, from Papua New Guinea, presented the final address in the name of all delegates.



PARTICIPANTS AT A PLENARY SESSION



LEFT TO RIGHT: CORAZON GONZALEZ, YOGENDRA
PRADHANANGA, PUTU LAWA UDAYANA,
EDDY LO, JOHN McCOLLUM

APPENDIX A

PRODUCTS DEVELOPED BY PARTICIPANTS

Group 1:

Ms. Ramona Arnett - Moderator

Dr. Lye Munn Saun - Reporter

Responsibility: Maintain communication with workers and with other levels of management

<u>Skills (Procedures)</u>	<u>Knowledge</u>	<u>Attitude</u>
<p>1. Psychomotor:</p> <p>a) to be able to ride a bicycle b) to be able to ride a motorcycle/horse c) to be able to row a boat</p> <p>To be able to maintain, operate and use means of transportation.</p>	<p>Knowledge of available and most appropriate means of transportation; Knowledge of the terrain of the area; Knowledge of maintenance, operation of vehicles.</p>	<p>Willingness to travel away from the office.</p> <p>Willingness to use appropriate means of transportation.</p>
<p>2. Interpersonal:</p> <p>Ability to show interest - in active listening and counseling and providing feedback.</p>	<p>Knowledge of cultural background, religious beliefs, taboos, educational level.</p>	<p>1. Objectivity 2. Control personal prejudice 3. Respect for other cultural groups.</p>
<p>3. a) Language</p> <p>Ability to understand and express himself and herself in the language and dialects of the workers and community both in writing and in verbal communication.</p> <p>b) Ability to tabulate, draw graphs and use models to teach workers.</p>	<p>Must be literate in the languages(s) and dialects used.</p> <p>Knowledge of existing systems; simple methods of tabulation, and drawing of graphs.</p>	<p>Willingness to learn and have a grasp of the language.</p> <p>Willingness to use it.</p> <p>Respect for the language</p> <p>Willingness to develop and learn the symbols.</p>
<p>4. To be able to plan, schedule, evaluate work performance of C level workers; willingness to give feedback of such performance to the higher management levels.</p>	<p>1. Know job descriptions and function of C and A levels. 2. Techniques of schedules, planning and evaluation methods.</p>	<p>Objectivity: To have a critical mind. Receptive to change (flexibility).</p>

Evaluation of Student Competencies

Conditions	Performance
Terminal Competencies	
<p>When given...</p> <ol style="list-style-type: none"> 1. Information and instructions from the higher level; 2. Information and problems from workers in the field. 	<p>The Student will...</p> <p>Interpret and selectively - Be able to pass the instructions and information from a higher management level to the workers in the field. Be able to understand from the field workers, the problem and pass it on to the higher level.</p>
Intermediate Competencies	
<p>When given...</p> <ol style="list-style-type: none"> 1. Illiterate health workers 2. Problems and information from field workers. 3. Problems and information from field workers. 	<p>The Student will...</p> <p>Be able to develop symbols for illiterate C level workers to use to communicate information. Actively listen, counsel and provide feedback.</p> <p>Plan schedule, prepare timetables, evaluate and interpret data.</p>
Entry Level Competencies	
<p>When given...</p> <ol style="list-style-type: none"> 1. Bicycles, scooters, etc. 2. Passages and language exercises in the given language 	<p>The Student will...</p> <p>Be able to maintain, operate and use means of transportation. Be able to read and write in that language.</p>

Evaluation Activities

	<u>Instructional Activity</u>
<u>Terminal Competencies</u>	<ul style="list-style-type: none">- Simulation Activities- Give them a set of information from A level supervisor which they will read, understand, interpret priorities, translate into an acceptable form to be transmitted to C level workers.- Simulation exercises on receiving information from the field workers.
<u>Intermediate Competencies</u>	<ul style="list-style-type: none">- Simulation exercises- Go to the field and demonstrate use of symbols
<u>Entry Level Competencies</u>	<ul style="list-style-type: none">- Testing language skills verbally- Written test of language skills- Demonstration of skill in operating, maintaining vehicles

Group 2:

Dr. C. Casin - Moderator

Dr. B. Shrestha - Reporter

Responsibility: Interpreting Data on Reports to Workers

Situation: Supervisor - Nurse/midwife H.A., or P.H.A.

<u>Skill</u>	<u>Knowledge</u>	<u>Attitude</u>
1. Collects/gathers data	- Knowledge of Reporting mechanisms.	Appreciates problem related to receiving of reports.
2. Analyze given data Present data in different forms	- Basic statistics. - Methods of Presentation	Appreciates the importance of statistics in the control and Prevention of Disease
3. Makes interpretation of data and correlates data with local conditions	- Knowledge of the existing local situation - Socio-economic background - Seasonal diseases - Cultural background of people	Realizes discrepancy of data with existing local situations
4. Communicates results of interpretation	- Knowledge of basic communication	Appreciates the importance of dissemination of information and knowledge of results of interpretation.

Evaluation of Student Competencies

<u>Condition</u>	<u>Performance</u>
Terminal Competencies	
When given... 1. Access to reports which include general information on the particular community to where the village worker has been assigned 2. Given basic communication skills	The Student will... Select, analyze, interpret, correlate data in the context of the existing local conditions and transmit it to the concerned authority. Communicate results of interpretation to village workers in an attempt to achieve maximum performance.
Intermediate Competencies	
When given... 1. Set of health data and necessary equipment and materials. 2. A case situation of a community with health problems derived from the above data.	The Student will... Demonstrate ability to compute rates and ratio and construct simple charts and tables
Entry Level Competencies	
When given... 1. Set of figures and tables 2. Set of questions on data analysis	

Group 3:

Dr. Eddy K. C. Lo - Moderator
Bijaya Joshi - Reporter

Course Description

- I. Title: A Course for Supervisors of Village Health Workers
- Purpose: To Enable Supervisors to Interpret Data On Reports to Village Health Workers
- Students: Nurse Midwives
Hospital Assistants
Health Auxiliaries
- Setting: Village School
- Constraints: As Given in the Assignment Sheet
- II. Professional Role:
Supervisors of Village Health Workers
- III. Professional Setting:
Village Health Office
- IV. Professional Responsibility:
To Interpret Data on Reports to Workers.

Responsibility: Interpret data on reports to village workers

<u>Skill (procedures)</u>	<u>Knowledge</u>	<u>Attitude</u>
1. Ascertain the types of information, reasons for briefing, and to whom, and approach to be used.	<ul style="list-style-type: none"> • Type and meaning of data related to: <ul style="list-style-type: none"> - health - community - type of approach - methods of information transfer • Village workers • Approach techniques 	<ul style="list-style-type: none"> • Develop confidence • Importance of dealing with known people and information
2. Prepare for the interpretation (or for briefing)	<ul style="list-style-type: none"> - how to prepare 	<ul style="list-style-type: none"> • Necessity of preparing
3. Present the briefing	<ul style="list-style-type: none"> • Instructional functions 	<ul style="list-style-type: none"> • Importance of feedback
4. Elicit response or actions	<ul style="list-style-type: none"> • Technical questioning or observing • Appropriate remedial measures 	

Evaluation of Student Competencies

Conditions	Performance
Terminal Competencies	
When given... 1. A list of information and a given situation in the class	The Student will... interpret information to his colleagues
Intermediate Competencies	
When given... 1. Graphs, charts and reports 2. A list of communication approaches and a situation	The Student will... - explain - pick the appropriate approach
Entry Level Competencies	
When given... 1. A list of the terms such as health, data, community, disease, etc. 2. A graph of data 3. Given multiple choice questions 4. Given a piece of paper	The Student will... - be able to define all the terms - be able to explain - pick the right answer - list duty of health workers

Evaluation Activities

Condition	Performance
Terminal Competencies	
<p>When given...</p> <p>Sets of reports (after the teacher has explained to the students)</p> <ul style="list-style-type: none"> - assignment - review, and - discussion <p align="center">Feedback (by observation)</p>	<p>The Student will...</p> <p>be able to comment or interpret the data by</p> <ul style="list-style-type: none"> - question - answer, and - observation
Intermediate Competencies	
<p>When given...</p> <p>Two or three sets of graphs (after the teacher has explained)</p> <ul style="list-style-type: none"> - review - discussion <p align="center">Feedback (teacher gets feedback by observation)</p>	<p>The Student will...</p> <p>pick up the right one</p> <ul style="list-style-type: none"> - test - feedback
Entry Level Competencies	
<p>When given...</p> <p>list of terms, e.g., M.C.H., etc.</p>	<p>The Student will...</p> <p>pick out the right one with 80% accuracy</p> <ul style="list-style-type: none"> - test - feedback

Session Number	Instructional Activities	Assignment
#1 (2 hrs.)	<ul style="list-style-type: none"> - review - test - feedback/review 	<ul style="list-style-type: none"> - read handouts page x
#2 (2 hrs.)	<p>Teacher led discussion on:</p> <ul style="list-style-type: none"> - demonstration - discussion on graphs, charts, and reports 	<ul style="list-style-type: none"> - read handouts page x - preparation for role-play
#3	<ul style="list-style-type: none"> - Mini-lecture on interpreting data on reports - Role-play on interpreting the results - Final evaluation 	

Group 4:

Dr. John McCollum - Moderator

Dr. K. K. Beri - Reporter

Responsibility: Prepares Routine and Special Reports

(Note) The group assumed that a Proforma for Reports already exists.

<u>Skills (procedures)</u>	<u>Knowledge</u>	<u>Attitude</u>
Collects data	of General meaning	Appreciates
Collates data	of elementary	importance of
Tabulates data	Bio-statistical	reports
Analyses data	terms	_____
Interprets data	_____	Honest in reporting
Summarizes data	of	the findings
Transmits data	source and method	_____
	of collecting	Strives for legi-
	data	bility and complete-
	_____	ness when recording
	of	data
	reliable and unreliable	
	data	

Evaluation of Student Competencies

Condition	Performance
Terminal Competencies	
<p>When given...</p> <ol style="list-style-type: none"> 1. Report forms 2. Vital health information 3. Information on difficulties encountered by village health workers in obtaining data 4. the task of collecting health data 	<p>The Student will...</p> <p>be able to collect, record, collate, tabulate, analyze, interpret and transmit health statistical data and relevant information to proper authorities</p> <p>be able to identify events where urgent action is necessary</p> <p>appreciate same</p> <p>describe difficulties that may be encountered</p>
Intermediate Competencies	
<p>When given...</p> <ol style="list-style-type: none"> 1. Raw data 2. Vital health information 	<p>The Student will...</p> <p>be able to prepare a frequency chart and calculate means and percentages and prepare simple graphs and bar diagrams</p> <p>be able to identify deviations from normal occurrences</p>
Entry Level Competencies	
<ol style="list-style-type: none"> (1) Must be qualified Nurse Midwife, health assistant or a public health auxiliary (2) Must have three years on the job experience (3) Must have passed a valid test in interpersonal relationships and a personal interview. 	

Group 5:

Devi Shrestha - Moderator

Dr. C.B. Pradhan - Reporter

Course Description

- I. Title: Training of Supervisors of Peripheral Level Village Health Workers (V.H.W.)
- Purpose: To Train supervisors in preparing health reports
- Students: Supervisors of peripheral level Village Health Workers
- Setting: Situations mentioned in briefing sheet
- Constraints: Lack of good transportation and sufficient medical supplies
- II. Professional Role:
Supervisor of Village Health Workers
- III. Professional Setting:
Village Health Worker in office
- IV. Professional Responsibility:
Prepares routine and special reports

*Note: It is assumed that V.H.W. are properly trained to collect appropriate data accurately in individual health forms.

It is assumed that V.H.W. are assigned to collect individual health data.

Responsibility: Prepares routine and special reports

<u>Skills (procedures)</u>	<u>Knowledge</u>	<u>Attitude</u>
1. Collects appropriate data	Kinds of forms to use Importance of different forms Relevancy of data collected	Realizes value of the information given by the forms
2. Processes data collected	Interpretation of data Classification Graphical presentation Analysis	Presents data objectively
3. Prepares written report	Purpose of report Content of report Language of report Organization of report	Accepts responsibility Submits report on time

Evaluation of Student Competencies

Condition	Performance
Terminal Competencies	
When given... the different forms with appropriate data	The Student will... process the data and prepare the report
Intermediate Competencies	
When given... the different forms with the data	The Student will... <ul style="list-style-type: none">- differentiate the importance and uses of different forms- recognize the relevance of data- classify, analyze, make graphical presentation of the data- describe the purpose- organize the content- write outline of the report in simple language
Entry Level Competencies	
When given... the different data	The Student will... <ul style="list-style-type: none">- identify the forms- group data according to age, sex.

Evaluation Activities

	Instructional Activities
Terminal Competencies	<ol style="list-style-type: none">1.2.3.4. etc.
Intermediate Competencies	<ol style="list-style-type: none">1. Lecture/demonstration of sample forms<ol style="list-style-type: none">1.1 Practice sessions on filling out forms2. Lecture/discussion/illustration about relevancy of forms data
Intermediate Competencies	<ol style="list-style-type: none">3. Discussion/Lecture/Demonstration on classifications and analysis of data in terms of health, socio-economic status<ol style="list-style-type: none">3.1 Lecture/Exercise on different forms of graphical presentation of data.
Intermediate Competencies	<ol style="list-style-type: none">4. Brain Storming/Discussion on the purpose of data5. Discussion/Exercise on organizing the report.
Intermediate Competencies	<ol style="list-style-type: none">6. Discussion/Practice outline of report writing

Group 6:

Constance Swinton - Moderator

Yogendra Prahhananga - Reporter

Responsibility: Maintain communication with workers and with other levels of management

<u>Skills</u>	<u>Knowledge</u>	<u>Attitude</u>
1. Build rapport with co-workers village health workers, in order to find out their problems	The indigenous ways of interpersonal behavior - culture - language - manners - mannerisms	1. Appreciate the importance of information from the V.H.W.
2. Dialogues with the village workers using simple verbal and non-verbal communication means	Level of understanding (education) of V.H.W. interim techniques verbal and non-verbal means of communication	2. Willingness to listen to the V.H.W. problems.
3. Encourage the workers to communicate their problems, concerns	Working conditions of V.H.W. (job description and actual situation)	
4. Conducts small group and interpersonal communication sessions with other workers in order to find solutions to encountered problems and to analyze reports and records prepared by V.H.W.	Techniques of group and individual communication methods Interpretation of non-statistical information	
5. Transfer relevant information to the supervising agency and to other agencies (inter-agency communication)	Structure and organization of the health services	

Evaluation of Student Competencies

Condition	Performance
Terminal Level Competencies	
<p>When given...</p> <p>Field practice situation in a rural community</p>	<p>The Student will...</p> <ul style="list-style-type: none"> a. build rapport with the health workers b. dialogue with the village health workers in group and individual situations c. encourage the workers to participate to share experience d. analyze the reports and information from the health workers e. prepares reports appropriate for submission to higher level management
Intermediate Competencies	
<p>When given a role play situation where the group of health workers are facing problems in delivering health services due to the lack of resources and lack of communication skills among the workers themselves and where there is a need for supervisor assistance for the problem situation</p>	<ul style="list-style-type: none"> a. build rapport among themselves as their respective roles require. b. dialogue among themselves in the form of small group discussion sessions on the identification of the problem and situations related to the lack of resources and communication skills c. one of the group designated as supervisor demonstrate the skill of encouraging active group participation d. the students demonstrate the skill of analyzing problems coming from the side of the village health workers. Student groups demonstrate how to communicate the problem to the supervisor. They suggest solutions for working with the next highest level of the health system

Evaluation of Student Competencies

Condition	Performance
<p>When given...</p> <p>reference to concept such as:</p> <ul style="list-style-type: none">- verbal and non-verbal communication- interpersonal skills- productive participation- small group and individual methods of communication	<p>The Student will...</p> <p>define and discuss the given concepts.</p>
<p>Entry Level Competencies</p>	
<p>When given questions...</p> <ol style="list-style-type: none">1. pertaining to the role and function of the community health workers2. organization, set-up of the health care system3. characteristics of a community	<p>The Student will...</p> <ol style="list-style-type: none">2. Explain and describe<ol style="list-style-type: none">1. role and function of the community health workers2. explain the organizational set-up of the central and village level health care system3. describe the structure of the community:<ul style="list-style-type: none">- geography- culture, etc.



PARTICIPANTS AT A PLENARY SESSION



PARTICIPANTS AT A PLENARY SESSION

APPENDIX B

RECOMMENDATIONS

APPENDIX B

Recommendations for Regional and Country CBT Programs

I. "Regional Recommendations" on use of CBT were as follows:

A) Dissemination of Material

- A Clearinghouse should be established at CEDH for dissemination of books, and instructional materials (4 countries).
- An Audio Visual Production Center should be established at CEDH (2).
- A Regional Center on CBT should be established.

B) Information Exchange

- A coordinating group should be established (2).
- Visits to other countries, exchange programs should be encouraged (2).
- A newsletter by CEDH staff should be developed.

C) Workshops/Inservice Training, etc.

- Intercountry Workshops needed (3).
- Inservice training on CBT/Fellowships (3).

D) Others

- Research and Evaluation plan needed.
- Financial Assistance needed for inservice training (2).
- Distribution of Malaysian Job Descriptions.
- Distribution of complete SCD course.
- Participants should play role of Change Agents for SCD approach.

II. "Country Recommendations" on use of CBT were as follows:

Bangladesh

The following represents a composite of the main recommendations of the Bangladesh delegation.

- A.
 - That we become Change Agents
 - Recommend Competency Approach to our Ministries of Health
 - Organize Workshop between Fiji, Tonga, Solomons, New Hebrides and Papua New Guinea
 - Seek international financial input for workshop
- B.
 - Through situational analysis, seek the answers for:

Who		Is Going
When		To Use
Where		C.B.T.
How, Why		

In Bangladesh there are various kinds of health services personnel ranging from village health workers at the village level to Medical Officer/Health Administrator for a community of 200,000 people on the average. To produce the required trained manpower, training programs have been developed for each category of worker. The curricula we follow have been developed based on a model which we call "job oriented training program".

From what we learned in this workshop during the last few days, we can certainly say that some of our curricula are definitely competency-based, for example, the trained Malaria Eradication People. Some of the other curricula, however, are not competency-based.

We found that the competency-based curricula will best suit our training needs. As much as possible, we will try to introduce it into our programs. To do so, we will first examine thoroughly some of our existing curricula and modify them, if required, to fit into this model. Then we will make a field trial on a pilot basis and if the new curriculum is found to be better than the existing one, we will adopt a nation-wide program. In the process, we will benefit from the experience of other countries. We may need, however, external assistance both on the technical and material aspects.

Indonesia

The Indonesian delegation summarized its recommendations in the following fashion:

<u>Organization</u>	<u>Now</u>	<u>Future</u>
Ministry of Education	+ Competency Based Training	Continue
Family Planning	- Competency Based Training	+ Revise
Ministry of Health	± Competency Based Training	+ Revise Continue Develop

Republic of Korea

The Republic of Korea delegation offered the following as Country recommendations:

A. Within own institutions:

1st step: Develop or expand a few SCD-based training models for a few specific tasks. Rationale and methods will be presented to the training staff through staff workshops.

2nd step: Expand the areas of application to other relevant areas.

B. Within the country:

Disseminate the SCD or CBT concept through professional periodicals in the country.

Malaysia

The Malaysian delegation presented its recommendations as follows:

- A. That our present training programs for health-related personnel be continued but with greater emphasis in the future on competency-based training in all our training programs.
- B. That a center for training teachers in health professions be set up in order to standardize training programs.
- C. That as an interim measure, workshops be conducted to orientate teachers on curriculum planning, using the competency-based method.
- D. That in-service training of teaching staff for health personnel be continued but with more emphasis on competency-based methods.

Nepal

June 1979 has been established as target date for the completion of the Community Medicine Auxiliary Program as follows:

- Teachers will be assigned
- Workshop to be held
- Feedback
- Course for teachers
- Field tested curricula to be approved by Faculty Board

Curriculum development programs began in Nepal in 1977. There were two specific programs:

- Health Assistants (HA)
- Community Medicine Auxiliary (CMA)

The work accomplished in these two areas could be estimated as follows:

- Health Assistants - 30%
- Community Medicine Auxiliary - 80%

Papua New Guinea, Fiji, Tonga

The recommendations of Papua New Guinea, Fiji and Tonga delegations consisted of the following five main steps:

1. Immediately upon our return each delegation should approach its Government for the purpose of holding workshops with international financial assistance.
2. Papua New Guinea would be the coordinator of this workshop. Resource persons would be drawn from Papua New Guinea, Fiji and Tonga.
3. Invitations would be extended by the coordinator to Solomons, New Hebrides.
4. Papua New Guinea would use SCD for curricula being reviewed and developed currently, particularly for the training of:
 - Health Extension Officers
 - Health Inspectors
 - Trainers of Health Personnel
5. Material developed in Papua New Guinea in No. 4 above, would be used for the proposed workshop.

Republic of the Philippines

The delegates of the Republic of the Philippines presented the following as their country recommendations:

A. Disseminate the concept of SCD to:

- Staff of our respective agencies;
- Faculty members of academic health units in different schools and universities
- Staff of agencies of MOH involved in training health manpower
- Representatives of different government agencies involved in implementing the PUSH training program
- Government senior administrators who train at the Development Academy of the Philippines;

by:

- Conferences
- Workshops
- Printed materials
- Non-print materials: visuals, tapes & A-V

B. Complete the development of the Municipal Health Office (MHO) competency-based curriculum:

- Improve curriculum output of the Manila workshop on SCD
- Field test improved curriculum
- Final revision and implementation of the MHO curriculum
- Evaluation of the program

C. Recommendations for use by agencies based on evaluation.

Thailand

Four basic phases represent the country recommendations set forth by the Thai delegation:

- Convince high-ranking officers who are involved in policy-making of the significance of SCD
- Develop well-defined job responsibilities for each category of health personnel at all levels
- Encourage educational institutions to develop their courses and/or curricula based on the SCD method
- Assist institutions responsible for the organization of workshops on "HOW TO TEACH OTHER PEOPLE" to apply competency-based approaches.

APPENDIX C

EVALUATION OF WORKSHOP

APPENDIX C

CENTER FOR EDUCATIONAL DEVELOPMENT IN HEALTH
BOSTON UNIVERSITY
BOSTON, MASSACHUSETTS

WORKSHOP EVALUATION

16/3/1979.

Kindly answer all questions. Your frank answer will assist us in the planning of future workshops/seminars. DO NOT SIGN YOUR NAME.

Thank you.

1. Each of you came with specific objectives and expectations. To what extent have they been attained?

Not at all /2/ Partly only /11/ Fully /17/ More than expected /1/

If your expectations were not attained, please explain.

2. Was the reception you received at the airport satisfactory?

Yes /22/ No /6/ Not checked /3/

3. Were your hotel accommodations satisfactory? Yes /30/ No /0/ Not checked /1/

4. Were your meal arrangements satisfactory? Yes /29/ No /2/

5. Was the financial transaction between you and CEDH satisfactory? Yes /20/ No /5/ Not checked /6/

6. Your opinion the duration of the Workshop was
Too long /1/ Too short /5/ Adequate /23/

7. Did you experience any communication barriers during the Workshop?

Yes /7/ No /23/ Not checked /1/

8. Were you given sufficient opportunity to speak, ask questions or air your views?

Yes /27/

No /4/

9. My frank rating of the following are:

Session	Excellent	Good	Fair	Poor	REMARKS
1. Health Manpower Planning and Training By Eddy Lo.	8	16	6		
Approaches to Curriculum Development by John McCollum	7	15	8		
3. Application of Competency-Based Curricula by Lori Vanderschmidt	9	11	9	2	
4. Small group exercise on analysis of Professional Responsibilities	5	17	6	3	
Systematic Course Design Project	6	10	9	1	
5. Nepal Case Study	8	16	6	1	
6. Other experience with Competency-Based curricula.	1	17	10	3	
7. The Field Visit to Seremban	10	13	7		
8. Curriculum Planning & small group exercises.	1	18	7	1	
9. My own contributions to the Workshop		14	14	2	

10. Do you think a similar workshop should be held again in the future?

Yes /26/ No / 3/ Uncertain / 2/

11. What do you think you accomplished and/or achieved as a result of your participation in the Workshop?

12. Please describe how you might use the workshop experience when you return to your job.

13. Do you think the SCD approach relevant to the training needs of your agency and organization?

Yes - 29 Partly - 1 Did not learn enough to reach a conclusion - 1

14. With reference to the Workshop objectives, I feel that they have been achieved to the extent indicated:

Objective	Fully	Partly	Not at all	REMARKS
1. To present SCD	19	9	2	
2. To consider relevancy	15	15	1	
3. To explore possibilities of implementing it	10	16	3	
4. To exchange information	20	10	1	

My other suggestion(s) or comment(s) about the workshop:

B O S T O N U N I V E R S I T Y

C E N T E R F O R E D U C A T I O N A L
D E V E L O P M E N T I N H E A L T H

COMPETENCY BASED HEALTH TRAINING

LORI VANDERSCHMIDT, Ph.D.
ASCHER SEGALL, M.D., DR.P.H.
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September 1979

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TRAINING COMPETENT HEALTH WORKERS

- PREFACE -

*Who can use
this text?*

The method described in this book for designing courses can be used by anyone who is going to teach others how to do certain tasks.

These "tasks" may involve "doing" things:

- giving immunizations to children,
- mapping environmental health hazards in a community,
- doing a physical examination of a patient.

Other tasks might be "thinking" in nature:

- identifying malnourished children,
- developing a plan to attack environmental health hazards,
- analyzing health data gathered from a community.

Other tasks might involve "communicating":

- putting a patient at ease
- taking a patient history
- listening to personal problems

The development of the course design methodology and the examples of the application of this methodology focus in general on the health fields, and more specifically, at the non-physician population. The text is particularly well suited for trainers of nurses, medical assistants, medical aides and auxiliary health workers.

*How is the
text written?*

The text is in three sections:

GUIDEBOOK: Guidelines are provided to take the reader step-by-step through the course design process, from writing a course description all the way through the development of individual session plans.

The Guidebook also suggests specific formats for each step of the course design process and provides feedback by way of checklists for the reader's use.

METHODS: A variety of educational methods are described to help the reader carry out major tasks in the course design process. These tasks include...

...doing a careful analysis of the job(s) for which students are being prepared

...planning evaluation in such a way as to assess and/or predict on-the-job capabilities during the course.

...choosing teaching methods that are most appropriate for the tasks being taught.

Hence, the Methods section includes:

- Methods for job analysis/verification
- Evaluation methods,
- Teaching methods.

EXAMPLES: Three complete examples are provided which show each step of the course design process, formatted as suggested in the Guidebook.

Each example is a course design for training health professionals at the non-physician level.

How is the text used?

Some readers will find it most useful to read the Guidebook first, referring as suggested to the Examples and Methods sections.

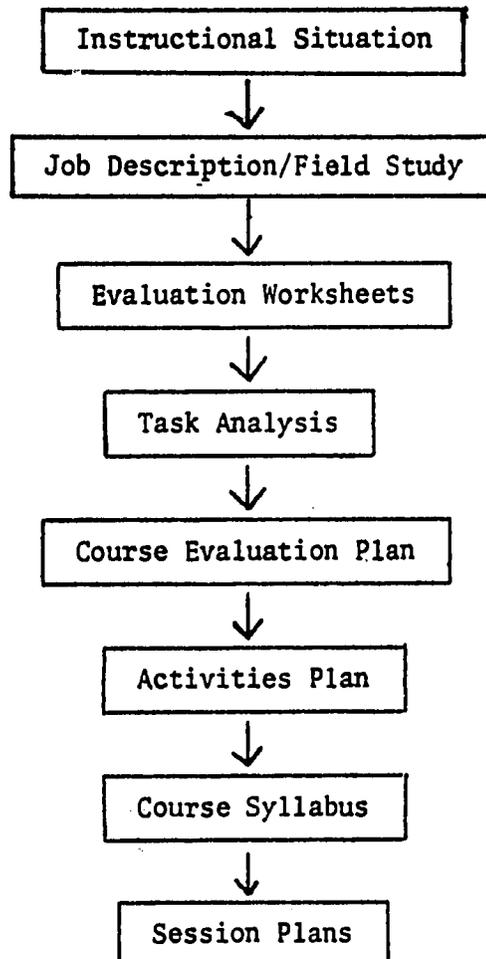
Other readers may wish to begin with the Examples, and attempt to model them directly, referring as needed to the Guidebook and Methods section.

In any case, the text is meant to serve as a basis from which the READER CAN DESIGN HIS/HER OWN COURSE.

If the steps of the Guidebook are followed carefully and/or if the Examples are modeled and adapted appropriately, the end result of READING and APPLYING is a complete course design, the length and complexity of which will vary depending on the reader's needs and expectations.

For those who want a quick picture, the SYSTEMATIC COURSE DESIGN METHOD is sketched below.

SYSTEMATIC COURSE DESIGN



ACKNOWLEDGMENTS

The preparation and field-testing of this book were supported by the Development Support Bureau of the Agency for International Development Contract AID ta-c-1355. Special Thanks is due to AID project monitors, including Dr. Bud Shutt, Mr. Frances Murphy, Mr. Irving Taylor, and Mr. John McEnaney.

The concept of developing a short simply-written manual on course design resulted from experience working overseas with the CEDH text Systematic Course Design for the Health Fields (New York, John Wiley, 1975). The earlier publication was scholarly and comprehensive. For field work a shorter, more streamlined approach was needed.

The text was developmentally tested at the University of the District of Columbia, Washington, DC and field tested in Beersheva, Israel, Offa, Nigeria and Manila, Philippines. CEDH is particularly grateful to the excellent feedback from those individuals who implemented and evaluated the field tests. These include:

Donald Bullock, PhD	C&P Telephone Company Silver Springs, Maryland
Ms. Mercedes Miller, MS	ACTION Washington, DC
David Olubaniyi, MD, MPH	School of Health Technology Offa, Kwara State, Nigeria
Ms. Lynn Gilbert, RN	Boulder, Colorado
Nursing Faculty	Ben Gurion University of the Negev School of Health Sciences
John McCollum, PhD	Social Educational Research & Development, Incorporated Washington, DC

CEDH is particularly thankful to the hundreds of students in this country and overseas who have developed competency-based courses using our method. Three outstanding examples of their products are included in the text. These are:

Community Health Orientation
Introductory Course for
Nigerian Medical Assistants

David Olubaniyi, MD, MPH
School of Health Technology
Offa, Kwara State, Nigeria

Promoting Breast Feeding

Maria Ines Romero Sepulveda, MD
Escuela de Medicina
Universidad de Chile
Santiago, Chile

Nutrition Education for
Public Health Workers

Heng Leng Chee, MPH
Kuala Lumpur, Malaysia

The Manual has been translated into French by W. Almeida, MD in Lome, Togo, WHO RTTC. We would like to extend our appreciation to Dr. Almeida and to Dr. B. F. Adjou-Moumouni, Coordinator of Studies; RTTC for undertaking this difficult task.

A Leader's Guide is available from CEDH on request. The Guide enables instructors to teach workshops on competency-based course design using this Manual.

The Leader's Guide was field tested in Malaysia by Eddy Lo, MD, MPH, Ministry of Health, Kuala Lumpur, and in Nepal by John McCollum, PhD, Social Educational Research & Development, Incorporated, Washington, DC.

Thanks is due to staff members Jocelyn Carlson, EdM, John Massey, MPH, Sif Ericsson, PhD, Geri Duffy, and Beverly Anderson for their suggestions and comments.

Finally, we want to thank CEDH consultant Dieter Koch-Weser, MD, PhD and Ramona Arnett, Director of Development/CEDH for their on-going support.

Lori Vanderschmidt
Ascher Segall
Tom Frostman

Boston University,
September 26, 1979

CHAPTER ONE

DEFINING COURSE GOALS

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CHAPTER ONE

DEFINING COURSE GOALS

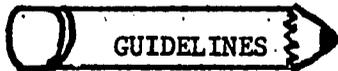
CHAPTER PURPOSE

The purpose of this chapter is to provide guidelines for defining the goals of your course...

- (a) to lessen the time and energy you as the course designer must spend on "getting started", and
- (b) to increase the value of your course by making sure you teach what your students need to learn.

Begin with what is known. As you start to plan, you will have information about such things as the kinds of students taking the course, the total number of "class" hours, the facilities and resources available, etc.

In order to help focus your thinking on some of these on-going considerations and to help communicate what your course is all about to others, begin by writing down some of what is known about the course.



describing the
INSTRUCTIONAL
SITUATION

A. DESCRIBE THE INSTRUCTIONAL SITUATION

Using the format suggested (see Figure 1), write a COURSE DESCRIPTION. See also the example (Figure 2).

1. put in column one only those items that are assigned or fixed
2. as you design your course, and as you see the need to change certain items, indicate your desired changes in column two

You will need the INSTRUCTIONAL SITUATION for designing the rest of your course. Keep it in a notebook for future reference.

DEFINING COURSE GOALS

F
O
R
M
A
T

COURSE DESCRIPTION	
<u>ASSIGNED:</u>	<u>WOULD PREFER</u>
<u>COURSE TITLE:</u>	
<u>COURSE PURPOSE:</u>	
<u>EXPECTED STUDENTS:</u> Number of Students Educational Background	
<u>SETTING:</u>	
<u>CONSTRAINTS:</u> Such as... Dates of course: Total hours:	
<u>RESOURCES:</u> Such as... Funds: Personnel: Laboratory facilities: etc.	

Figure 1

E
X
A
M
P
L
E

<u>COURSE DESCRIPTION</u>		
	<u>ASSIGNED</u>	<u>WOULD PREFER</u>
<u>COURSE TITLE:</u>	Community Health Orientation introductory course for Nigerian medical assistants.	
<u>COURSE PURPOSE:</u>	To enable the medical assistants to identify the health related resources in the community in which they work as so to utilize them effectively in health care delivery.	
<u>EXPECTED STUDENTS:</u>	Candidates with full secondary education (i.e., II years of schooling) with or without health-related job experience.	Candidates who failed the qualifying exam; with one science subject e.g., biology, health science.
<u>SETTING:</u>	School of Health Technology, Offa in Kwara State, Nigeria.	
<u>CONSTRAINTS:</u>	<p>The course is part of a 6-week introductory program in the 24-month training period of medical assistants.</p> <p><u>Date:</u> July 1st - Aug. 12th. <u>Total Hours:</u> 48 hrs. <u>Number of Students:</u> 30</p> <p>Community health experience has not been systematically planned and implemented during the training period of medical assistants. However, students have expressed keen interest in early involvement in community diagnosis. I think the course will be highly welcomed.</p> <p>Other instructors will "build" on this introductory course as major emphasis will be on community health during the training.</p>	Oct. 2nd - Nov. 13th
<u>RESOURCES:</u>	<p><u>Funds:</u> Kwara State Government sponsored course.</p> <p><u>Personnel:</u> Two full-time instructors and one public health physician, part-time, acting as consultant.</p> <p><u>Facilities:</u> Limited. Most of the activities will be performed in the community i.e., out of class. Lectures and in-door demonstrations take place in a classroom. Two tape recorders, two landcruiser vehicles provided. No slides, video-tapes or films.</p>	<p>In addition one Public Health Nurse Tutor, full-time, and a social worker, part-time.</p> <p>10 bicycles for ease of individual student movement in the community.</p>

Figure 2

DEFINING COURSE GOALS

B. WRITE A JOB DESCRIPTION

INTRODUCTION

Assuming that the general purpose of your course is to somehow better prepare students for a job, the following guidelines help you determine what the nature of that job is, and what specific job-related tasks you can teach in your course.

The assumption here is that the course you design will be of greatest value to your students when you have an accurate and complete notion of what their future jobs will be.

Again, this first attempt at defining what your students are likely to be doing in the future is based on what you already know about those jobs. Later, you will be asked to examine more closely what the working professionals are doing by verifying your JOB DESCRIPTION with others who are knowledgeable.



for writing a
JOB DESCRIPTION

As related to the purpose of your course (see your INSTRUCTIONAL SITUATION), write a JOB DESCRIPTION.

1. List the job(s) related to your course for which you will prepare your students. Then for each job...
2. Think about what people do on the job. List or describe the tasks they perform. (See the definition below).
 - (a) if there are people now doing this job, describe what tasks they do when the job is done well. Describe good or desired performance, regardless of how well the job is done now. (Keep your goals high!)
 - (b) if no one now does the job (i.e., if you are preparing students for a job that doesn't yet exist) describe the tasks you think they should be doing.

DEFINITION
"Task"

TASK: What a person does on the job when carrying out his/her responsibilities. Demonstration of specific behaviours including but not restricted to:

- making decisions
 - interacting with others
 - providing a service
 - producing a product
 - evaluating (people, products, programs, events)
 - making judgements
 - planning (activities, programs, etc.)
 - implementing (activities, programs, etc.)
-

Examples of JOB DESCRIPTIONS are below (Figure 3) as well as on pages 135 and 159.

Examine them carefully before developing your own.

3. At this point, you may already feel your course is getting too "big"...that is, that you are dealing with more tasks than you can handle, given the course constraints and resources. Refer to your INSTRUCTIONAL SITUATION and decide...
 - (a) if you need to consider changing any of the "constraints" or "resources" (such as total number of class hours, number of students admitted, facilities that are available, etc). Indicate such changes in column two of your INSTRUCTIONAL SITUATION, and/or
 - (b) if you need to take out certain tasks from the JOB DESCRIPTION. Are some tasks clearly less important than others? (If so, perhaps the less important ones should be eliminated.) Might certain tasks be better learned in other courses or even on the job? (If so, perhaps cut these as well.)

DEFINING COURSE GOALS

E	<u>JOB DESCRIPTION</u>
X	<u>JOB TITLE:</u> Medical Assistants Perform Community Health Education
A	<u>TASKS:</u>
M	1. Make a community profile.
P	2. Refer severe illnesses from the family, pre-school, school and other educational institutions to the appropriate health clinic for management.
L	3. Recognize conditions in the environment which have adverse effects on health.
E	4. Develop a plan of action with a group in the community to combat specific health problems.
	5. Give health education in family compounds, schools, and community groups on environmental sanitation, communicable disease control and personal hygiene.

Figure 3

E	<u>VERIFICATION STUDY</u>
X	There are no medical assistants performing this job in the community now. Ninety-eight per cent of their time is spent in the clinic treating patients. However, there are community nurses and public health inspectors performing some of the activities in the community.
A	
M	Two methods shall be used in the job verification:
P	<u>ONE:</u> I shall accompany the community nurses and public health inspectors to see how they perform on the job, the type of problems encountered and community reaction to them.
L	
E	<u>TWO:</u> Organize a conference consisting of community nurses, public health inspectors and a community physician to critically analyze the various community activities.

Figure 4

Because the rest of your course design builds upon the tasks as described in the JOB DESCRIPTION, it is essential that this description is a correct one...that the tasks do represent what people on the job do and when they do it well.

Equally important, you, as the course designer responsible for the course content, ought to make sure you have not overlooked critical tasks in the JOB DESCRIPTION.

Therefore...

GUIDELINES

(for writing a
JOB DESCRIPTION
continued)

C. CONDUCT A FIELD STUDY

1. A field study generally 1-2 weeks in length will help you determine whether the job description you have written matches the problems you meet in the field. Write a questionnaire or interview guide to obtain answers to your chief questions. You should interview both people providing and using health services.
2. Your field study should also give you answers to the following questions:
 - What is the health delivery system in the area?
 - What are the chief health problems in the area?
 - What is the educational level of people who are available as trainees?
 - What ways of learning are they used to (for Village Health Workers, for example, these may include songs or stories)?
 - What constraints and resources are there—for example, how far away is the health post from the district hospital? Are there roads? What equipment, supplies and medicine are available?
3. Now study the methods for Job Analysis and Verification on pages 63-72, and choose or construct a method for checking out with others the tasks in your JOB DESCRIPTION. You may find it helpful to examine the examples (see Figure 4). p. 135, and p. 160.

D. REVISE THE JOB DESCRIPTION

1. Based on the field study, revise your JOB DESCRIPTION as follows:
 - (a) KEEP those tasks that are important and/or done on the job.
 - (b) CROSS OUT those tasks that are judged unimportant as well as those tasks not done on the job due to difficult working conditions over which you have no control.

DEFINING COURSE GOALS

- (c) ADD those tasks that you overlooked that are important and that you can teach in your course.
- (d) REVISE those tasks that are important but that should be stated differently.
- (e) KEEP in mind the information you obtained on educational level of students on teaching methods used, on resources and constraints as you develop instructional activities for your course.

The JOB DESCRIPTION will serve as the basis for the rest of your course design. Keep it in a notebook, along with your COURSE DESCRIPTION, for future reference.

(✓) REVIEW & SELF-CHECK

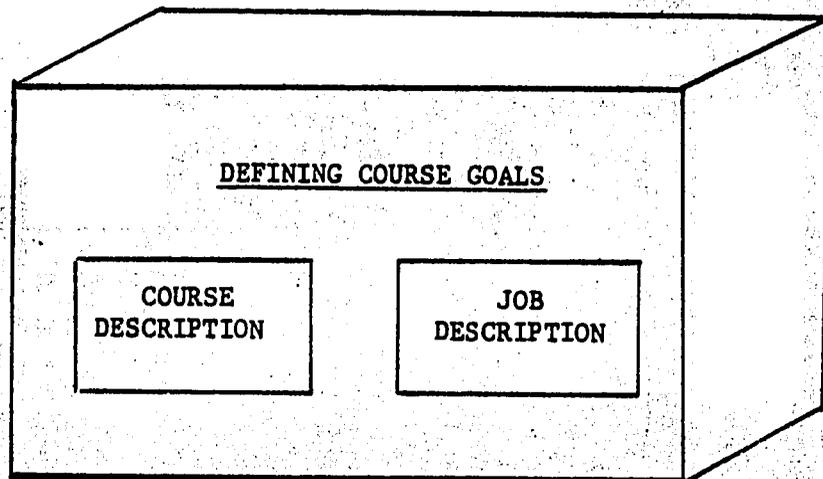
Look at your INSTRUCTIONAL SITUATION and JOB DESCRIPTION. Before moving on, check (✓) to make sure you have done each of the following:

Regarding the INSTRUCTIONAL SITUATION:

- () 1. Noted all known or fixed information about the course see the format, page 2.
- () 2. Indicated certain items you might want to change, especially with regard to resources and constraints.

Regarding the JOB DESCRIPTION:

- () 3. Identified the job(s) for which you hope to prepare students in your course.
- () 4. Listed tasks for each job which you will teach in the course.
- () 5. Checked out the JOB DESCRIPTION with others; that is, done some form of field study.
- () 6. Revised the JOB DESCRIPTION based on the field study.



CHAPTER TWO

PLANNING EVALUATION

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CHAPTER TWO

PLANNING EVALUATION

You now have (in your job description) a list of tasks for which you plan to prepare students in your course.

Since, in most cases, you will not observe your students on the job, how will you know, based on student performance in your course, whether they have learned the job-related tasks?

An important problem facing the course designer is to clearly define what it is the students will do in the course that will demonstrate whether they can do the tasks on the job.

The problem is similar to that of explaining how to get to a certain location to someone who has never been there. You not only need to give clear and concise directions, but you need to describe the destination well enough so the traveller will know when he/she has arrived.

Or, another way of putting it...

If the "objective" of your course is to teach people how to carry out specific job-related tasks, how will you know when your objective has been met?

Once you have described what it is the students must do to meet the course objectives...to demonstrate that they are capable of doing job-relevant tasks...then you can focus on what teaching strategies are most appropriate to help students learn the tasks.

But to plan teaching strategies before planning evaluation is like giving directions to a traveller without knowing where he/she is going.

Describe first where you are going. Then decide how to get there.

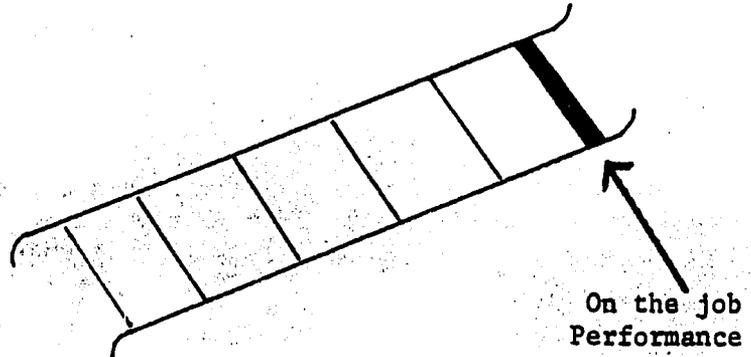
PLANNING EVALUATION

CHAPTER PURPOSE

The purpose of this chapter is to guide you in planning evaluation of student performance based on the tasks in the JOB DESCRIPTION.

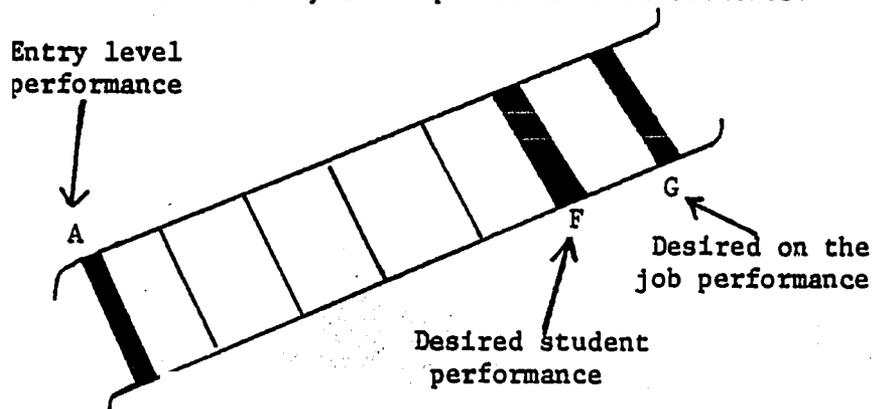
The guidelines stress the need to evaluate student performance at a level that matches performance on the job to the extent possible, given the constraints and resources of the course.

OVERVIEW



Think of the learning process as a ladder. We wish to train the student to function effectively on the job. He must be able to carry out the tasks listed in the job description. We have outlined these tasks in Chapter 1. We will now specify them in more detail. Desired job performance is the top of the ladder.

We also need to specify two other rungs on the ladder, the desired student performance at the end of the course and the entry level performance of students.



Once we have determined on the job performance (G), the beginning and endpoints of instruction (A & F), the other rungs on the ladder are no longer arbitrary and can be rationally planned.

Points A, F, & G also define the endpoints of evaluation as we shall discuss in this chapter.

A. Evaluation Worksheet: DESCRIBE DESIRED JOB PERFORMANCE



for planning
EVALUATION

To describe on-the-job conditions and desired job performance...

1. Pick one task from your JOB DESCRIPTION.
2. Describe any on-the-job conditions that might affect how the task is done.

On-the-job conditions might include:

- other people (fellow workers, clients, supervisors, etc.)
- resources and facilities
- a specific problem or challenge
- physical location
- physical or emotional stress
- time constraints
- other factors that affect performance

3. With the above conditions in mind, describe what the person does when the task is done well.

This description of the job performance is a restatement of the task itself with additional information about how fast the task should be done, with what accuracy, completeness, etc. ("Additional information" should help define what is meant by "good" or "desirable" performance.)

4. Repeat steps 2. - 3. above for each task in your job description



for
PLANNING
EVALUATION
(Continued)

B. Evaluation Worksheet: DESCRIBE DESIRED
STUDENT PERFORMANCE

As you move on to the next step, think about how the conditions of your teaching situation compare with on-the-job working conditions and how the difference between "classroom" vs "working" conditions might affect the performance you can expect from your students.

Also think about how you can best prescribe classroom conditions as well as student performance in such a way that "successful" performance in the classroom will lead to "successful" performance on the job.

To shift from the work setting to the
classroom...

1. For each condition described in A-2, above, and in view of your course constraints and resources,
 - (a) if you can re-create or duplicate the job conditions, during your course, enter that condition in the first column of your evaluation plan (see suggested Format Figure 5 and Example Figure 6).
 - (b) if you cannot re-create or duplicate the job conditions, create similar conditions for your course that come as close as possible to the on-the-job conditions. Enter the similar conditions in the first column of the evaluation plan.
2. For the on-the-job performance described in A-3, above, and given the classroom conditions now specified in your evaluation plan,
 - (a) if you can expect the same performance from your students by the end of your course, copy that performance in the second column of your evaluation plan.

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Evaluation Worksheet	
DESIRED JOB AND STUDENT PERFORMANCE	
<p>TASK: Recognize, interpret, and recommend appropriate actions in response to patients exhibiting signs and symptoms of shock</p>	
CONDITIONS	PERFORMANCE
<p>TASK AS PERFORMED ON THE JOB</p> <p>When given...</p> <p>Individual patients in the health post who are exhibiting signs and symptoms of shock</p>	<p>The health worker will...</p> <p>Recognize the signs and symptoms, interpret them, and take appropriate action</p>
<p>TASK AS PERFORMED AT THE END OF COURSE</p> <p>When given...</p> <p>Film showing individual patients who are exhibiting signs and symptoms of shock</p>	<p>The student will...</p> <p>Recognize the signs and symptoms (write down each one observed), interpret them (write down the likely meaning of each), and demonstrate appropriate action. (A fellow student will "be" the patient.)</p>
<p>OR, IF COURSE CONSTRAINTS/RESOURCES RULE OUT FILMS...</p>	
<p>Verbal descriptions of signs and symptoms exhibited by individual patients who are in shock</p>	<p>Recognize...(just as above).</p>

Figure 5

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<u>EVALUATION WORKSHEET*</u>	
Describe Desired Job and Student Performance	
TASK: Make a community profile. (1)	
CONDITIONS	PERFORMANCE
<p>When given...</p> <p>a community of 500 in a rural environment and assistance from an instructor from the school of Health Technology</p>	<p>The student will...</p> <ul style="list-style-type: none"> - Contact and introduce himself to the community leader (chief, oba) and his aides, political and religious leaders in order to familiarize and solicit their cooperation. - Describe accurately to the instructor the relative locations of the hospital, school clinic, infant welfare center and the dispensary. - Make a sketch of the community and locate public places including markets, schools, parks, halls, post offices, churches, mosques, etc.
TASK: Refer severe illnesses from the family, pre-school, school, and other educational institutions to the appropriate health clinic for management. (2)	
CONDITIONS	PERFORMANCE
<p>When given...</p> <p>mothers with their children at home, or teachers with children at pre-school or school institutions</p>	<p>The student will...</p> <ul style="list-style-type: none"> - Recognize signs and symptoms of severe diarrhea, malnutrition, severe cough and high fever (temperature above 102 F) - Instruct the mother/teacher to take the child to the appropriate and nearest health clinic for treatment. - Check on child's progress the following day.

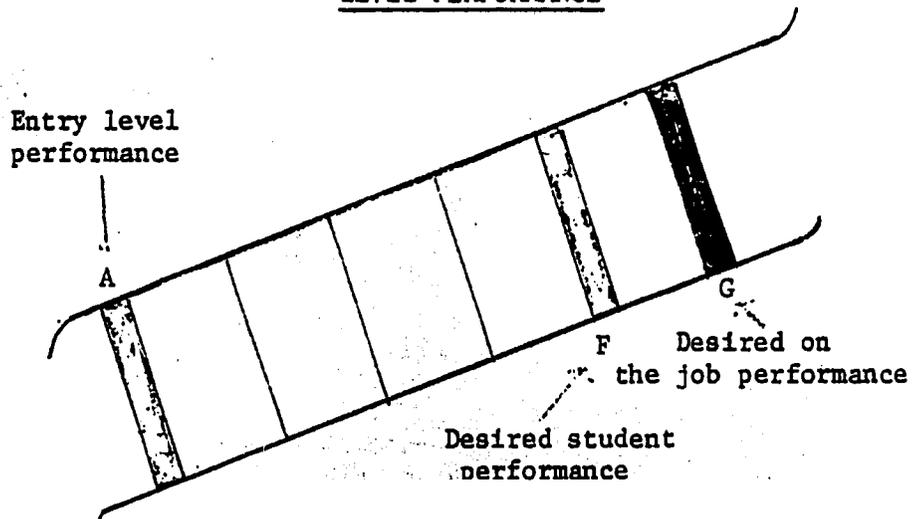
Figure 6

* In this example, the work on the job is identical to the desired student performance. The section on Job Performance has therefore been omitted.

- (b) if you cannot expect the same performance, describe the best performance you can expect that comes as close as possible to the desired job performance. Enter that performance in the second column of your evaluation plan.

Before preparing your descriptions of conditions and performance for both the job and your course, carefully examine the examples.

C. Evaluation Worksheet: DESCRIBE STUDENT ENTRY LEVEL PERFORMANCE



GUIDELINES

for
PLANNING
EVALUATION
(Continued)

To specify entry level skills and knowledge...

If there are certain task-related skills and knowledge

- (a) that you assume students have when entering the course, AND
- (b) that you want to check on before instruction begins

add one or more sets of entry level testing conditions/performance to your evaluation plan. (See Figure 7 below.)

PLANNING EVALUATION

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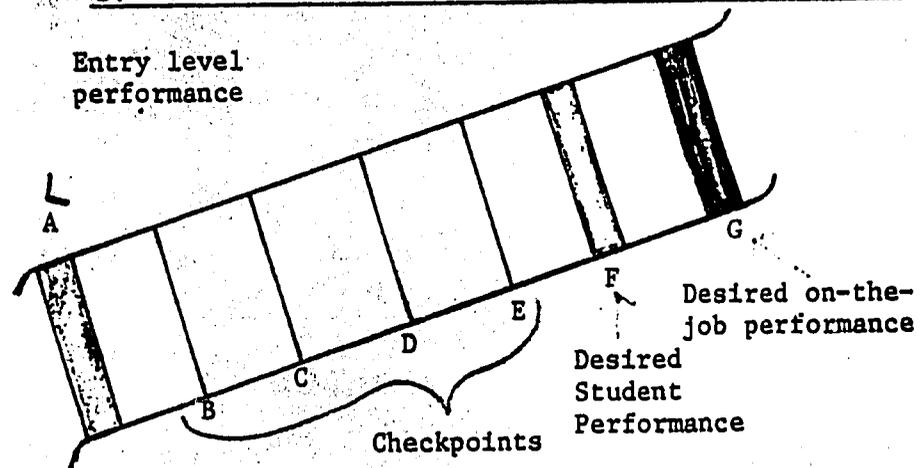
TASK: Describe Student Entry Level Performance	
CONDITIONS	PERFORMANCE
<p>When given...</p> <p>a test of English language in an interview situation</p>	<p>The student will...</p> <ul style="list-style-type: none"> - Be able to demonstrate ability to read English language manuals and to write simple English language reports. - Demonstrate that he can listen and talk to villagers politely and describe conditions in villages.

Figure 7

Remember the 'on paper' list of skills and knowledge of students when entering your course are often exaggerated. You may want to test whether they actually can perform these skills. If they can't you will want to teach them skills which they will need at the beginning of your course.

Sometimes students already know a lot about the subject of the course. By testing them at the beginning of the course you will be able to determine if their skill level is high. You may be able to omit some topics for the whole group. Or you may be able to allow some students to skip certain topics of to move ahead more quickly.

D. PREPARE A TASK ANALYSIS TO DEVELOP "CHECKPOINTS"



Now that you have defined your "end-of-course" objectives, as well as entry level performance, it is desirable to determine the skills and knowledge your students must have to bridge the gap between entry level and end-of-course performance.

To do this, you carry out for each task a TASK ANALYSIS. Your analysis of each task will help you to do two things:

1. To decide the specific skills and knowledge that may have to be taught during the course to assure the student's learning progress.
2. To decide the specific skills and knowledge that may have to be tested during the course to measure the students' learning progress - or what we'll call CHECKPOINTS.

A TASK ANALYSIS begins with the description of on the job tasks and develops the following specific information:

PLANNING EVALUATION

SKILLS: what students need to be able to do to perform the task.

Thinking or
"mental"
skills

those skills which are mainly "mental" in the sense that they involve thinking more than they do motor or physical action. For example, planning, interpreting data or information, problem solving, decision-making, etc.

Doing or
"physical"
skills

those skills which, while they require thinking, involve using the hands or physical action. For example, changing bandages, giving injections, assembling or repairing an instrument, etc.

Communicating or
"inter-personal"
skills

those skills which deal mainly with interacting with other persons, including affecting their attitudes. Social skills. Includes also speaking and writing skills involved in communicating with others.

KNOWLEDGE: what students need to know to perform the task.

- Examples:
- names of things (parts of the body, names of medicines, names of instruments)
 - how things work (how the heart works, how mosquitoes breed, how the health department functions)
 - important ideas (the idea of prevention, the idea of infection)

To develop a task analysis:

GUIDELINES 

or planning
valuation
ont'd

1. List what skills each task involves, whether
 - thinking
 - doing
 - communicating
2. Order the skills under the heading where it fits best. Most skills involve all three: mental, physical and inter-personal procedures, so it may be hard to decide on the 'best' heading. It is more important to list each skill then to list it in the best possible place.
3. In the Knowledge column, list only those terms, facts and concepts needed to do the job. Don't list a lot of facts and theories that are 'nice' to know but which the student does not need to know.
4. The Knowledge needed for particular skill should be written on the same line as the skill. Then the reader will know how the skill and the knowledge relate to each other.
5. See the sample format below and examine carefully the example (Figures 8, 9). Remember you Need Not write something under each heading unless it applies.

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<u>TASK ANALYSIS</u>		
TASK:	<u>SKILLS</u>	<u>KNOWLEDGE</u>
	Thinking	What students need to know to perform the task.
	Doing	
	Communicating	

Figure 8

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<u>TASK ANALYSIS</u>	
TASK: Make a community profile. (1)	
<u>SKILLS</u>	<u>KNOWLEDGE</u>
Thinking: <ul style="list-style-type: none"> - Judges/decides which customs and beliefs are harmful to discourage, harmless to ignore, helpful to promote. - Plans ahead when making appointments with leaders. Doing: <ul style="list-style-type: none"> - Makes maps of community showing location of health clinics and public places; includes drawing skill. Communicating: <ul style="list-style-type: none"> - Speaks and writes local language. - Makes contact with community leaders. 	community; community leadership and hierarchy; community profile; culture.
TASK: Refer severe illnesses from the family, pre-school, school and other educational institutions to the appropriate health clinic for management. (2)	
<u>SKILLS</u>	<u>KNOWLEDGE</u>
Thinking: <ul style="list-style-type: none"> - Takes history; interpret what is said in view of what is observed. - Examines stool. - Recognizes children with severe illness (diarrhea, malnutrition, severe cough, high fever). - Examines blood. - Reads different temperature scales (F and C). - Decides if child should be referred to health clinic. Doing: <ul style="list-style-type: none"> - Counts respiratory rate (adults: 15-18/minute; children faster). - Takes temperature with thermometer. - "Feels" temperature with back of hand if no thermometer. Communicating: <ul style="list-style-type: none"> - Takes history: communicates in local language. - Motivates parents to cooperate with follow-up plans (e.g., requesting mother to take sample stool to health clinic). 	what questions to ask parasites in stool symptoms white cell, red cell, blood count. how to convert C to F referral possibilities procedures pulse fever why follow-up is needed.

Figure 9

GUIDELINES

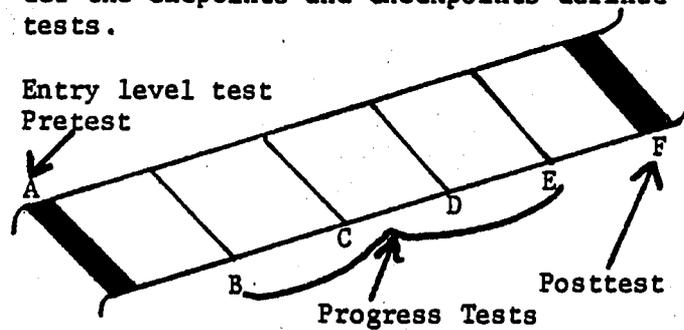
for planning
evaluation
cont'd

To develop "checkpoints" to assess student progress,

1. for each skill knowledge item noted in your task analysis, write conditions and performance as you did for your job, student and entry level performance.
2. Add these checkpoints to your evaluation plan.

EVALUATION AND TESTING

Another way of looking at the instructional ladder which we have been building is to consider the endpoints and checkpoints defined as tests.



Desired student performance F is measured by a posttest.

Entry level performance A is measured by an entry level test and a pre-test.

The checkpoints B C D E are measured by Progress Tests.

Definitions of these tests are given below:

PLANNING EVALUATION

DEFINITION

"Posttest"

POSTTEST: assess the degree to which students perform task(s) after instruction

Examples of testing conditions include:

- a topic or question to discuss
- a procedure to demonstrate
- written questions: multiple choice, true/false, essay, etc.
- with or without the use of notes and references
- "in-class" or "take home"
- with or without other people or resources
- self-evaluated, teacher evaluated, evaluated by classmates
- with or without audiovisuals, etc.
- prepare and deliver a 15 minute talk to....
- demonstrate the correct procedure for....
- circle correct answers with 80% accuracy....
- take part in a discussion about....
- play the role of....
- discuss a solution for....

"Pretest"

PRETEST: assess the degree to which students can perform tasks before instruction.

NOTE: The main reasons for giving a pretest are:

- (a) to identify students who already know how to do the task(s), and hence do not need the instruction,
- (b) to measure how much students have learned from the beginning (pretest) to the end (posttest),
- (c) posttests and pretests usually include the same or similar items.

DEFINITION

"Entry Level Test"

ENTRY LEVEL TEST: a set of conditions used to assess the degree to which students have the skills and knowledge needed in order to begin learning a certain task(s).

NOTE: Both the entry level test and the pretest are given before instruction begins.

The PRETEST is used to identify students who can/cannot already do the task, the ENTRY LEVEL TEST is used to identify students who are/are not ready to begin learning the task.

DEFINITION

"Progress Test or Checkpoint"

PROGRESS TEST (or CHECKPOINT): (1) a set of conditions used to assess the degree to which students are learning needed skills and knowledge during instruction.

(2) a means of checking on student progress and a basis for on-going course revision.

E. COMPLETE COURSE EVALUATION PLAN

GUIDELINES 

for planning evaluation cont'd

In order to complete your evaluation plan for the entire course (i.e., for all tasks)...

1. Develop evaluation plans (including as needed pretest/posttest, entry level test and progress tests) for each of the remaining tasks in your JOB DESCRIPTION.

Review the GUIDELINES for each step of this process as developed on page 23.

2. Review your desired Job and Student Performance. You can use a sequence such as the following or adapt the sequence:

PLANNING EVALUATION

Of the tasks are taught together. Each progress test involves a closer approximation to the desired job performance. Or each progress test evaluates key skills and knowledge required for the overall set of tasks. Finally, the posttest calls for all of the tasks to be performed. See Figure 10 and Figure 11. For a second example of Flow A, see Example B, p. 145.

FLOW A

Pretest/Entry Level test
(for all tasks combined)

Progress test #1
(for all tasks combined)

Progress test #2
(for all tasks combined)

Progress test #3
(for all tasks combined)

Progress test # (etc.)
(for all tasks combined)

Posttest
(for all tasks combined)

FLOW B

A different flow from above in that the progress tests are done task-by-task after which there is a combined posttest for all of the tests. Example C, pages 167 - 168. is somewhat like this, except that the tasks are evaluated separately in the posttest.

Pretest/Entry Level Test
(for all tasks combined)

Progress tests
(for task 1)

Progress tests
(for task 2)

Progress tests
(for task 3)

Posttest
(for all tasks combined)

3. Within whatever general flow of testing you have chosen, sequence all evaluation activities for all tasks.
 - (a) You may see items that can be combined or eliminated, especially if two or more tasks require some of the same skills and knowledge.
 - (b) You may want to code each test item or group of items in this final sequence, for example, as being part of a pretest (PRE), entry level test (ENT), progress test (PROG) or posttest (POST). See the examples.
 - (c) Steps 2 and 3 may well involve cutting-and-pasting, crossing out, combining, copying from here to there, etc., and it will probably be useful to use the familiar format (shown below) to display your evaluation plan for the entire course. (See Format Figure 10.)

<u>COURSE EVALUATION PLAN</u>	
CONDITIONS	PERFORMANCE
When given...	The students will..
(PRE) 1. <u> </u>	<u> </u>
(ENT) 2. <u> </u>	<u> </u>
3. <u> </u>	<u> </u>
(PROG) 4. <u> </u>	<u> </u>
5. <u> </u>	<u> </u>
(POST) etc <u> </u>	<u> </u>
	<u> </u>

Figure 10

EXAMPLE



Examples of the process of developing a complete evaluation plan for a course are shown in Figure 11.

You will need your COURSE EVALUATION PLAN to design the rest of your course. Keep it handy for future reference.

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<u>COURSE EVALUATION PLAN</u>	
CONDITIONS	PERFORMANCE
When given...	The student(s) will...
<p>NOTE: All students have passed an entry aptitude examination and have been properly screened at an interview (the 30 students would probably have been chosen from 1,000 candidates).</p>	
1. Directions in class	<ul style="list-style-type: none"> - recall definitions/explanations of some words/terms used in clinical practice.
2. Classroom situation without reference to notes.	<ul style="list-style-type: none"> - explain the following: <ul style="list-style-type: none"> • family-nuclear extended • compound/homestead • rural/urban community • culture • various community leaders
3. Fellow student	<ul style="list-style-type: none"> - describe using rough sketches the way to the hospital, health clinic, dispensary from different locations in the community.
4. Pencil and paper and within specified time	<ul style="list-style-type: none"> - list the breeding sites of flies/mosquitoes - list sources of drinking water and ways of pollution.
5. Multiple-choice items	<ul style="list-style-type: none"> - recognize: <ul style="list-style-type: none"> • environmental sanitation measures • communicable disease control measures • local food sources
6. Classroom situation	<ul style="list-style-type: none"> - explain to a fellow student action plan to combat a community health problem.

Figure 11

PLANNING EVALUATION

CONDITIONS	PERFORMANCE
7. Directions in class	- explain the following: <ul style="list-style-type: none"> • food hygiene • personal hygiene • balanced diet • immunization
8. Multiple-choice items	- recognize the clinical features leading to the diagnosis of: <ul style="list-style-type: none"> • severe diarrhea and vomiting • malnutrition • severe cough • high fever
(NOS. 1-8 are progress test items.)	
TASK #1	
9. A rural community ✓	<ul style="list-style-type: none"> • solicit the cooperation of the community leaders • locate all public places including the health services • submit a written report on above
TASK #2	
10. An ill child with his/her mother	<ul style="list-style-type: none"> • take a brief history • recognize if the child has any of the following: <ul style="list-style-type: none"> severe diarrhea and vomiting malnutrition severe cough high fever, and • refer immediately to the appropriate nearest health clinic.

Figure 11 (Continued)

CONDITIONS	PERFORMANCE
<p>TASK #3</p> <p>11. An environmental health problem such as:</p> <p>well pollution mosquito/fly breeding refuse accumulation in a compound, institution, or public place</p>	<ul style="list-style-type: none"> • recognize the magnitude of the hazard to health • give health education to the group • organize and develop a plan of action with group • participate in project execution and • write and submit a report
<p>TASK #4</p> <p>12. A group in the community (family group, school children or mothers, etc.) for health education</p>	<ul style="list-style-type: none"> • choose appropriate topics from the following: Environmental Sanitation Food and Personal Hygiene Breast Feeding Balanced Diet • give a talk/demonstration in the local language
<p>NOTE: NOS 9-12 are post test items.</p>	
<p>Most of the post test items are conducted in the community (i.e., outside the classroom); this is where success/failure of the program can be assessed.</p>	

Figure 11 (Completed)

PLANNING EVALUATION

SUMMARY

Once you have identified the tasks for which you plan to prepare your students, a well-developed evaluation plan will help you...

- a) identify students who can/cannot do the task (pretest/posttest),
- b) identify students who are/are not ready to learn the tasks (entry level test),
- c) identify students who are/are not having problems learning the tasks (progress tests or checkpoints),
- d) identify how well students have mastered the tasks (posttests),
- e) design instructional activities to help students learn the tasks (the subject of the next chapter).

Figure 12 is a diagram of the evaluation process in systematic course design. The lines and arrows show you what decision to make. For example, if a student fails the entry level test, he should receive special help and then take the entry test again.

PLANNING EVALUATION

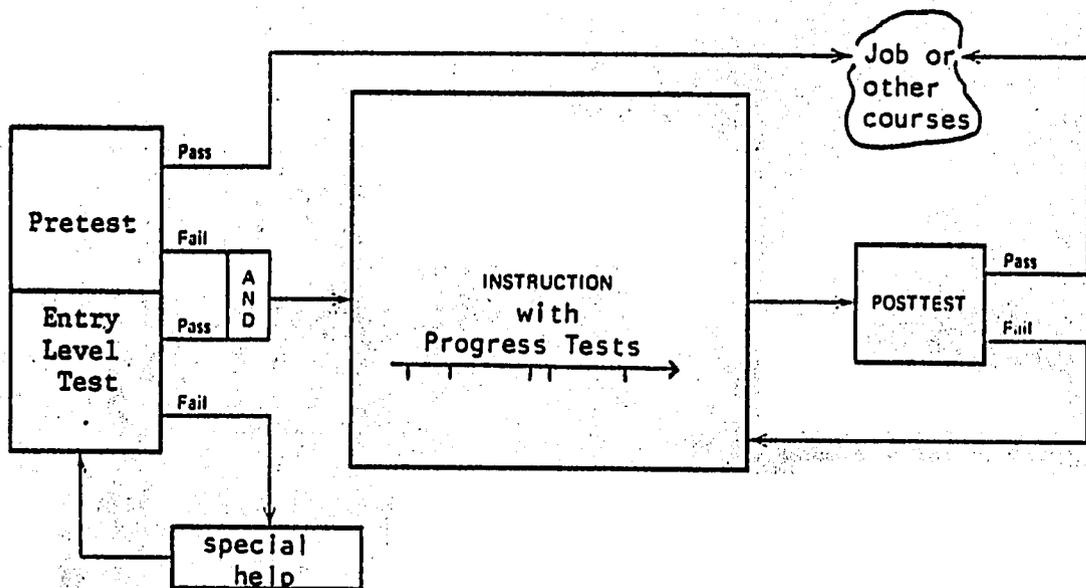


Figure 12

(✓) REVIEW & SELF-CHECK

Look at your COURSE DESCRIPTION, JOB DESCRIPTION and COURSE EVALUATION PLAN. Before going on, check (✓) to make sure you have done each of the following.

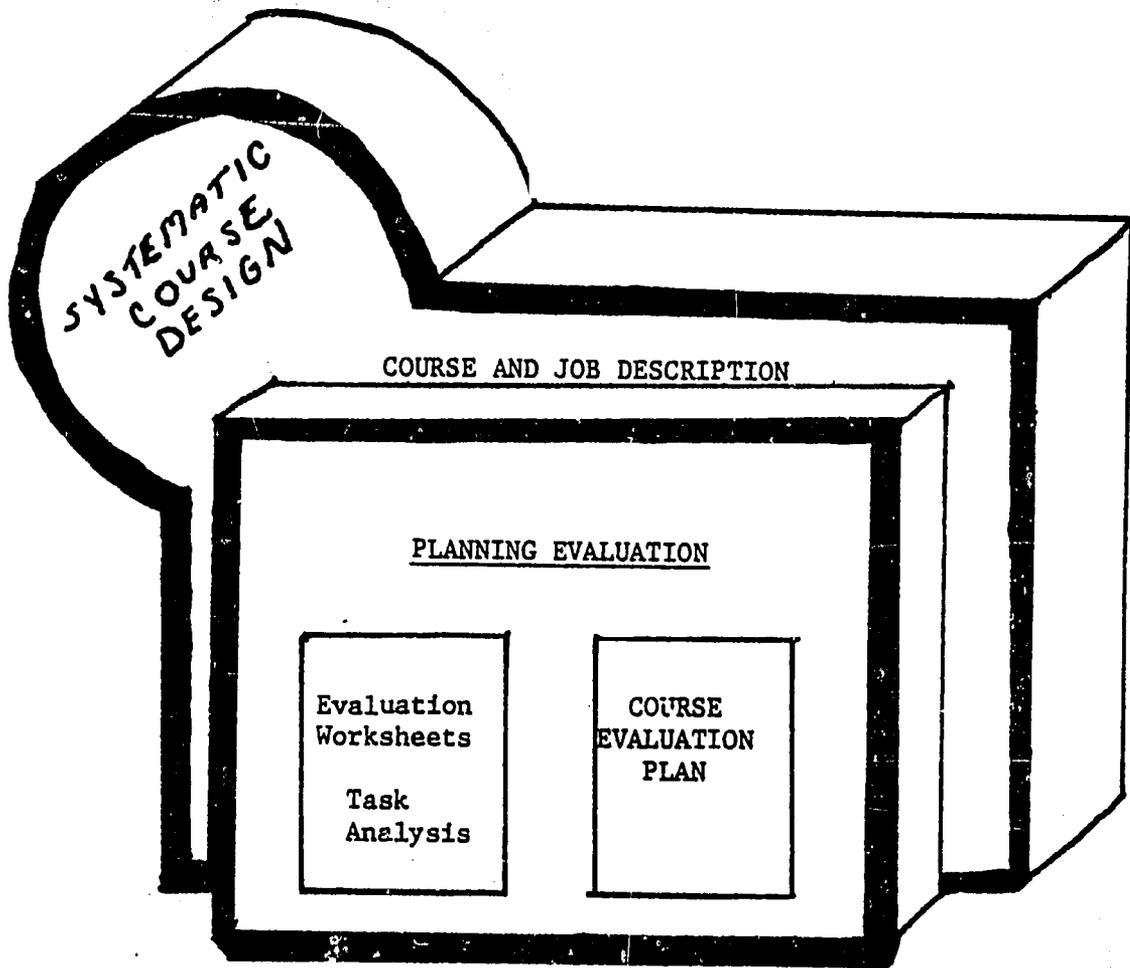
FOR EACH TASK:

- () 1. Specified pre/posttesting "conditions" and "performance" that match on-the-job conditions and performance to the extent possible, given the course constraints and resources.
- () 2. Specified plans to evaluate entry level skills and knowledge before instruction.
- () 3. Identified the skills and knowledge needed to carry out the task (Task Analysis).
- () 4. Specified "checkpoints" (or conditions and performance for progress tests) to assess whether the needed skills and knowledge are being learned during instruction.

FOR ALL TASKS:

- () 5. Combined and eliminated certain evaluation activities, where two or more tasks require the same skills and knowledge.
- () 6. Sequenced all evaluation activities for all tasks to develop an Evaluation Plan for the entire course, the COURSE EVALUATION PLAN.

PLANNING EVALUATION



CHAPTER THREE

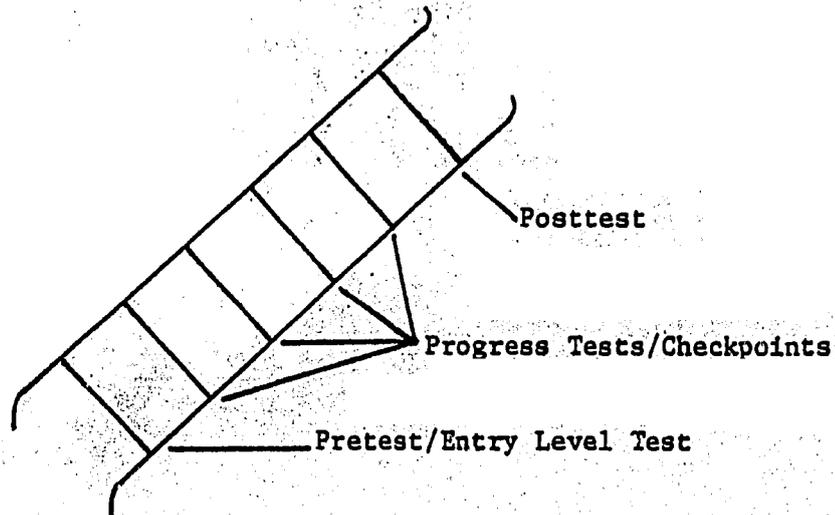
DESIGNING ACTIVITIES

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CHAPTER THREE

DESIGNING ACTIVITIES



You can think of your course evaluation plan as a learning ladder, where each evaluation item represents a level-of-learning rung. The students master the job-related tasks by demonstrating (step-by-step) learned skills and knowledge that are essential in doing the tasks.

The course evaluation plan, then describes how you expect students to improve...

- ...from entry level (pretest/entry level test)
- ...to learning new skills and knowledge (progress tests)
- ...to mastering job-related tasks (posttest).

Recall that the purpose of the evaluation plan is not only to help you assess student learning, but also to help you design activities to help students learn.

CHAPTER PURPOSE

The purpose of this chapter is to provide guidelines for designing activities to help students move from entry level skills and knowledge to mastering job-related tasks.

DESIGNING ACTIVITIES

OVERVIEW

To outline the overall teaching strategy, an ACTIVITIES PLAN will be developed for the whole course as follows:

- . The course is divided into *segments* (as defined by successive evaluation events from the COURSE EVALUATION PLAN).
- .. *Teaching goals* are identified for each segment
- ... A variety of *teaching methods* are considered
- *Activities* are designed for each segment (to help students move from one evaluation event to the next).

DEFINITION

"Activity"

ACTIVITY: any event of experience which is designed to help students learn during the course.

IN-CLASS ACTIVITIES

Some events or experiences may be in a classroom and/or during class hours. In-class activities might include: (See also Chapter 7, teaching methods, page 83 - 97.)

- discussion of a case study
- role play activity
- simulation/game
- lecture or programmed lecture
- panel discussion
- laboratory exercise
- field trip
- clinical experience
- evaluation activity etc.

OUTSIDE ACTIVITIES

Other events or experiences may be outside the classroom and/or outside of class hours. Outside activities might include:

DESIGNING ACTIVITIES

- reading assignments
- homework problems
- library research
- field trips
- data collection exercise
- clinical exercise etc.

Note that you have already answered an important part of the question, "How can I design activities to help students learn?" by designing your COURSE EVALUATION PLAN.

How so??

Each item in your evaluation plan...each set of testing conditions and performance...whether for pretesting, entry level testing, progress testing or posttesting... each represents an event or an activity and is designed to help students learn...learn by doing.

Your evaluation plan represents not only a framework for designing learning activities, but also IS a set of learning activities in itself. This set of activities will now be made longer for purposes other than evaluation.

A. DEVELOP AN ACTIVITIES PLAN

GUIDELINES
for designing
activities

Refer as needed to your COURSE DESCRIPTION, JOB DESCRIPTION and COURSE EVALUATION PLAN.

Look at the first two items of your COURSE EVALUATION PLAN. In order to help move students from the first evaluation event to the second, note what students need to learn in this first *segment* of the course:

- a) What knowledge should they acquire (key terms, concepts etc. as outlined in your TASK ANALYSIS)?
- b) What skills should they learn (doing, thinking, and communicating)?

TABLE OF TEACHING GOALS

TEACHING GOAL	EXPLANATION	APPROPRIATE ACTIVITY (Example)
1. to provide a frame of reference.	Relate what is to be learned to the past and to the future. Review past sessions. Overview new material. Connect old material to new.	Show a film of a task being done on-the-job. Follow the film with a discussion of what experience, if any, students have had with that task.
2. to provide a reason to learn.	Motivate and excite students. Make them curious.	Carry out a guest interview with someone who has suffered/benefited as a result of a job-related task being done poorly/well. Have students and the guest discuss the need to learn the task well.
3. to transmit information.	Provide students with key terms, and concepts, criteria, theories, guidelines etc.	Assign readings; give handouts; use programmed exercises, flow charts, worksheets etc.
4. to demonstrate skills and attitudes.	Model (by doing) the desired skills and attitudes. Display what the students should do and how they should act (especially as related to the job for which they are being prepared).	Visit a facility where the job is done. Ask students to observe what is being done and how it is being done.... both skills and attitudes... good and bad.
5. to allow practice of skills and attitudes.	Guide and encourage students to demonstrate desired skills and attitudes as related to on-the-job performance. Work for improvement with each practice activity.	Have students assume job-related roles. Present an on-the-job situation (real or made up) and ask students to act out their roles in the context of that situation.
6. to respond to student performance	Respond to students (both individually and in groups) and comment on their performance. Emphasize what is good, and suggest ways to improve where needed.	Give a practical exam to assess physical skills. Call attention to good performance. Ask for others' suggestions where performance can be improved.

2. Study the TABLE OF TEACHING GOALS on this page. Still considering the first segment of the course, in order for students to learn new skills and knowledge as outlined in step one, decide if you need to design activities ...

	YES	NO
a)... to provide a frame of reference?	___	___
b)... to provide a reason to learn?	___	___
c)... to transmit information?	___	___
d)... to demonstrate skills	___	___
e)... to allow practice of skills	___	___
f)... to respond to student performance	___	___

GUIDELINES

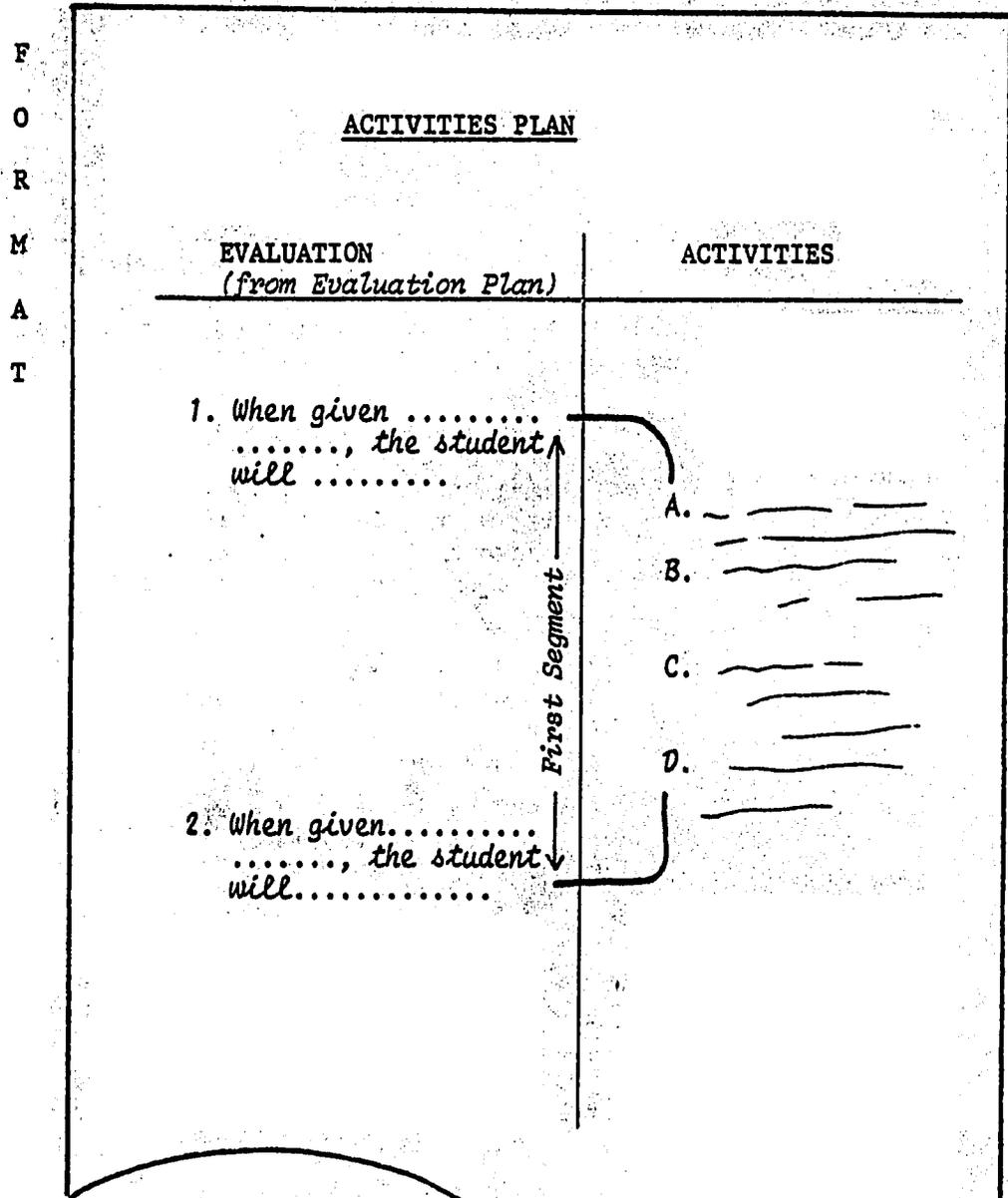
for
Designing
Activities
(Continued)

3. Review the variety of *teaching methods* described on pages 83-97.
- Note that depending on your *teaching goals* and upon the desired level of student participation, certain teaching methods are usually more appropriate than others in bringing about the desired learning. Try to choose methods that will match as closely as possible an on-the-job learning experience.
 - Pay special attention to those teaching methods with which you are less familiar. The choice of a particular method should be based more on whether it will help students learn than on whether you as a teacher are "comfortable" with the method.
 - Consider which methods are feasible given the constraints and resources of your course.
4. Given...
- ...the variety of teaching methods available,
 - ...the specific skills and knowledge that students need to learn,
 - ...your teaching goals for this segment of the course,
 - ...the desired student performance at the end of this segment (as described in the Evaluation Plan)...
- design as many activities as you need (both "in-class" and "outside" activities) in order to:
- meet your teaching goals,
 - convey needed skills and knowledge,
 - ensure the desired student performance.

WRITE AN ACTIVITIES PLAN

Describe these activities for the first segment of your course using the format suggested below.

DESIGNING ACTIVITIES



EXAMPLE
of
Activities
Plan

Examples of complete Activities Plans for entire courses are on pages 146 and 169. (See also Figure 16).

Figure 13

NOTE: At this point, you have described all the activities that you think students need to experience to move from the first to the second "rung" of the learning ladder, shown below.

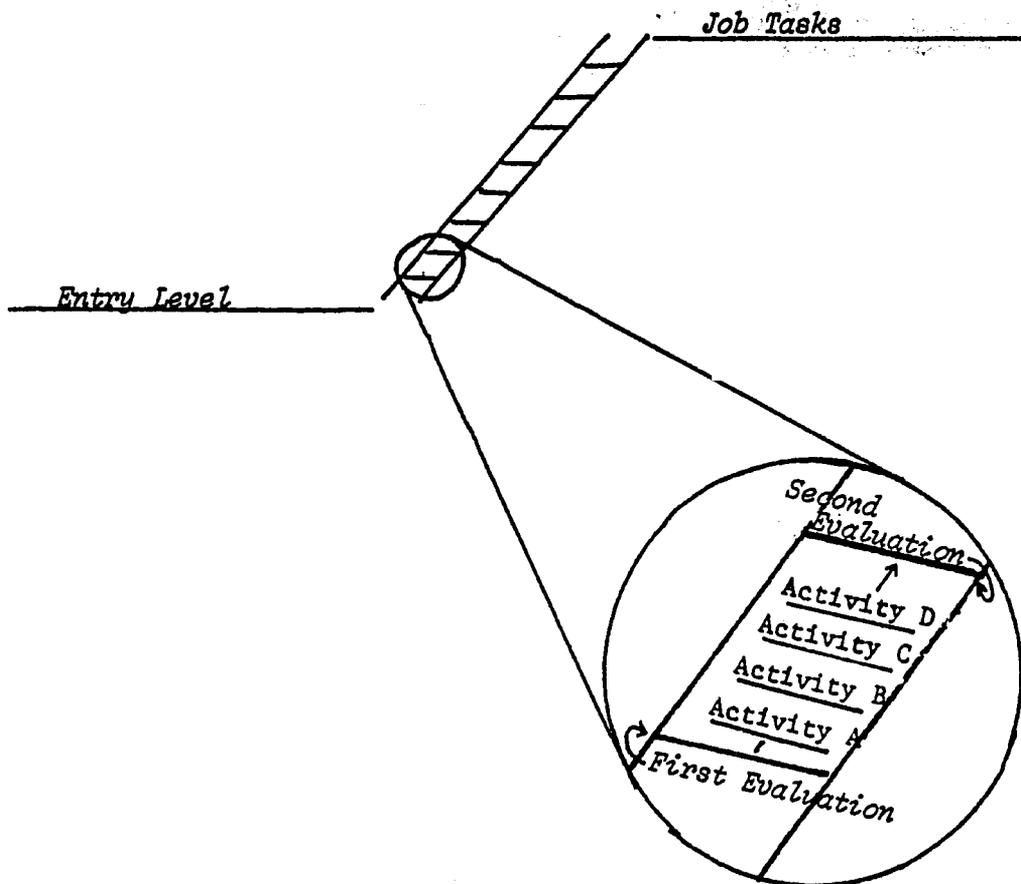


Figure 14

DESIGNING ACTIVITIES

GUIDELINES

for
Designing
Activities
(Continued)

- Complete your ACTIVITIES PLAN for the entire course, segment by segment, by repeating steps 1-4 for each successive pair of events in your COURSE EVALUATION PLAN.

Note that all of your tests (PRE, ENT, PROG, POST) will appear in the left column. All of the instructional activities which enable students to pass these tests appear in the right hand column.

Your complete ACTIVITIES PLAN will look like the following:

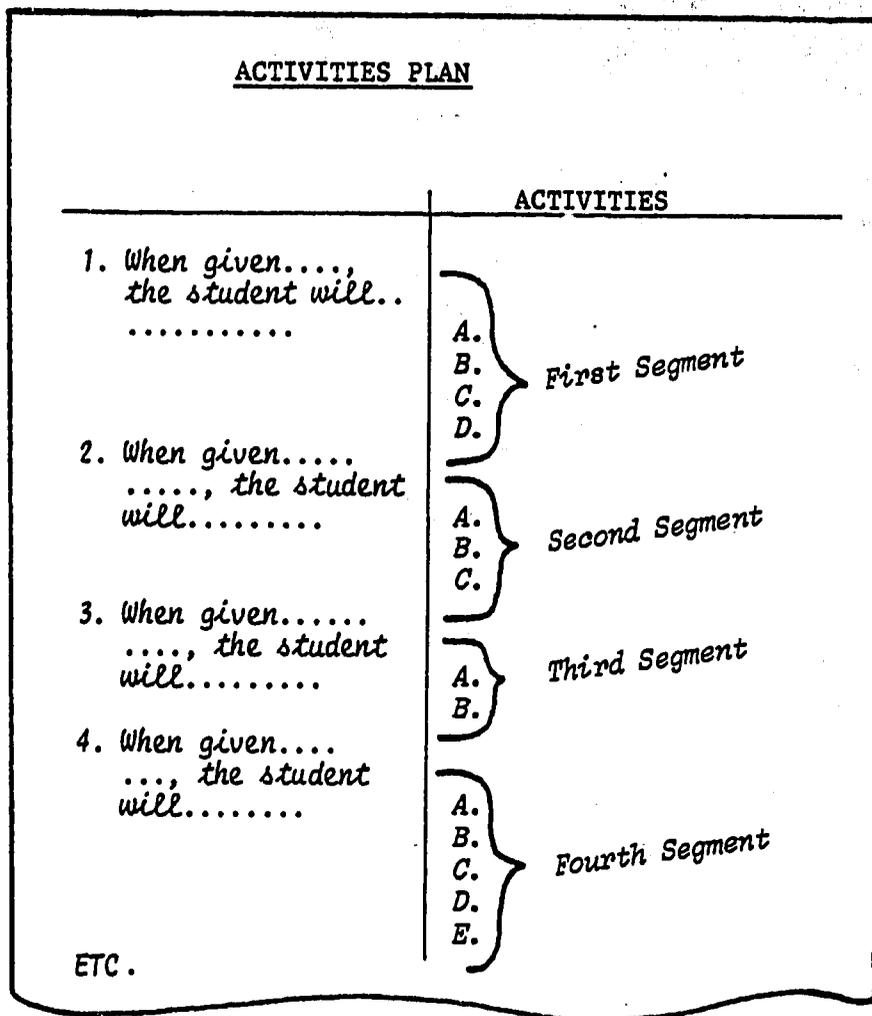


Figure 15

You will need this Activities Plan to design the rest of your course. Keep it handy for future reference.

E
X
A
M
P
L
EACTIVITIES PLANEVALUATION

1. When given directions in class, the student will recall definitions/explanation of some words/terms used in clinical practice.
2. When given a classroom situation without reference to notes, the student will explain the following terms:
 - family-nuclear/extended
 - compound/homesteads
 - rural/urban community
 - culture
 - various community leaders
3. When given a fellow student, the student will describe using rough sketches the way to the hospital, health clinic, dispensary from different locations in the community.
4. When given pencil and paper and within specified time, the student will list the breeding sites of flies/mosquitoes, sources of drinking water and ways of pollution.
5. When given multiple-choice items, the student will recognize:
 - environmental sanitation measures.
 - communicable disease control.
 - local food sources.
6. When given a classroom situation, the student will explain to a fellow student action plan to combat a community health problem.

ACTIVITIES

- A. Lecture on terms used in clinical practice.
- B. Handouts explaining difficult terms.
- A. Reading assignments (rural/urban communities).
- B. Evaluation activity - individuals asked to define/explain key terms and concepts.
- A. Community field trips - as group (first); individuals (later).
- B. Practice on the job after initial demonstration.
- C. Evaluation activity - individuals read to the class report on assigned community. Instructor collects all reports.
- A. Guest interview e.g., with a public health inspector.
- B. Lecture and handouts on public health nuisances and control.
- A. Field trips - visit to compounds in the community as a group and later by individuals.
- B. Evaluation activity:
 - Individual's report.
 - Multiple-choice exam.
- A. Field trips to identify specific health hazards, first in groups, then as individuals.
- B. Evaluation activity:
 - Submit all reports.
 - Discuss 5 reports in class.

Figure 16

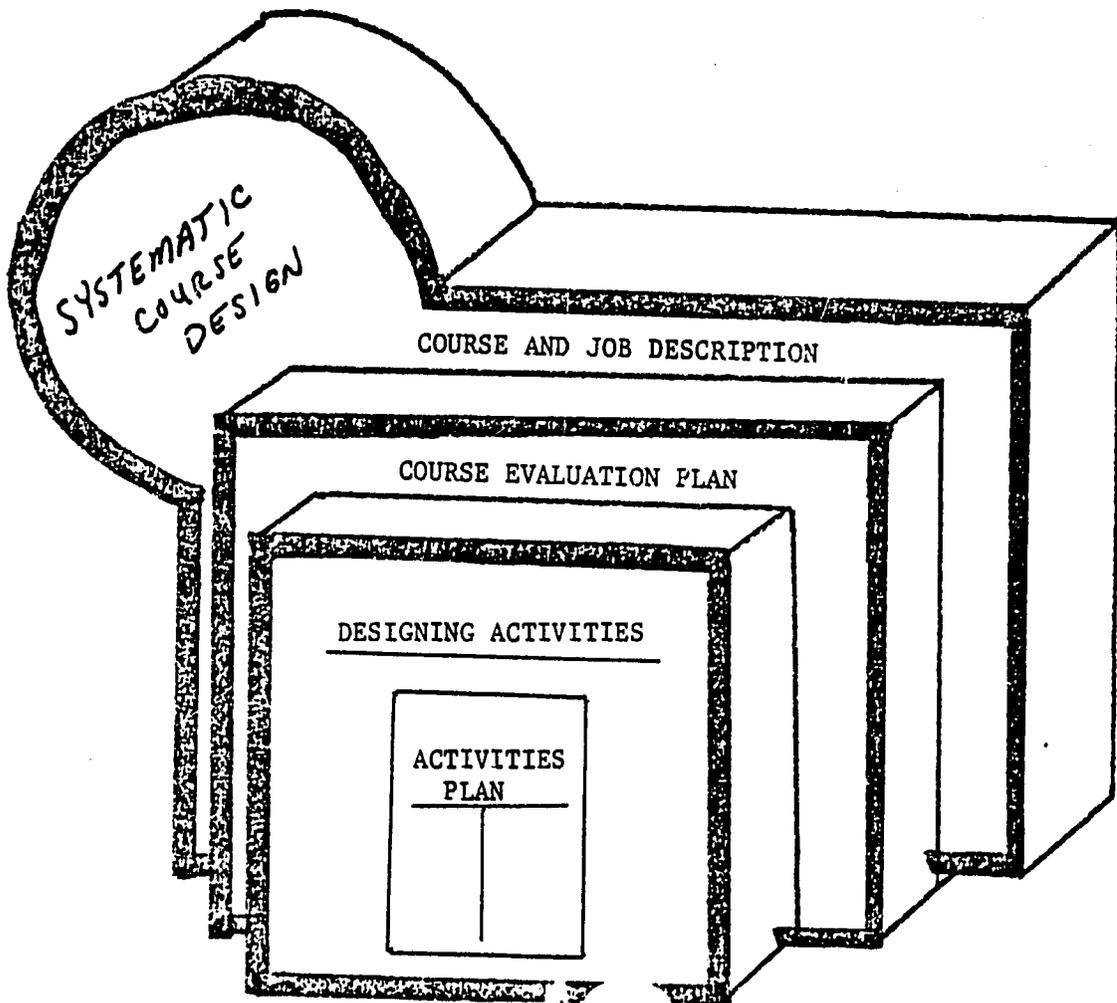
DESIGNING ACTIVITIES

Self-check & Review

Look at your COURSE DESCRIPTION, JOB DESCRIPTION, COURSE EVALUATION PLAN and ACTIVITIES PLAN. Before going on, check to make sure you have done each of the following.

For each segment of the course:

- 1. Designed activities to teach the skills and knowledge needed for the next higher level of evaluation.
- 2. Designed activities as needed to meet the following teaching goals:
 - a) to provide a frame of reference.
 - b) to provide a reason to learn.
 - c) to transmit information.
 - d) to demonstrate skills and attitudes.
 - e) to allow practice of skills and attitudes.
 - f) to respond to student performance.
- 3. Designed activities using methods that are appropriate for each teaching goal and for the desired learning.
- 4. Designed activities that are feasible, given the course constraints and resources.



CHAPTER FOUR

PLANNING SESSIONS

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B. Develop Session Plans	54

CHAPTER FOUR
PLANNING SESSIONS

Having planned a set of learning activities for the entire course, these activities must now somehow be grouped into the available class *sessions*. Furthermore, each session must be planned in sufficient detail to show how the activity(s) of that session will be carried out and to help relate one session to the next.

CHAPTER PURPOSE

The purpose of this chapter is to provide guidelines for (a) grouping or "packaging" activities into individual class sessions (the course *syllabus*), and (b) developing detailed plans for each session (*session plans*).

OVERVIEW

The syllabus and session plans will be developed as follows:

- . "In-class" activities from the ACTIVITIES PLAN are grouped in view of the time constraints of each session.
- .. "Outside" activities are grouped to correspond with in-class activities.
- ... A checklist is used to plan the approach for carrying out the activities of each session.
- References and resources are noted for each session.

PLANNING SESSIONS

GUIDELINES

for
Developing
a Syllabus

A. DEVELOP A COURSE SYLLABUS

Refer as needed to your COURSE DESCRIPTION and ACTIVITIES PLAN.

1. On the ACTIVITIES PLAN, check (✓) those activities that are "in-class" (as opposed to "outside" activities).
2. For each of these activities (including in-class evaluation activities), estimate how long the activity will take. (Note the hours/minutes next to each activity).

EXPERIENCE TELLS US THAT AN HOUR LONG ACTIVITY (ESTIMATED) WILL IN REALITY PROBABLY TAKE TWO HOURS!

3. Based on realistic time estimates for each activity, and in view of the length of each class session, draw lines between appropriate activities to show which activities are in each session.

Here are some important assumptions and considerations at this point:

- a) This step assumes that you do have individual sessions, and that the number and length of the sessions are fixed. IF, on the other hand, you have freedom in the number and length of sessions, then simply specify how many sessions you need and how long each should be (perhaps varying the length of sessions as needed).
- b) Realizing that some activities are designed to be carried out back-to-back, without a time break.... that other activities require a time break between them.... and that still other activities may each take several class sessions to complete....

.... adjust your dividing lines to reflect these factors.

GUIDELINES

for
Developing
a Syllabus
(continued)

- c. When you must decide between grouping activities
.... so that a particular session is not "full"
as opposed to
.... so that same session is "crammed" full,
you are in a sense deciding between
.... teaching some things well as opposed to
.... teaching more things not as well.

YOU DECIDE and draw your lines accordingly.

4. Using the format suggested, (see figure 17 and example figure 18) show all the activities as part of a course syllabus as follows:
- a) In column I, enter known information about session dates and times.
 - b) In column II, enter all the "in-class" activities, now grouped session by session.
 - c) In column III, enter all the "outside" activities to be completed before the next session, including assignments.

PLANNING SESSIONS

F
O
R
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A
T

<u>COURSE SYLLABUS</u>		
Course: _____		
SESSION	IN-CLASS ACTIVITIES (To be completed this session)	OUTSIDE ACTIVITIES (To be completed before next session)
#1 Date: Time:		
#2 Date: Time:		
#3 Date: Time:		
ETC		

Figure 17

NOTE: When you have completed the syllabus, it should contain all of the activities, including evaluation events, from the ACTIVITIES PLAN.

PLANNING SESSIONS

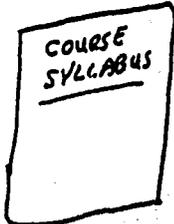
E
X
A
M
P
L
E

<u>COURSE SYLLABUS</u>		
Course: Community Health Orientation--Introductory course for Medical Assistants.		
SESSION	IN-CLASS ACTIVITIES (To be completed this session)	OUTSIDE ACTIVITIES (To be completed before next session)
<p>#1</p> <p>Time: 2 hrs.</p>	<ol style="list-style-type: none"> 1. Introduction 2. Lecture--definitions/ explanation of terms/ words in clinical practice. 3. Handouts explaining the more difficult terms. 	<ol style="list-style-type: none"> 1. Reading assignment A for Session #2.
<p>#2</p> <p>Time: 2 hrs.</p>	<ol style="list-style-type: none"> 1. Lecture/discussion based on reading assignment A-- culture, community (rural urban), family structure and various community leaders. 2. Evaluation activity --Randomly call on 15 students to explain/ define some terms covered in Sessions 1 and 2. 	
<p>#3</p> <p>Time: 3 hrs.</p>		<ol style="list-style-type: none"> 1. Community visit or trip. <ul style="list-style-type: none"> - 30 students divided into 2 groups of 15 each. - 15 in each landcruiser with one instructor, go around the community stopping at various points.

Figure 18

PLANNING SESSIONS

EXAMPLE



Examples of the process of developing a Course Syllabus from an Activities Plan are shown on pages 148 and 173.

The syllabus outlines a general overall plan of teaching activities, session by session. The main purpose of the syllabus is to provide a framework for planning each session in greater detail.... coming up next.



B. DEVELOP SESSION PLANS

GUIDELINES

for
Developing
Session
Plans

Look at your Course Syllabus and for each session, ask yourself, "What APPROACH will I (the teacher) use in carrying out the activities of this session?"

- Using the suggested SESSION PLAN format below, describe your teaching approach for each session. In describing your approach, use the CHECKLIST that follows to help you think about the many factors that help students to learn. (see figure 19 and example figure 20)

F
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M
A
SUGGESTED

for a
SESSION
PLAN

<p>SESSION PLAN</p> <p>(Session # _____)</p>	
<p>ACTIVITIES <i>(From Syllabus)</i></p>	<p>APPROACH</p>
<p>REFERENCES & RESOURCES needed for this session:</p> <p>REMINDERS for preparing for this session:</p>	

Figure 19

E
X
A
M
P
L
E

<u>SESSION PLAN</u>	
(Session 5)	
<u>ACTIVITIES</u>	<u>APPROACH</u>
<p>1. Guest interview: a practicing public health inspector.</p>	<p>Classroom setting Introduction of guest.</p> <p><u>30 minutes</u></p> <p>Specific questions guest would answer:</p> <ol style="list-style-type: none"> 1. Describe briefly your duties. <ul style="list-style-type: none"> • Environmental sanitation duties. • Communicable disease control <ul style="list-style-type: none"> - malaria control measures - mass immunization campaigns measles/DPT, cholera, yellow fever - leprosy control • Building plans approval and house-to-house inspection • Food and meat inspection <ul style="list-style-type: none"> - markets - abattoirs 2. What is a public health nuisance? 3. Enumerate the procedure you take for an owner/occupier to abate a nuisance. 4. How successful have you been in keeping this community clean? <p><u>20 minutes</u></p> <p>Discussion involving guest, instructor and students on above issues.</p> <p><u>10 minutes</u></p> <p>Break</p>
<p><u>References and Resources</u></p> <p><u>Reminders</u></p>	<p>Reading assignment B</p> <p>Classroom reservation</p> <p>Specific questions to the guest</p> <p>Remind guest of time of session.</p>

Figure 20

PLANNING SESSIONS

CHECKLIST

- for
- Planning
- Sessions

CHECKLIST FOR PLANNING SESSIONS

	<u>YES</u>	<u>NO</u>
a. What are my objectives for this session?	___	___
b. Does the activity(s) suggest a particular room/people arrangement?	___	___
c. Is special equipment needed?	___	___
d. Does anyone need to be introduced (students, guests, teachers, etc.)?	___	___
e. Will I deal with immediate (though not necessarily anticipated) student problems and concerns?	___	___
f. Is a review of the last session needed?	___	___
g. Does the activity(s) need an introduction?	___	___
h. Do students and/or the teacher have specific tasks during the activity that need explanation?	___	___
i. Do I need to plan a follow-up to the activity?	___	___
j. Does the ending of the session need special planning	___	___
k. Is there provision for feedback?	___	___

GUIDELINES

for
Developing
Session
Plans
(continued)

NOTE: You may want to include in your APPROACH some notes about the following:

- setting the "tone" of a particular session/ activity at the beginning.
- making charts or diagrams you want to display in that session.
- listing specific questions to ask during the session.
- having a backup plan if the activity(s) does not work out as planned.
- making time estimates of where the teacher and students should be at key points in the session (and noting these times in the session plan).

2. At the bottom of each session plan, list references and resources you will need for that session (audio-visual equipment, texts, handouts, guests etc).

3. Finally, make a list of "reminders" for that session, including:

- materials to be prepared for that session,
- people to call or see ahead of time,
- room or equipment to be reserved,
- etc.

EXAMPLE



SUMMARY

Examples of the process of developing Session Plans from the Course Syllabus are shown on pages 151 and 183.



With the development of individual Session Plans, your course design is complete. Before the course can be taught, the one major task remaining is to develop the teaching materials, including tests, that will be used during the course.

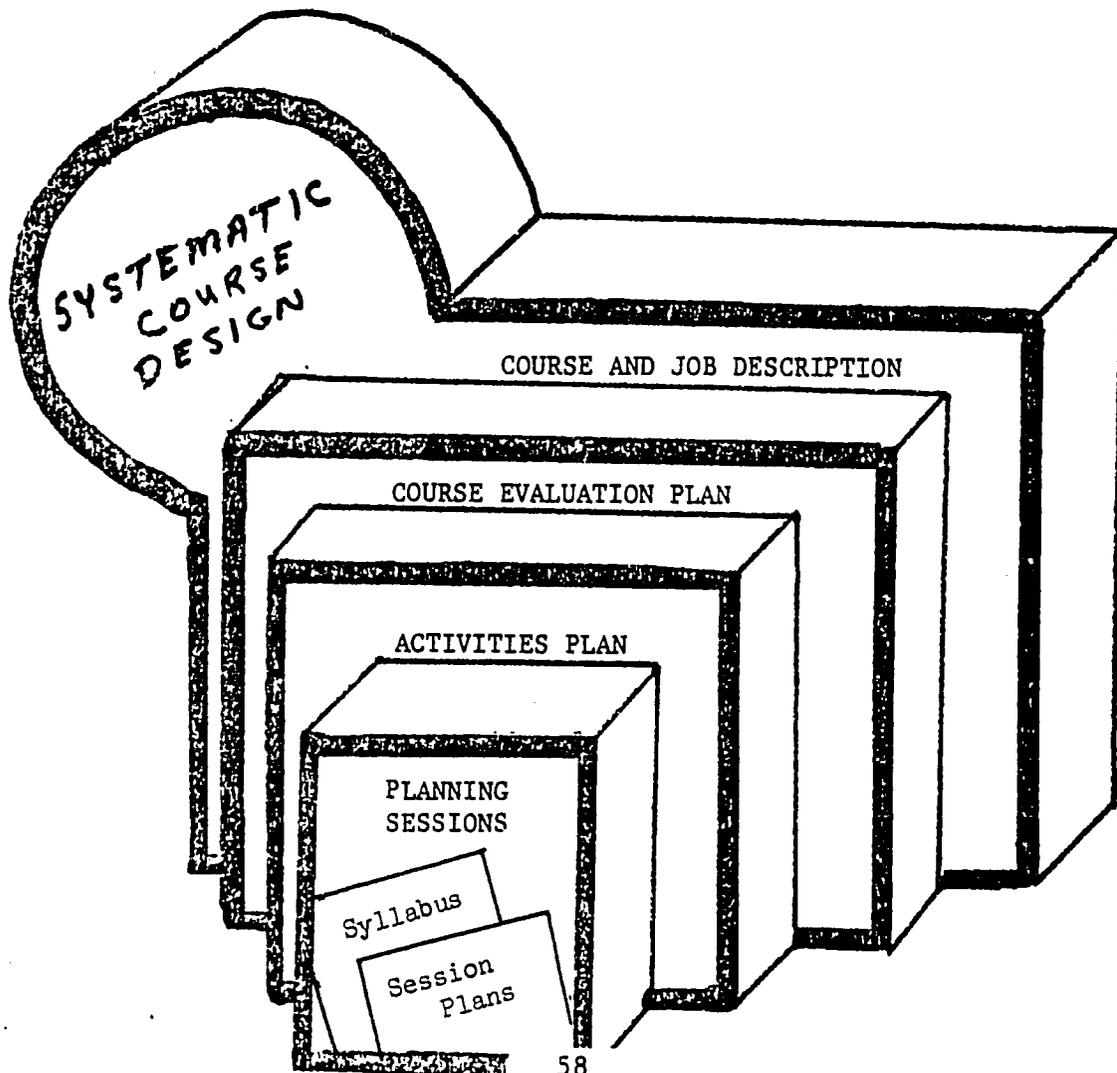
PLANNING SESSIONS

SELF-CHECK & REVIEW

Look at your COURSE DESCRIPTION, ACTIVITIES PLAN, COURSE SYLLABUS and individual SESSION PLANS.

Check to make sure you have done each of the following:

- 1. Grouped all "in-class" activities into class sessions.
- 2. Grouped all "outside" activities to correspond with in-class activities.
- 3. Developed a session plan for each session in the syllabus, having....
 - a) described the teaching APPROACH for carrying out the activity(s) of the session.
 - b) listed references and resources needed for the session.
 - c) listed reminders for preparing for that session.



SYSTEMATIC COURSE DESIGN

Section II:

METHODS

-CONTENTS-

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CHAPTER FIVE

METHODS FOR JOB ANALYSIS AND VERIFICATION

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CHAPTER FIVE

METHODS FOR JOB ANALYSIS AND VERIFICATION

INTRODUCTION

Because your course design is based upon the tasks as outlined in the JOB DESCRIPTION, it is essential that this description is a valid one.... that the tasks do represent what people *can and should be doing* on the job.

CHAPTER PURPOSE

How can I check out my JOB DESCRIPTION to make sure that....

.... the tasks that I have described can and should be done on the job?

.... I haven't overlooked important tasks that should be taught?

.... I can determine which tasks to emphasize in the course design in order to best meet the needs of the population to be served by my students?

There are several methods for analyzing what people can or should be doing on-the-job (*job analysis*), and these same methods can be used to check out whether a given job description is a valid one (*job verification*).

These methods for job analysis and verification can even be used to verify a JOB DESCRIPTION for a job that does not yet exist (for example, in programs to train health workers for expanded duties). In such cases, the emphasis of the analysis is to verify that real societal needs have been identified, and that the proposed training does focus on helping to meet those needs.

All of the methods for job analysis and verification involve somehow "checking out" your JOB DESCRIPTION with other people. These "other people" should include as

JOB ANALYSIS/VERIFICATION METHODS

WHO CAN
HELP?

many of the following as might be appropriate for your teaching situation:

- a) people already on the job (probably the most important group).
- b) "clients" of people on the job (for example, nursing mothers being served by public health workers).
- c) other teachers and students (perhaps who also have been involved with similar training programs).
- d) other members of the community, including government, industry etc. (especially to determine where the greatest need is for the proposed training).

Regardless of the method(s) you might choose to check out your JOB DESCRIPTION, you will probably want to discuss your plan with knowledgeable people close at hand. Although such discussion might be very helpful, the *number of people* you can contact on a one-to-one basis, and hence, the *amount of information* gathered that way is usually quite limited by time and distance constraints.

Therefore, to help ensure a valid response to your plan for job-based training, consider using one or more of the following methods for job analysis and verification.

<u>METHOD</u>	<u>PAGE</u>
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A.

QUESTIONNAIRE: a set of questions to which any number of people may respond.

There are two main types of questionnaires. One type provides a number of possible answers to each question. The person selects answers from those provided.

**EXAMPLE
QUESTIONNAIRE**

QUESTIONNAIRE REGARDING THE ROLE OF MEDICAL ASSISTANTS IN NIGERIA		
Do you think medical assistants should be trained to:		
	<u>YES</u>	<u>NO</u>
1. identify community leadership and heirarchy?	---	---
2. make contact with community leaders?	---	---
3. refer serious illness in the family to appropriate health clinic	---	---
4. recognize adverse health conditions in the environment?	---	---
5. provide health education sessions in the community?	---	---

Figure 21

Another type of questionnaire asks the person to answer questions in his/her own words.

**EXAMPLE
QUESTIONNAIRE**

QUESTIONNAIRE REGARDING THE ROLE OF MEDICAL ASSISTANTS IN NIGERIA	
1. What are the chief health workers in Nigeria?	
2. What is the role of medical assistants?	
3. How do they relate to the other health workers?	
4. Where do they work? With whom do they work?	
5. What educational level do health assistant students generally have?	
6. List three health services now badly lacking in your community.	
7. Why are these health services now well provided?	
8. Could medical assistants be trained to help provide such services? Please explain why or why not.	

Figure 22

JOB ANALYSIS/VERIFICATION METHODS

B. CRITICAL INCIDENT TECHNIQUE:

a survey of how well certain job tasks are carried out. The survey is done by collecting observations of good and/or poor performance of people on-the-job.

With this method, one is interested in documenting specific *critical incidents* during which the worker performed particularly well or particularly badly -- ultimately, to analyze whether job training (or the lack of it) was directly related to the observed performance.

The reporting of *incidents* can be done verbally or in writing.

EXAMPLE OF CRITICAL INCIDENT TECHNIQUE

(filled
out)

TO: mothers seen by outpatient clinic health team members.

During a recent visit, one of our team members should have discussed with you the advantages and disadvantages of breast feeding.

Describe below if you think the advantages and disadvantages were described well or described poorly. Tell why you think so, if you can.

Breast feeding explanation was done well because:

all the good points and bad points of breast feeding were covered, and these were also written out so I could read them again.

Breast feeding explanation was done poorly because:

the team member was a man and I didn't like being told about breast feeding my baby by someone who's never done it and never will. Also, there should have been more information about bottle feeding, too.

Figure 23

Typically, the persons interviewed are each asked to list specific examples of excellent and poor performance of a certain task which they witnessed during the last several weeks. Once a number of these incidents are collected (50-100), they are sorted out into categories.

The person analyzing the incidents decides what were the chief points both positive and negative in each category. He or she sums these points up. The report will assist course planners in developing or revising job descriptions and training programs.

C.

LOG DIARY:

a written description of what a worker does over a period of time on the job. The diary is kept by the worker and entries are made at the end of blocks of time during the day or at the end of the day.

EXAMPLE OF
LOG DIARY
(filled out)

FOR: Health Workers carrying out nutrition education.	
DIRECTIONS: Describe what you do today on the job, and indicate how much time is spent on each activity or group of activities.	
<u>TIME</u>	<u>ACTIVITIES</u>
7-8 AM	Answered correspondence and attended staff meeting.
8-9	Prepared materials to hand out to mothers' group.
9-9:30	Rode my bicycle over to elementary school for mothers' group meeting.
9:30-11:30	Ran nutrition education session with mothers of newborns.
11:30-3	Visited with mothers and children in their homes in the community around the school. Answered nutrition questions and helped plan diets and meals. Also ate lunch at one of the homes.
3-3:30	Rode my bicycle back to the health center.
3:30-4	Wrote up report of home visits for follow-up.

Figure 24

JOB ANALYSIS/VERIFICATION METHODS

D.

CHECKLIST:

a form of questionnaire in which responses are quick and easy, generally done by checking "yes/no" or by rating on a scale of "1-10" etc. The checklist might be done by the worker or by someone observing the worker on the job.

EXAMPLE OF CHECKLIST

JOB INVENTORY: SUPERVISOR OF COMMUNITY HEALTH CENTER					
DIRECTIONS: Check (✓) all the tasks which you perform. Add tasks which you do that are not listed. Rate the tasks you check.					
TASK	CHECK (✓) IF DONE	IMPORTANCE			
		High	Average	Low	
1. Advise others in solving technical maintenance problems.	—	—	—	—	
2. Assign workload to others.	—	—	—	—	
3. Counsel others concerning personal problems.	—	—	—	—	
4. Counsel others on professional development.	—	—	—	—	
5. Supervise inspection reports.	—	—	—	—	
6. Supervise security procedures.	—	—	—	—	
OTHER TASKS (Specify):					
	—	—	—	—	
	—	—	—	—	

E.

OBSERVATIONAL INTERVIEW:

takes place at the work site while the worker is performing the various job tasks. The interviewer observes and questions the worker about the tasks being done in order to obtain more complete and accurate information.

EXAMPLES OF
OBSERVATIONAL
INTERVIEWS

Four practicing pediatricians were followed by an observer with a stopwatch for a total of 18 days to gain a profile of how their working days were spent.

Described in an article by Bergman, Dassel and Wedgwood: "Time-motion study of practicing pediatricians", PEDIATRICS 38: 254-263, 1966.

In order to do a job analysis of nurse practitioners working in a clinical setting, checklists were prepared for five nursing tasks. The checklists were then reviewed by a panel of experts, and 35 nurse practitioners were observed and rated on the five tasks.

Described in an article by Dunn: "Development of an instrument to measure nursing performance", NURSING RESEARCH 19: 502-510, (Nov-Dec) 1970.

F.

WORK PARTICIPATION:

involves the course designer taking part in the job tasks. Depending on the difficulty of the job and upon the expertise of the investigator, he/she may want to work closely with an experienced worker who can then critique the work of the course designer.

JOB ANALYSIS/VERIFICATION METHODS

G.

INDIVIDUAL INTERVIEW:

involves interviewing workers, their supervisors, users of health services, ministry of health officials in charge of training. Often, the interview is based on prepared questions or with the help of a checklist. The personal approach allows for a more informal and less structured means of obtaining information on worker performance. Asking questions of representatives from different groups allows you to compare and contrast responses. Do supervisors and workers see the job differently, for example? What is the point of view of the user?

H.

GROUP INTERVIEW:

involves a number of experienced workers sharing their views on certain aspects of a particular job. Generally, each member of the group or panel has been given a set of job-related questions and asked to respond verbally or in writing.

I.

TECHNICAL CONFERENCE:

similar in make-up to the group interview, but the subject matter experts in this case are generally charged with the sole responsibility of developing a job description. Conferees attempt to reach consensus on the job-related tasks based on:

- a) their own previous experience,
- b) a demonstrated need for the job,
- c) the feasibility of such tasks being carried out.

CHAPTER SIX

EVALUATION METHODS

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CHAPTER SIX

EVALUATION METHODS

PROBLEM:

You are a patient in a hospital in need of an IV. Which one of the following three nurses would you choose to administer your IV?

The only information you have on which to base your decision is the method by which each nurse has been evaluated and judged to be competent in administering IVs.

Nurse A received a perfect score on an essay describing how to administer IVs.

Nurse B administered IVs correctly on 4 of 5 trials using manikins in a lab setting.

Nurse C administered IVs correctly on 7 of 10 fellow classmates in a hospital setting (nurse/patient role play).

Nurse A, B or C? _____

**FEEDBACK ON
THE PROBLEM**

Given the above hospital situation, most people choose nurse C. Why?

The task of administering an IV involves a number of skills including:

- putting the patient at ease
- cleaning the injection site
- adjusting the equipment for proper flow etc.
- locating an appropriate injection site
- injecting the needle, securing in place etc.

EVALUATION METHODS

FEEDBACK

(Continued)

Nurse A clearly had mastered the important *knowledge* components of administering IVs (as demonstrated by the performance on the essay), but this method of evaluation could in no way predict how well A might apply that knowledge in an actual hospital setting.

All of the *conditions* of actual practice (including perhaps an apprehensive patient, the pressures of other nursing responsibilities with other patients, the need to set up and adjust the equipment etc) were missing. Furthermore, none of the desired *performance* could be observed based solely on the essay test -- performance such as putting the patient at ease, cleaning the injection site, injecting the needle etc.

In fact, the only *skill* that could be evaluated based on Nurse A's performance is writing or communicating.

The method by which nurse B was evaluated is much better. The testing conditions more closely match on-the-job conditions including the actual IV equipment and a person-like model with which to work. And much of the desired performance could be observed including cleaning the injection site, adjusting the equipment, injecting the needle etc.

What was lacking in this evaluation were the pressures of working with a living, disturbed and perhaps fidgety human being as well as all the normal distractions of a hospital setting including responsibilities with other patients. And certain performance could not be observed especially as related to putting the patient at ease, and perhaps locating an appropriate injection site given certain troublesome physical characteristics of the patient.

Clearly the testing conditions for nurse C most closely match on-the-job conditions. The "patient", although role-playing, probably IS somewhat apprehensive (given this is still a training period for all of them), and C would have to put the patient at ease. And the "patient's" arm now is not just person-like, but presents the feel and response of a real patient.

FEEDBACK

(Continued)

Note that even some of the outside pressures and distractions of the hospital setting are present during this evaluation, although the student can take some comfort in knowing that the instructor is there to help as needed.

GOAL OF
EVALUATION

In general, when choosing a method for evaluating students for a specific job-related task, the goal of the evaluator should be to design testing *conditions* that match AS CLOSELY AS POSSIBLE on-the-job working conditions, and to specify desired student *performance* that matches AS CLOSELY AS POSSIBLE performance on the job.

And whereas "paper and pencil" tests might be appropriate for assessing *knowledge* components, they are often inadequate for assessing the degree to which the student can apply that knowledge in a task-oriented setting.

If you think of a *skill* as being the application of knowledge, the student who masters a skill can probably be assumed to have mastered the relevant knowledge as well. But as seen in the nursing example above, the reverse is not necessarily true -- that is, it is not safe to assume that the student who demonstrates mastery of knowledge has mastered the job-related skills as well.

Therefore, the course designer must plan evaluation activities to assess:

- a) the various knowledge components of a given task (especially to help students who cannot apply assumed knowledge at some point in the course),
- b) the skills needed for doing the task.

EVALUATION METHODS

CHAPTER PURPOSE

The purpose of this chapter is to describe a variety of methods that are appropriate for assessing skills and/or knowledge relevant to the tasks of the JOB DESCRIPTION.

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B. OBSERVATIONAL REPORT . . .	77
C. ORAL EXAMINATION	78
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F. OBJECTIVE EXAMINATION . . .	79

A.

PRACTICAL EXAMINATION:

a testing procedure in which the student is asked to demonstrate job-related skills when given a set of conditions that closely match on-the-job working conditions.

**EXAMPLES OF
PRACTICAL
EXAMINATIONS**

1. Given a patient during a routine visit to the clinic, the student performs a physical examination.
2. Given several bacterial cultures, the student prepares slides and identifies the organisms.
3. Students demonstrate cardio-pulmonary resuscitation with a manikin.

B.

**OBSERVATIONAL
REPORTS:**

documented observations of a student's performance over a period of time. The student is generally performing tasks in a setting very close to an on-the-job environment. The observer often uses a checklist or a rating scale to assess the performance.

**EXAMPLES OF
OBSERVATIONAL
REPORTS**

1. An intern is observed at different stages of patient management throughout the duration of several cases.
2. Once a day the head nurse observes each student nurse's performance for five minutes and records ratings about that performance.
3. In a dental clinic, the teacher is called over to evaluate each successive stage of a dental preparation.

EVALUATION METHODS

C.

ORAL

EXAMINATION:

Here the student responds to questions or to problem situations. The student may be asked to formulate and justify a particular approach to the problem. The student may also be asked to assume a certain role and to respond from that viewpoint in the context of the examination problem.

EXAMPLE OF
AN ORAL
EXAMINATION

Given background information regarding:

- a) the socio-economic make up of a village,
- b) available resources in that village,
- c) a particular health problem in that village,

the student will assume the role of a public health officer and discuss an appropriate plan to deal with the health problem.

D.

PROJECT

ASSIGNMENT:

The student is given a task or project to complete in given time period. Performance is evaluated on the basis of the product produced.

EXAMPLES OF
PROJECT
ASSIGNMENTS

The product produced might include:

- a research paper
- a laboratory experiment or demonstration
- a community survey
- slide preparations
- tissue dissections
- dental preparations etc.

EVALUATION METHODS

E.

ESSAY
EXAMINATION: similar to an oral examination, except the student now responds to questions or problems in writing.

- EXAMPLES OF
ESSAY
EXAMINATIONS
1. Given a letter from a community group requesting advice on how to set up a particular type of community health service, the student drafts a reply.
 2. Given a copy of the clinical records of a child, the student writes instructions for follow up care by the parents at home.

F.

OBJECTIVE
EXAMINATIONS: The student responds to questions by choosing the best answer(s) from those given (multiple-choice, true-false, matching, rank-in-order) or by writing in an appropriate answer (fill-in-the-blank or other short answer format). The questions may be given with related visual or auditory material.

- EXAMPLES OF
OBJECTIVE
EXAMINATIONS
1. Given a partially filled-in table, the student completes the table.
 2. Given a tape-recording of heart sounds, the student answers a series of multiple-choice questions regarding what he/she hears.
 3. Given a medical history for a patient who has been admitted to hospital x with given symptoms and lab tests, the student selects the most likely diagnosis from a set of six possible logical alternatives.

EVALUATION METHODS

SUMMARY

BEST USES (X) OF CERTAIN EVALUATION METHODS

Use this Method

For Testing

	<u>PRACTICAL EXAM *</u>	<u>OBSERVATIONAL REPORT</u>	<u>ORAL EXAM</u>	<u>PROJECT ASSIGNMENT</u>	<u>ESSAY EXAM</u>	<u>OBJECTIVE EXAM</u>
KNOWLEDGE (Concepts, Definitions, Facts etc)			X	X	X	X
PSYCHOMOTOR (PHYSICAL) SKILLS	X	X		X		
COGNITIVE (MENTAL) SKILLS	X	X	X	X	X	X
COMMUNI- CATING SKILLS	X	X	X	X	X	

Figure 26

* Including role-plays for communication skills.

CHAPTER SEVEN

TEACHING METHODS

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CHAPTER SEVEN

TEACHING METHODS

CHAPTER PURPOSE

The purpose of this chapter is to describe a variety of methods that can be used for teaching large groups, small groups and individuals. Guidelines are also provided for choosing appropriate methods to meet specific teaching needs.

PROBLEM

Assume that you are designing an introductory course in community health to train medical assistants in Nigeria. One of the tasks of the medical assistant is:

TASK: Make a community profile. (More specifically....)

- 1. Contact and solicit the cooperation of community leaders.*
- 2. Describe the relative locations of the available health services in the community (hospital, school clinic, dispensary and infant welfare center).*
- 3. Make a sketchy map of the community (markets, schools, halls, parks, churches, mosques etc).*

Which of the following methods would you choose to teach this particular task? Check one or more.

- Lecture on the importance of doing a community profile.
- Movie showing how community profile is done.
- Case study of a particular community (in which students write up a profile based on background information provided in the case).
- Field visit to a community to do a profile as a group.
- Project assignment: Each student is assigned a community and asked to do a community profile following certain guidelines.

TEACHING METHODS

FEEDBACK TO THE PROBLEM

Whether a given teaching method is appropriate depends on the following factors:

A) What are the goals of the teacher?

- 1).... to provide a frame of reference?
- 2).... to provide a reason to learn?
- 3).... to transmit information?
- 4).... to demonstrate skills and attitudes?
- 5).... to allow practice of skills and attitudes?
- 6).... to respond to student performance?

B) What is the desired student performance?

- What skills and knowledge are students expected to acquire?
- What is the student performance specified in the EVALUATION PLAN?

C) Is the method feasible?

- What are the constraints of the teaching situation?
- What resources are available?

In view of these three factors -- *teaching goals, student performance, feasibility* -- consider each of the methods described for teaching students how to make a community profile.

Go back to the list of methods on the preceding page. For each method listed, write one or more numbers - 1) through 6) - from A) above to show the teacher goals that could be best served by each method. Then compare your choices with the table on the next page.

FEEDBACK
TO THE
PROBLEM
(Continued)

A. TEACHING GOALS

The following table summarizes which teaching methods are most likely to meet various teaching goals when dealing with the task of doing a community profile.

	LECTURE	MOVIE	CASE STUDY	FIELD VISIT	PROJECT ASSIGNMENT
To provide a frame of reference.	X	X	X	X	X
To provide a reason to learn.	X	X	X	X	X
To transmit information.	X	X	X	X	X
To demonstrate skills and attitudes.		X		X	X
To allow practice of skills and attitudes.			X	X	X
To respond to student performance.			X	X	X

Figure 27

TEACHING METHODS

FEEDBACK
TO THE
PROBLEM
(Continued)

B. STUDENT PERFORMANCE

NOTE: Student performance should already have been specified in the EVALUATION PLAN. Without having access to that plan, what student performance could be observed as a result of each of the teaching methods posed in the problem?

METHOD

OBSERVABLE STUDENT PERFORMANCE

LECTURE:

Students listen, then discuss.

MOVIE:

Students watch and listen, then discuss.

CASE STUDY:

Students describe how they might contact community leaders.

Students describe location of health services.

Students map the case community.

FIELD VISIT:

Students contact community leaders as a group with help from the instructor.

Students locate health services as a group.

Students map a real community as a group.

PROJECT
ASSIGNMENT:

Each student contacts community leader(s).

Each student locates health services.

Each student maps a real community.

Ultimately, the method(s) chosen for teaching a particular task must ensure, to the extent possible, the level of student performance as specified in the EVALUATION PLAN.

FEEDBACK
TO THE
PROBLEM
(Continued)

C. FEASIBILITY

Whether a given teaching method is feasible depends on the available resources as well as constraints. With regard to the problem at hand....

<u>METHOD</u>	<u>FEASIBLE?</u>
LECTURE:	Yes, in almost any situation.
MOVIE:	If film and equipment available.
CASE STUDY:	If time to develop the case or if access to an existing case.
FIELD VISIT:	If time to do it. If transportation available as needed. If cooperative community.
PROJECT ASSIGNMENT:	If time to do it. If transportation available as needed. If cooperative community. If needed supervision and guidance is available.

Consider the factors of feasibility, student performance and teacher goals as you choose from among the following methods or as you make up your own methods.

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TEACHING METHODS

A.

GROUP DISCUSSION

In this approach, classes are less formal, and the students do much of the talking. Students are encouraged to state their views freely. If a class is large, it may be divided into smaller groups to allow more students to exchange more ideas. Group discussion can be used to examine issues, present alternative points of view and to develop communication skills.

B.

PROGRAMMED LECTURE

The programmed lecture is an instructional technique that bridges the traditional lecture with programmed instruction.

The instructor planning and implementing a programmed lecture:

1. Establishes objectives for the lecture.
2. Attempts to justify the content by asking, "If I want to present this material, what do I want students to do with it? How can I test for any desired change in skills or knowledge?"
3. Constructs test items that....
 - are relevant to the information presented.
 - are few in number (say, ten per fifty minute lecture).
 - are brief.
 - avoid ambiguity.
 - require short answers.
4. Presents test items in a format visible to all students simultaneously (e.g., slides or large placards, perhaps simply verbally).
5. Gives immediate feedback to student responses.

NOTE: Students may respond to test items by....

- a show of hands.
- holding up color-coded cards.
- making quick responses to objective test items (true-false, multiple choice, etc.).

C.

**ROLE PLAY/
SIMULATION
GAMES**

In role playing, a person adopts a specified role and tries to behave in ways characteristic of a person in that role.

In the health fields, role playing usually involves having one student take the part of a specific health worker, for instance, a nutritionist working with low-income patients, and having another student play the role of a patient in that context. Both are given a setting or situation in which to interact.

Classroom games usually involve a simulation of real-world situations, often in a simplified but dramatic manner. Games designed for educational purposes stress the process of play rather than the outcome.

Simulation games involve elements of group discussion and of role playing. An important difference among the three is in the degree of structure. Usually there is the least structure in group discussion; there are some implicit behavior patterns to be followed in role playing; in simulation games there are usually explicit rules to be obeyed, which are similar to the regulations and procedures in an actual setting outside the classroom.

Some games provide a framework for solving a particular type of problem, generally by posing a specific problem and specifying a sequence of steps for solving that problem, for example, formulating a goal, assigning priorities, allocating resources and then distributing them.

In other games, referred to as board games, ideas or processes are represented by means of concrete symbols: chips, markers, and a game board. Students investigate the process by manipulating the symbols.

**EXAMPLE OF
ROLE PLAY**

A student nurse may learn to have more confidence in her future capacity as a health team member if she is allowed to play the role of team nurse while others in the class act as the social worker, physician, family member and hospital administrator.

TEACHING METHODS

EXAMPLE OF SIMULATION GAME

(For students learning to become hospital administrators):

Students divide themselves into groups of hospital specialists: nurses, surgeons, maintenance personnel, social workers etc. The classroom represents a full meeting of the hospital council where each group of specialists vies for a larger section of the budget and more physical space in the building. If all the students playing this game are able to work out their viewpoints thoroughly, perhaps as a homework assignment, the simulated council session can become quite lively and students will observe the potential for rivalries, grievances, and perceived injustices in a hospital setting. The speeches, rebuttals, and discussions of their classmates should help them acquire a more realistic attitude about the future problems they will face as hospital administrators.

D.

GUEST INTERVIEW :

involves having the instructor or course participants direct a series of prearranged questions to the invited speaker. The interview conforms to the natural flow of conversation rather than to any formal questioning procedure.

The guest interview is an alternative to the traditional use of guest lecturers, which is often unsuccessful for one or more of the following reasons:

- The lecturer may cover points that have already been covered in the course or omit points you wanted him/her to cover.
- The standard lecture method makes it difficult to dovetail the contributions of several visiting speakers.
- Once started, a lecturer is likely to "follow his own flow of thought", regardless of the original agreement.

ARRANGING FOR THE INTERVIEW:

1. The instructor selects the areas in the curriculum where it seems desirable to involve outside speakers and chooses possible speakers.
2. The instructor then contacts the speakers, tells them of the interest in interviewing them, describes the interview method, and requests each guest's relevant publications and/or job description.

GUEST
INTERVIEW
(Continued)

3. The instructor reviews the speaker's background and draws up a tentative list of questions to be asked in the interview (this may be done in collaboration with the students).
4. The list is submitted to the guest speaker, who is asked to make modifications, deletions, and additions. This process can be accomplished on the phone or by letter and serves to reassure the guest as well as communicate the specific requirements for the session. It also permits the guest speaker to anticipate sensitive questions. The final list of questions forms the basis for the interview.

CONDUCTING THE INTERVIEW:

1. The instructor reviews the agreement with the speaker before the interview.
2. The interview begins with a brief introduction and overview of the session.
3. The interview should allow time for class participation and exchange with the guest.
4. The dialogue should develop naturally.
5. The guest should be kept to the subject by turning to the list of questions as needed.

E.

CASE
METHOD:

presents factual information about a specific job setting or problem.

Cases may be used as examples to support a point the instructor is trying to make. The instructor points out general principles that held true in the case under study. The student is a more or less passive listener when cases are used in this way, and class time is largely taken up by the instructor telling what the case "means".

TEACHING METHODS

CASE
METHOD
(Continued) Other cases are designed for students to play a more active role, and the instructor simply moderates the discussion. Cases in which students may play an active role include:

OPEN ENDED CASES: in which students are asked to read a case that outlines a complex situation and includes a problem calling for a decision. The case narrative stops at the decision point, and students are asked what they would do and why. In class, students defend the factual basis and reasoning that led to their decision.

INCIDENT TYPE CASES: Students are presented with short descriptions of a problem situation. If they ask the right questions, they are supplied with more information. As a group, students take the role of the decision-maker trying to straighten out the problem. Sometimes the students are divided into teams and asked to defend their respective positions.

F.

FIELD
STUDY

Sometimes it is possible for the instructor to help the students develop certain attitudes by arranging for them to experience specific aspects of the world outside the classroom. Often these experiences involve exposure to conditions normally experienced by patients of the health professionals being trained.

EXAMPLE OF
FIELD
STUDY

Field studies may involve on-the-job work participation, or they may simply involve experiencing a particular aspect of a certain health role. For example, nutrition students might be required to use a diet that later they plan to prescribe for others. This experience should help to develop a more realistic attitude about the problems a patient encounters in following a diet prescribed by a health professional.

G.

**INDIVIDUALIZED
INSTRUCTION**

Instruction is individualized when its contents, sequence, pace and/or methods somehow match the learner's present knowledge, ability, interest or learning style.

Instruction can be individualized in many ways, most of which remove the teacher from the center of the stage. Emphasis is placed on having each student learn at his/her own pace in his/her own way. The instructor becomes more a coach, counselor, leader of small groups or a director of individual projects.

Evidence has shown that individualized instruction is more effective than group instruction....

.... when students differ widely in backgrounds, interests, abilities and/or future professional goals.

.... when students as a group tend to be self-confident and self-initiated.

It is generally easier to individualize instruction when the student-teacher ratio is low. However, individualization can be accomplished even when a high student-teacher ratio prevails by dividing students into small groups and/or using selected students as teaching assistants.

The following table summarizes a variety of ways in which instruction can be personalized or adapted to individual learning styles.

TEACHING METHODS

INDIVIDUALIZING INSTRUCTION

VARIABLE	METHODS FOR INDIVIDUALIZING INSTRUCTION
Content	<ol style="list-style-type: none"> 1. Allow students as a group or individually to select those objectives they want to achieve from a prepared set of possible objectives. 2. Suggest a wide range of topics for individual projects or encourage students to select project of own interest. 3. Offer "reading", "tutorial" or "supervized research" components. 4. Provide remedial and/or advanced segments for different levels of students. 5. Divide class into small interest groups which then pursue different topics or objectives.
Sequence	<ol style="list-style-type: none"> 1. Encourage students as a group to choose the order in which the class will cover a set of objectives. 2. Develop self-instructional packages and encourage students to go through the materials in whatever order they choose.
Pace	<ol style="list-style-type: none"> 1. Encourage students to set their own deadlines for meeting specific objectives; for example, for turning in parts of a research proposal. 2. Encourage students to take tests and exams whenever they are ready (instead of at a scheduled time). 3. Assign units of programmed instruction that students may work through at their own pace.
Methods	<ol style="list-style-type: none"> 1. Set up different "tracks" or ways in which students can learn the same subjects. 2. Encourage students to select those instructional activities they wish to pursue to achieve the objectives.

TEACHING METHODS

H.

NOTE ON
USE OF
MEDIA

Any of the above teaching methods might be used in conjunction with audiovisual aids. Depending on available resources, the following media should be considered for use by the course designer:

Chalkboard

Flip Chart

Overhead Projection

Slides

Audiotape

Videotape

Filmstrips

Movies

I.
JOB AND
TRAINING
AIDS

In addition to audiovisual aids, you should always give serious consideration to such other aids as job aids and training aids.

Job (or performance) aids usually take the form of printed or written information that can be used on the job as guides or reminders. This book contains job aids intended for your use whenever you are developing a course. For example:

- Each "Review & Self-Check" (e.g., Page 33).
- The step-by-step guidelines (e.g., Page 13).
- The sample formats (e.g., Page 15).
- Decision-making guides, such as the diagram, Planning Evaluation (Page 32).
- The descriptions of job verification study techniques, evaluation methods, and teaching methods.

Training aids are often much like and serve the same purposes as job or performance aids, but are likely to be more specific to the teaching activities. For example:

- A list of course objectives which serves to guide students' study activities
- A course syllabus which provides students with a "map" of the overall coursework.
- An overview description or diagram of a given process, such as that in the Preface of this book.
- Assignment sheets accompanying the course syllabus, so that the students have a clear picture of what is expected of them step-by-step through the course.
- Examples of desired outputs, such as in this book.

Whenever the tasks your students are to learn from your course involve decision-making or step-by-step procedures or combinations of these, you can help them immensely by developing for their use both in your course and afterwards on the job suitable job aids of the kinds mentioned above.

Depending on the resources and time available to you, such job - and training - aids can be prepared by any of the following means:

Write them on the chalkboard or easel pad for students to copy; or show them via a slide or transparency.

Have them printed via mimeograph or other inexpensive reproduction equipment process.

Identify them in resource materials available to your students in libraries to which they have convenient access.

Put charts or posters on the walls of the classroom.

SYSTEMATIC COURSE DESIGN

Section III

EXAMPLES

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EXAMPLE A

Community Health Orientation
Introductory Course for
Nigerian Medical Assistants

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<u>COURSE DESCRIPTION</u>		
	<u>ASSIGNED</u>	<u>WOULD PREFER</u>
<u>COURSE TITLE:</u>	Community Health Orientation introductory course for Nigerian medical assistants.	
<u>COURSE PURPOSE:</u>	To enable the medical assistants to identify the health related resources in the community in which they work as so to utilize them effectively in health care delivery.	
<u>EXPECTED STUDENTS:</u>	Candidates with full secondary education (i.e., II years of schooling) with or without health-related job experience. <u>Number of Students:</u> 30	Candidates who failed the qualifying exam; with one science subject e.g., biology, health science.
<u>SETTING:</u>	School of Health Technology, Offa in Kwara State, Nigeria.	
<u>CONSTRAINTS:</u>	The course is part of a 6-week introductory program in the 24-month training period of medical assistants. <u>Date:</u> July 1st - Aug. 12th. <u>Total Hours:</u> 48 hrs.	Oct. 2nd - Nov. 13th
	Community health experience has not been systematically planned and implemented during the training period of medical assistants. However, students have expressed keen interest in early involvement in community diagnosis. I think the course will be highly welcomed.	
	Other instructors will "build" on this introductory course as major emphasis will be on community health during the training.	

EXAMPLE A

<u>RESOURCES:</u>	<u>ASSIGNED</u>	<u>WOULD PREFER</u>
	<p><u>Funds:</u> Kwara State Government sponsored course.</p>	
	<p><u>Personnel:</u> Two full-time instructors and one public health physician, part-time, acting as consultant.</p>	<p>In addition one Public Health Nurse Tutor, full-time, and a social worker, part-time.</p>
	<p><u>Facilities:</u> Limited. Most of the activities will be performed in the community i.e., out of class. Lectures and in-door demonstrations take place in a classroom. Two tape recorders, two landcruiser vehicles provided. No slides, video-tapes or films.</p>	<p>10 bicycles for ease of individual student movement in the community.</p>

EXAMPLE A

JOB DESCRIPTION

JOB TITLE: Medical Assistants Perform Community Health Education

TASKS:

1. Make a community profile.
2. Refer severe illnesses from the family, pre-school, school and other educational institutions to the appropriate health clinic for management.
3. Recognize conditions in the environment which have adverse effects on health.
4. Give health education sessions in family compounds or homesteads, schools, and community groups on environmental sanitation, communicable disease control and personal hygiene.

EXAMPLE A

FIELD STUDY

There are no medical assistants performing this job in the community now. Ninety-eight per cent of their time is spent in the clinic treating patients. However, there are community nurses and public health inspectors performing some of the activities in the community.

Two methods shall be used in the job verification:

- ONE: I shall accompany the community nurses and public health inspectors to see how they perform on the job, the type of problems encountered and community reaction to them.
- TWO: Organize a conference consisting of community nurses, public health inspectors and a community physician to critically analyze the various community activities.
- THREE: I will analyze existing documents on the health care system to determine the major health problems in the community, the structure of the health services, a list of commonly-available equipment and supplies.

EVALUATION WORKSHEET*

Describe Desired Job and Student Performance

TASK: Make a community profile. (1)

CONDITIONS	PERFORMANCE
<p>When given...</p> <p>a community of 500 in a rural environment and assistance from an instructor from the school of Health Technology</p>	<p>The student will...</p> <ul style="list-style-type: none"> - Contact and introduce himself to the community leader (chief, oba) and his aides, political and religious leaders in order to familiarize and solicit their cooperation. - Describe accurately to the instructor the relative locations of the hospital, school clinic, infant welfare center and the dispensary. - Make a sketch of the community and locate public places including markets, schools, parks, halls, post offices, churches, mosques, etc.

TASK: Refer severe illnesses from the family, pre-school, school, and other educational institutions to the appropriate health clinic for management. (2)

CONDITIONS	PERFORMANCE
<p>When given...</p> <p>mothers with their children at home, or teachers with children at pre-school or school institutions</p>	<p>The student will...</p> <ul style="list-style-type: none"> - Recognize signs and symptoms of severe diarrhea, malnutrition, severe cough and high fever (temperature above 102 F)

* In this example, the work on the job is identical to the desired student performance. The section on Job Performance has therefore been omitted.

EXAMPLE A.

	<ul style="list-style-type: none"> - Instruct the mother/teacher to take the child to the appropriate and nearest health clinic for treatment. - Check on child's progress the following day.
<p>TASK: Recognize conditions in the environment which have adverse effect on health and develop a plan of action with a group in the community to combat specific health problems. (3)</p>	
<p>CONDITIONS</p>	<p>PERFORMANCE</p>
<p>When given...</p> <p>a compound consisting of 3 families which have a shallow well (located 10 feet on a lower gradient to a pit latrine) without a cover as the only source of drinking water. Individuals use their own buckets to draw water and are unaware of the health hazards.</p>	<p>The student will...</p> <ul style="list-style-type: none"> - Recognize the magnitude of this health problem and the hazards. - Organize two meetings with <u>ALL</u> the members of this small group; first meeting to educate them on the hazards of drinking polluted water (diarrhea, vomiting, fever) and to require them to think of solutions to the problem. - Participate with the group in formulating the following action during the second meeting: <ul style="list-style-type: none"> ● Make mud blocks to raise the well outlet 2 feet above ground. ● Make a cover (lid) to prevent dirt, leaves, etc. from falling into the well. ● Stop using the pit latrine and dig another one 50 feet away on a lower gradient. ● When water level in the well is minimum (say 2 feet), drain well completely and increase depth to 25 feet.

EXAMPLE A

	<ul style="list-style-type: none"> • Fix a bucket with its rope to the well. Ban individual buckets. - Supervise the activities and participate as much as his schedule permits. - Educate the group on proper use and maintenance of the well and pit latrine. - Write and submit a full report of this project.
<p>TASK: Give health education in family compounds or homesteads, schools, and community groups on common environmental sanitation problems, communicable disease control and personal hygiene. (4)</p>	
<p>CONDITIONS</p>	<p>PERFORMANCE</p>
<p>When given...</p> <p>a compound/homestead of three families seated in the courtyard in the evening without visual aids and given only 45 minutes.</p>	<p>The student will...</p> <ul style="list-style-type: none"> - Give a talk in the local language on the following: <ul style="list-style-type: none"> • Maintenance of a clean environment inside/outside the house using refuse bins and burning or incineration. • Proper and adequate ventilation especially in the living rooms. • Fly/mosquito breeding control. • Proper food, hygiene and the "good" local foods. • Adequate protection for source of drinking water, e.g., well.

EXAMPLE A

<p>a class of 30 pupils age 10-12 years and with aid of a chalkboard and flipcharts</p>	<p>- Give a talk/demonstration on:</p> <ul style="list-style-type: none">• Proper personal hygiene<ul style="list-style-type: none">tooth brushingdaily bathclean clothesneat hair and clean fingernails.• Daily exercise.• Maintenance of clean environment<ul style="list-style-type: none">sweeping and burning of waste• Proper food hygiene<ul style="list-style-type: none">washing handscovering food to prevent fliesadequate cooking
<p>a group of mothers standing under a tree, shed, or just in an open space and with the aid of some charts (preferably not in a health clinic)</p>	<ul style="list-style-type: none">- State the importance of balanced diet and what local foods can be used.- List the high protein local foods.- Teach the importance of breast feeding.- State the role of good nutrition to growth and development, prevention of disease and malnutrition.- Encourage mothers to take their children to well-baby clinics regularly for weighing and immunization.

EXAMPLE A

EVALUATION WORKSHEET	
Describe-Student Entry Level Performance	
CONDITIONS	PERFORMANCE
When given... a test of English language in an interview situation an interview situation	The student will... - Be able to demonstrate ability to read English language manuals and to write simple English language reports. - Demonstrate that he can listen and talk to villagers politely and describe conditions in villages.

EXAMPLE A

Task Analysis

<u>TASK ANALYSIS</u>	
TASK: Make a community profile. (1)	
<u>SKILLS</u>	<u>KNOWLEDGE</u>
<p>Thinking:</p> <ul style="list-style-type: none">- Judges/decides which customs and beliefs are harmful to discourage, harmless to ignore, helpful to promote.- Plans ahead when making appointments with leaders. <p>Doing:</p> <ul style="list-style-type: none">- Makes maps of community showing location of health clinics and public places; includes drawing skill. <p>Communicating:</p> <ul style="list-style-type: none">- Speaks and writes local language- Makes contact with community leaders.	<p>community; community leadership and hierarchy; community profile; culture.</p> <p>how to design and interpret simple maps.</p>
TASK: Refer sever illnesses from the family, pre-school, school and other educational institutions to the appropriate health clinic for management. (2)	
<u>SKILLS</u>	<u>KNOWLEDGE</u>
<p>Thinking:</p> <ul style="list-style-type: none">- Takes history; interpret what is said in view of what is observed.- Recognizes children with severe illness (diarrhea, malnutrition, dehydration, severe cough, high fever).- Reads different temperature scales (F and C).- Decides if child should be referred to health clinic	<p>what questions to ask.</p> <p>symptoms</p> <p>normal and abnormal temperature range</p> <p>referral possibilities procedure</p>

<p>Doing:</p> <ul style="list-style-type: none"> - takes pulse - counts respiratory rate (adults: 15-18/minute; children faster). - takes temperature with thermometer. - "feels" temperature with back of hand if no thermometer. - examines stool. - examines blood. <p>Communicating:</p> <ul style="list-style-type: none"> - communicates with parents in local language - motivates parents to cooperate with follow-up plans (e.g., requesting mother to take stool sample to health clinic). 	<p>pulse</p> <p>what information can be obtained from respiratory rate</p> <p>oral and anal temperatures</p> <p>fever</p> <p>parasites in stool</p> <p>white cell, red cell, blood count.</p> <p>why follow-up is needed.</p>
<p>TASK: Recognize conditions in the environment which have adverse effects on health, and develop a plan of action with a group in the community to combat a specific problem. (3)</p>	
<p style="text-align: center;"><u>SKILLS</u></p> <p>Thinking:</p> <ul style="list-style-type: none"> - selects refuse depot sites taking into account access roads, safety and volume of refuse. - recognizes magnitude of health problems - relates ill-health to environmental problem(s). - develops plan to combat environmental problem(s). - identifies group leaders who will help in organization. 	<p style="text-align: center;"><u>KNOWLEDGE</u></p> <p>proper methods for water and refuse disposal.</p> <p>polluted drinking water;</p> <p>improper disposal of refuse and human waste.</p> <p>formal and informal leaders</p>

EXAMPLE A

<p>Doing:</p> <ul style="list-style-type: none"> - collects larvae of fly/mosquito - participates in the implementation of the project <p>Communicating:</p> <ul style="list-style-type: none"> - organizes community groups to combat environmental hazard(s). - seeks expert help for problems as needed 	<p>breeding sites of flies/mosquitos</p> <p>methods of community organization</p> <p>when expert help is needed</p>
<p>TASK: Give health education sessions in family compounds or homesteads, schools and community settings on environmental problems, communicable disease control and personal hygiene. (4)</p>	
<p>Thinking:</p> <ul style="list-style-type: none"> - recognizes the important health problems in the community <p>Communicating:</p> <ul style="list-style-type: none"> - speaks, reads and writes in the local language - applies basic teaching tools - stress the importance of doing something about health rather than just talking about it 	<p>environmental sanitation measures; communicable disease control; food hygiene; personal hygiene; balanced diet; local food sources; breast feeding; immunization</p> <p>small group discussion using simple A-V aids demonstrating behavior to be learned.</p>

COURSE EVALUATION PLAN

	CONDITIONS	PERFORMANCE
	When given...	The student(s) will...
(ENT)	NOTE: All students have passed an entry examination to test basic knowledge of the English language and have been screened in an interview (the 30 students would probably have been chosen from 1,000 candidates).	
(PROG)	1. Directions in class	- recall definitions/explanations of some words/terms used in clinical practice.
"	2. Classroom situation without reference to notes.	- explain the following: <ul style="list-style-type: none"> • family-nuclear extended • compound/homestead • rural/urban community • culture • various community leaders
"	3. Fellow student	- describe using rough sketches the way to the hospital, health clinic, dispensary from different locations in the community.
"	4. Pencil and paper and within specified time	- list the breeding sites of flies/mosquitoes - list sources of drinking water and ways water is polluted.
"	5. Multiple-choice items	- recognize: <ul style="list-style-type: none"> • environmental sanitation measures • communicable disease control measures • local food sources
"	6. Classroom situation	- explain to a fellow student action plan to combat a community health problem.

EXAMPLE A

CONDITIONS	PERFORMANCE	
<p>7. Directions in class</p>	<p>- explain the following:</p> <ul style="list-style-type: none"> ● food hygiene ● personal hygiene ● balanced diet ● immunization 	
<p>8. Multiple-choice items</p>	<p>- recognize the clinical features leading to the diagnosis of:</p> <ul style="list-style-type: none"> ● severe diarrhea and vomiting ● malnutrition ● severe cough ● high fever 	
<p>(NOS. 1-8 are progress test items.)</p>		
<p>TASK #1, Page 107.</p>		
(POST)	<p>9. A rural community</p>	<ul style="list-style-type: none"> ● solicit the cooperation of the community leaders ● locate all public places including health facilities ● submit a written report on above
<p>TASK #2, Pages 107-108.</p>		
<p>10. An ill child with his/her mother</p>	<ul style="list-style-type: none"> ● take a brief history ● recognize if the child has any of the following: <ul style="list-style-type: none"> dehydration severe diarrhea and vomiting malnutrition severe cough high fever, and ● refer immediately to the appropriate nearest health clinic. 	

CONDITIONS	PERFORMANCE
<p>(POST) TASK #3, Pages 108-109.</p> <p>11. An environmental health problem such as:</p> <p>well pollution mosquito/fly breeding refuse accumulation in a compound, institution, or public place</p>	<ul style="list-style-type: none"> ● recognize the magnitude of the hazard to health ● give health education to the group ● organize and develop a plan of action with group ● participate in project implementation ● write and submit a report
<p>" TASK #4, Pages 109-111.</p> <p>12. A group in the community (family group, school children or mothers, etc.) for health education</p>	<ul style="list-style-type: none"> ● choose appropriate topics from the following: Environmental Sanitation Food and Personal Hygiene Breast Feeding Balanced Diet ● give a talk/demonstration in the local language
<p>NOTE: NOS 9-12 are post test items.</p>	
<p>Most of the post test items are conducted in the community (i.e., outside the classroom); this is where success/failure of the program can be assessed.</p>	

ACTIVITIES PLAN

EVALUATION

Progress Test

1. When given directions in class, the student will recall definitions/explanation of some words/terms used in clinical practice.

Progress Test

2. When given a classroom situation without reference to notes, the student will explain the following terms:

- family-nuclear/extended
- compound/homesteads
- rural/urban community
- culture
- various community leaders

Progress Test

3. When given a fellow student, the student will describe using rough sketches the way to the hospital, health clinic, dispensary from different locations in the community.

Progress Test

4. When given pencil and paper and within specified time, the student will list the breeding sites of flies/mosquitoes, sources of drinking water and ways of pollution.

ACTIVITIES

- A. Lecture on terms used in clinical practice.
- B. Handouts explaining difficult terms.

- A. Reading assignments (rural/urban communities).
- B. Individuals are asked to define/explain key terms and concepts.

- A. Community field trips - as group (first); individually (later).
- B. Practice on the job after initial demonstration.
- C. Individuals discuss the report on the assigned community. Instructor with the class collects all reports.

- A. Guest interview e.g., with a public health inspector.
- B. Lecture and handouts on public health nuisances and control.

EVALUATION

Progress Test

5. When given multiple-choice items, the student will recognize:

- environmental sanitation measures,
- communicable disease control,
- local food sources.

Progress Test

6. When given a classroom situation, the student will explain to a fellow student action plan to combat a community health problem.

Progress Test

7. When given directions in class, the student will explain the following:

- food hygiene
- personal hygiene
- balanced diet
- immunization

ACTIVITIES

A. Field trips - visit to compounds in the community as a group and later by individuals.

B. Individual reports on field trips.

A. Field trips to identify specific health hazards, first in groups, then as individuals.

B. Students

- Submit all field reports.
- Discuss 5 reports in class.

A. Lecture or programmed lecture on Health Education/with handouts.

B. Reading assignments on Health Education

C. Field trip - visit a health clinic where Health Education is being given

D. Health Education role-play activity.

E. Real situation practice.

EXAMPLE A

<u>EVALUATION</u>	<u>ACTIVITIES</u>
<p data-bbox="414 374 621 406">Progress Test</p> <p data-bbox="277 412 743 570">8. When given multiple choice items, the student will recognize the clinical features leading to the diagnosis of:</p> <ul data-bbox="335 604 662 757" style="list-style-type: none">● severe diarrhea and vomiting● malnutrition● severe cough● high fever.	<p data-bbox="872 421 1298 480">A. Clinical case study and discussion.</p> <p data-bbox="872 514 1359 604">B. Lecture on severe illnesses using flow charts and hand-outs.</p> <p data-bbox="872 638 1372 704">C. Reading assignment on recognizing severe illness.</p> <p data-bbox="872 734 1339 795">D. Field trips to clinics and community.</p> <p data-bbox="872 827 1295 889">E. Bring clinical cases to classroom.</p> <p data-bbox="935 919 1417 981">- individuals report on community visit/activity.</p>
<p data-bbox="335 987 794 1019"><i>Items 9-12 are Posttest Items.</i></p>	
<p data-bbox="269 1081 740 1112">9. TASK 1, Page 107. Posttest</p> <p data-bbox="330 1123 783 1342">When given a rural community, the student will solicit the cooperation of the community leaders, locate public places including health services and submit a written report on above.</p>	<p data-bbox="868 1076 1372 1200">A. Guest interview e.g., social worker describing how he/she went about "knowing" the community.</p> <p data-bbox="868 1234 1367 1330">B. Field activity - individuals have different part of community assigned to him/her.</p> <p data-bbox="868 1361 1229 1393">C. Evaluation activity</p> <p data-bbox="931 1427 1410 1464">- Submit field activity report.</p>

<u>EVALUATION</u>	<u>ACTIVITIES</u>
<p>10. TASK 2, Page 107. Posttest</p> <p>When given an ill child with his/her mother, the student will take a brief history, recognize if the child has any of the following:</p> <ul style="list-style-type: none"> ● severe diarrhea and vomiting ● malnutrition ● severe cough ● high fever <p>and refer immediately to the appropriate nearest health clinic.</p>	<p>A. Discussion on a referral case study.</p> <p>B. Community referrals involving many trips.</p> <p>C. Evaluation of referrals in the community by the instructor.</p>
<p>11. TASK 3, Page 108. Posttest</p> <p>When given an environmental health problem such as:</p> <ul style="list-style-type: none"> ● well pollution ● mosquito/fly breeding ● refuse accumulation <p>in a compound, institution or public place, the student will</p> <ul style="list-style-type: none"> ● recognize the magnitude of the hazard to health ● give Health Education to the group ● organize and develop a plan of action with group ● participate in project execution ● write and submit a report. 	

EXAMPLE A

<u>EVALUATION</u>	<u>ACTIVITIES</u>
<p data-bbox="469 385 596 412">Posttest</p> <p data-bbox="282 421 723 449">12. TASK 4, Pages 109 - 111.</p> <p data-bbox="356 470 773 689">When given a group in the community (family group, school children or mothers, etc.) for Health Education, the student will choose appropriate topic from the following:</p> <ul data-bbox="356 725 778 846" style="list-style-type: none">● Environmental Sanitation● Food and Personal Hygiene● Breast Feeding● Balanced Diet <p data-bbox="356 880 806 938">and give a talk/demonstration in the local language.</p>	<p data-bbox="872 427 1389 512">HH. Students are given groups in the community for Health Education.</p> <p data-bbox="872 549 1075 576">II. Posttest</p> <ul data-bbox="943 619 1364 704" style="list-style-type: none">- Instructor makes on the job assessment of performance.

EXAMPLE A

Course Syllabus

NOTES ON COURSE SYLLABUS

1. More than half of the time allocated for this course is spent in the community.
2. Students will have to spend more of their own free time (i.e., outside the normal official time allocated for community exercise) in the community.
3. A strong indication of student involvement in the community assigned to him/her will be the quality of the reports and performance in the final evaluation.

COURSE SYLLABUS

Course: Community Health Orientation--Introductory course for Medical Assistants.

SESSION	IN-CLASS ACTIVITIES (To be completed this session)	OUTSIDE ACTIVITIES (To be completed before next session)
<p>#1 Time: 2 hrs.</p>	<p>1. Introduction</p> <p>2. Lecture--definitions/ explanation of terms/ words in clinical practice.</p> <p>3. Handouts defining the more difficult terms used in medicine.</p>	<p>1. Reading assignment A for Session #2.</p>
<p>#2 Time: 2 hrs.</p>	<p>1. Lecture/discussion based on reading assignment A- culture, community (rural urban), family structure and various community leaders.</p> <p>2. Feedback: --Randomly call on 15 students to explain/ define some terms covered in Sessions 1 and 2.</p>	
<p>#3 Time: 3 hrs.</p>		<p>1. Community visit or trip.</p> <p>- 30 students divided into 2 groups of 15 each.</p> <p>- 15 in each landcruiser with one instructor, go around the community stopping at various points.</p>

EXAMPLE A

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p>#4 Time: 4 hrs.</p>	<p>Spend 1 hour on student reports.</p> <p>Four students given 10 minutes each to read individual report. Students and instructor criticize.</p>	<p>- Assign each "ward" to two students. Ward usually consists of a group of families having a common ancestor; may be up to 10-20 houses.</p> <p>1. First Community Exercise: - Identifying public places. - Meeting local community and family leaders. - Write brief report.</p> <p>All students report back to classroom after <u>3 hours</u>.</p> <p>2. Reading assignment B for Session 5.</p>
<p>#5 Time: 2 hrs.</p>	<p>1. Guest interview: Invite a public health inspector to discuss his/her duties.</p> <p>2. Lecture/discussion on reading assignment B- public health nuisances and control, local food sources, etc.</p>	
<p>#6 Time: 4 hrs.</p>		<p>1. Second Community Exercise: - Divide class into four groups. - Identify as many as possible nuisance items discussed in Session 5.</p>

EXAMPLE A

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u> - Each group writes a report.
<p>#7 Time: 2 hrs.</p>	<p>1. Progress Test: - Each group representative reads report to class. - Multiple-choice exam for 1 hour on most items covered so far in the course.</p>	<p>1. Reading assignment C for Session 8.</p>
<p>#8 Time: 3 hrs.</p>	<p>1. Thirty minutes to discuss reading assignment C- action plan to combat a community health problem.</p>	<p>1. Third Community Exercise: - Each pair of students goes to "ward". - Define a specific health problem. - With the group, prepare action plan. - Individual pairs arrange follow-up. 2. Reading assignment D for Session 9.</p>
<p>#9 Time: 2 hrs.</p>	<p>1. Lecture/discussion on reading assignment D- hygiene, balanced diet and immunization. 2. Instructor demonstration on how to give Health Education.</p>	<p>1. Reading assignment E for Session 10. 2. Individual pair arranges follow-up on third community exercise.</p>

EXAMPLE A

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p>#10</p> <p>Time: 2 hrs.</p>		<p>1. First Health Clinic Visit and Exercise:</p> <ul style="list-style-type: none"> - Students observe clinic staff give Health Education. - Students practice in groups.
<p>#11</p> <p>Time: 2 hrs.</p>	<ol style="list-style-type: none"> 1. Lecture/discussion on reading assignment E-four major illnesses. 2. Handout on main signs for the four illnesses. 3. Case study. 4. Demonstration of one case by the instructor. 	<ol style="list-style-type: none"> 1. Continue reading assignment E. 2. At own time continue follow-up on third community exercise.
<p>#12</p> <p>Time: 3 hrs.</p>		<ol style="list-style-type: none"> 1. Second Health Clinic Exercise <ul style="list-style-type: none"> - Demonstrate brief history taking and eliciting signs and symptoms to diagnose the four major illnesses. 2. Fourth Community Exercise <ul style="list-style-type: none"> - Pairs go into "ward", identify illnesses, if any, and write brief report.

EXAMPLE A

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p>#13</p> <p>Time: 1½ hrs.</p>	<ol style="list-style-type: none"> 1. Guest interview: request social worker to discuss his/her duties and how he/she gets to "know" the community. 2. A discussion should follow. 3. Fourth community exercise report and criticisms. 	
<p>#14 and #15</p> <p>Time: 15 hrs.</p>		<p>Sessions 14 and 15 shall be devoted to posttest activities in the community. Total hours shall be 15 hours; each instructor shall spend 1 hour with each student:</p> <ol style="list-style-type: none"> A. Assess individual in the "ward" on skill in taking brief history and recognition of signs and symptoms leading to the diagnosis of the four severe illnesses. B. Give appropriate Health Education to a group in the community. C. Submit a written report on third community exercise (progress report is acceptable if task is not yet completed by the group).

EXAMPLE A

<u>SESSION PLAN</u>	
(Session 1)	
<u>ACTIVITIES</u>	<u>APPROACH</u>
1. Introductions	<p>Classroom setting, 30 students with a chalkboard.</p> <p><u>10 minutes</u></p> <p>Instructor/student introductions. Course overview.</p>
2. Lecture/Discussion	<p><u>40 minutes</u></p> <p>Instructor defines/explains the following:</p> <ul style="list-style-type: none"> • terms - health, disease, clinic, etc. • symptoms (the complaint), signs (discovered on exam) • fever, vomiting, diarrhea, malnutrition. <p><u>10 minutes</u></p> <p>Break</p> <p><u>30 minutes</u></p> <p>Instructor defines/explains more terms and gives examples of signs and symptoms.</p>
3. Handout I	<p>Instructor gives a compiled list of the difficult medical/clinical terms.</p>
4. Reading assignment A	<p>Instructor distributes this to each student for Session 2.</p>
<u>References and Resources</u>	<p>Handout I Reading assignment A</p>
<u>Reminders</u>	<p>Classroom reservation with chairs, desks for 30; chalkboard, chalk, and duster.</p>

SESSION PLAN

(Session 5)

ACTIVITIES

1. Guest interview: a practicing public health inspector.

APPROACH

Classroom setting
Introduction of guest.

30 minutes

Specific questions guest would answer:

1. Describe briefly your duties.
 - Environmental sanitation duties.
 - Communicable disease control
 - malaria control measures
 - mass immunization campaigns
measles/DPT, cholera,
yellow fever
 - leprosy control
 - Building plans approval and house-to-house inspection
 - Food and meat inspection
 - markets
 - abattoirs
2. What is a public health nuisance?
3. Enumerate the procedure you take for an owner/occupier to abate a nuisance.
4. How successful have you been in keeping this community clean?

20 minutes

Discussion involving guest, instructor and students on above issues.

10 minutes

Break

EXAMPLE A

<p style="text-align: center;"><u>ACTIVITIES</u></p>	<p style="text-align: center;"><u>APPROACH</u></p>
<p>2. Lecture/discussion</p>	<p>Review first hour activity and its relevance to the second part of the session.</p> <p><u>30 minutes</u></p> <p>Review reading assignment B.</p> <ul style="list-style-type: none"> ● Environmental sanitation measures <ul style="list-style-type: none"> - refuse disposal: dust bins incineration - proper ventilation ● Control of communicable diseases <ul style="list-style-type: none"> - reduction of breeding sites for flies/mosquitoes - larvaecides/insecticides for larvae/adults -prevent indiscriminate defecation-pit latrines -protection for sources of drinking water ● Local food sources <ul style="list-style-type: none"> - protein foods - ewa, eran, wara, epa, eyin, ere - CHO foods - isu, gari, oka, ogede - fruits - orombo, guava, mango, ope, oymbo, etc. <p><u>20 minutes</u></p> <p>Entertain comments/questions. Students list more local food sources.</p>
<p><u>References and Resources</u></p> <p><u>Reminders</u></p>	<p>Reading assignment B</p> <p>Classroom reservation Specific questions to the guest Remind guest of time of session.</p>

EXAMPLE B

Promoting Breast Feeding

- COURSE DESIGN CONTENTS -

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COURSE DESCRIPTION

	<u>ASSIGNED</u>	<u>WOULD PREFER</u>
<u>COURSE TITLE:</u>	Promoting Breast Feeding	
<u>COURSE PURPOSE:</u>	To enable health personnel to promote successful breast feeding by educating women attending maternal and child services in outpatient clinics.	
<u>EXPECTED STUDENTS:</u>	Personnel providing direct services to women and children in outpatient clinics from the National Health Service in urban settings in Chile. In general, they are: obstetricians, pediatricians, general practitioners, midwives, nurses, social workers and aides. Also, there are residents and interns from the Faculty of Medicine. It is expected that 20-25 people will attend each course.	This course should be given throughout the country, but this is not possible at present. If the course is successful in urban settings it could be extended to rural settings as well.
<u>SETTING:</u>	Outpatient clinics providing primary care for mothers and children where there exist integrated programs of direct service and teaching combining resources from the National Health Service, (public organism responsible for the health of the majority of the Chilean population) and the School of Medicine, University of Chile. These clinics provide prenatal and postnatal care for women and comprehensive care for children 0 to 18 years. Deliveries occur in hospitals, and institutionalized care for severe illnesses.	

<u>ASSIGNED</u>	<u>WOULD PREFER</u>
<p><u>CONSTRAINTS:</u> <u>Total hours:</u> 18 <u>Time:</u> 5 to 7 p.m. (After work hours)</p> <p>-----</p> <p><u>Characteristics of Students:</u> different background and experience.</p>	<p>within working hours</p>
<p><u>RESOURCES:</u> Human resources: 1 obstetrician and 1 pediatrician, both with experience in clinical and Public Health Work from the University.</p>	
<p>Classrooms and physical facilities will be provided by the National Health Service.</p>	
<p>Mimeographed material and audiovisual aids will be provided by the University.</p>	
<p>There are no funds directly available for this course.</p>	<p>An effort will be made to obtain funds to pay for the time out of working hours used for the course. (But this is unlikely.)</p>

JOB DESCRIPTION

JOB TITLE: Member of outpatient clinic team providing services to mothers and children in relation to breast feeding.

TASKS:

1. Takes a medical history.
2. Examines breasts and nipples.
3. Instructs and demonstrates preparation/care procedures.
4. Instructs and demonstrates breast feeding procedure.
5. Explains advantages and disadvantages of breast feeding.
6. Evaluates success of breast feeding efforts.
7. Conducts nutrition education for lactating women.
8. Explains and arranges benefits for the mother.

FIELD STUDY:

Comment: A field study based on interviews of pediatricians, nurses and aides shows that physicians generally perform a physical examination, give some instructions, evaluate and make decisions, but seldom give demonstrations or provide health education. This does not seem to be due to a lack of knowledge or skill. An attitudinal component is involved.

A second interview of community mothers indicates that they don't understand the dangers involved in bottle feeding. They have little information on breast feeding and proper nutrition for their babies. Malnutrition and undernutrition of babies is common. Babies also suffer from diarrhea which may be due to dirty bottles.

It was decided to keep the tasks listed above for all members of the team, given their crucial importance for successful breast feeding.

EXAMPLE B

EVALUATION WORKSHEET*

Describe Desired Job and Student Performance

TASK: Takes a medical history. (1)

CONDITIONS	PERFORMANCE
<p>When given...</p> <p>a woman attending a prenatal service in an outpatient clinic, a time constraint of 10 to 15 minutes per patient, the embarrassment and emotional stress that surrounds breasts and the eventual barriers due to sex and age</p>	<p>The student will...</p> <p>take a medical history and will find out accurately about success or failure in previous lactations, including mother's explanation of that situation, and will always make an effort at reinforcing mother's confidence or suppressing mother's fear on her ability to breast feed.</p>

TASK: Examines breasts and nipples. (2)

CONDITIONS	PERFORMANCE
<p>When given...</p> <p>a woman attending a prenatal service in an outpatient clinic, a time constraint of 10 to 15 minutes per patient, the embarrassment and emotional stress that surrounds breasts and the eventual barriers due to sex and age</p>	<p>The student will...</p> <p>examine breasts and nipples in order to assess their condition for adequate breast feeding, being aware of the woman's discomfort and being careful to put her at ease.</p>

* In this example, the work on the job is identical to the desired student performance. The section on job performance has therefore been omitted.

<p>TASK: Instructs and demonstrates preparation/care procedures. (3)</p>	
<p>CONDITIONS</p>	<p>PERFORMANCE</p>
<p>When given...</p> <p>a woman attending a prenatal service in an outpatient clinic, a time constraint of 10 to 15 minutes per patient, the embarrassment and emotional stress that surrounds breasts and the eventual barriers due to sex and age</p>	<p>The student will...</p> <p>give complete instructions and will demonstrate clearly (with mannikin and/or mother) how to prepare and care for breasts during pregnancy and lactation according to characteristics found in breasts and nipples examination.</p>
<p>TASK: Instructs and demonstrates breast feeding procedure. (4)</p>	
<p>CONDITIONS</p>	<p>PERFORMANCE</p>
<p>When given...</p> <p>a mother attending a postnatal and well child clinic; a time constraint of 10 to 15 minutes per patient; the emotional embarrassment about breasts; eventual barriers due to sex and age; the presence of the baby with mother paying more attention to baby than to health worker</p>	<p>The student will...</p> <p>give complete and clear instructions and will make a demonstration on how to adequately breast feed a child including manual expression to complete emptying.</p>

EXAMPLE B

<p>TASK: Explains advantages and disadvantages of breast feeding. (5)</p>	
<p>CONDITIONS</p>	<p>PERFORMANCE</p>
<p>When given...</p> <p>a mother attending a postnatal and well child clinic; a time constraint of 10 to 15 minutes per patient; the emotional stress and embarrassment about breasts; eventual barriers due to sex and age; the presence of the baby with mother paying more attention to baby than to health worker</p>	<p>The student will...</p> <p>give clear and convincing information on advantages (and disadvantages, if any) of breast feeding for the mother and for the child.</p>
<p>TASK: Evaluates success of breast feeding efforts. (6)</p>	
<p>CONDITIONS</p>	<p>PERFORMANCE</p>
<p>When given...</p> <p>a mother attending a postnatal and well child clinic; a time constraint of 10 to 15 minutes per patient; the emotional stress and embarrassment about breasts; eventual barriers due to sex and age; the presence of the baby with mother paying more attention to baby than to health worker</p>	<p>The student will...</p> <p>accurately evaluate the process of breast feeding in terms of the growth and development of the child and of the mother's situation, in order to make decisions about breast feeding & giving additional (supplementary) food. If weaning is decided upon, the student will give clear instructions on gradual weaning making arrangements for food supplements.</p>

<p>TASK: Conducts nutrition education for lactating women. (7)</p>	
<p>CONDITIONS</p>	<p>PERFORMANCE</p>
<p>When given...</p> <p>a mother attending a postnatal and well child clinic; a time constraint of 10 to 15 minutes per patient; the emotional stress and embarrassment about breasts; eventual barriers due to sex and age; the presence of the baby with mother paying more attention to baby than to health worker</p>	<p>The student will...</p> <p>give complete instructions on nutritional needs for lactation, emphasizing correct use of supplementary milk, taking into account the availability of local and seasonal foods, including foods that should be avoided along with drugs and alcohol.</p>
<p>TASK: Explains and arranges benefits for the mother. (8)</p>	
<p>CONDITIONS</p>	<p>PERFORMANCE</p>
<p>When given...</p> <p>a mother attending a postnatal and well child clinic; a time constraint of 10 to 15 minutes per patient; the emotional stress and embarrassment about breasts; eventual barriers due to sex and age; the presence of the baby with mother paying more attention to baby than to health worker</p>	<p>The student will...</p> <p>clearly explain and will arrange for benefits, utilizing all resources available (money, free milk, rest periods, etc.) according to each situation.</p>

EXAMPLE B

EVALUATION WORKSHEET

Describe Student Entry Level Performance

A case study describing
a mother who has come
to the postnatal clinic
for breast feeding
information

student will describe in
writing how he/she would
go about putting patient
at ease

<u>TASK ANALYSIS</u>	
TASK: Takes a medical history. (1)	
<u>SKILLS</u>	<u>KNOWLEDGE</u>
<p>Thinking:</p> <ul style="list-style-type: none"> - Interprets mother's explanations; making judgments about explanations. <p>Communicating:</p> <ul style="list-style-type: none"> - Plans nonthreatening ways of taking a history. - Listens attentively to mother's speech. - Speaks clearly, emphasizing important concepts. - Demonstrates own belief in the value of lactation. 	<p>breast feeding; lactation; factors affecting lactation</p> <p>threatening mannerism:</p>
TASK: Examines breasts and nipples. (2)	
<u>SKILLS</u>	<u>KNOWLEDGE</u>
<p>Doing:</p> <ul style="list-style-type: none"> - Evaluates woman's breasts and nipples according to techniques for the examination. <p>Communicating:</p> <ul style="list-style-type: none"> - Demonstrates an attitude of awareness and respect of woman's emotional stress and discomfort while examining. 	<p>characteristics of normal breasts and nipples</p>

EXAMPLE B

<u>TASK ANALYSIS</u>	
TASK: Instructs and demonstrates preparation/care procedures. (3)	
<u>SKILL</u>	<u>KNOWLEDGE</u>
<p>Doing:</p> <ul style="list-style-type: none"> - Demonstrates massage of aureola and nipples. 	<p>techniques for preparing and caring for breasts and nipples</p>
TASK: Instructs and demonstrates breast feeding procedures. (4)	
<u>SKILLS</u>	<u>KNOWLEDGE</u>
<p>Doing:</p> <ul style="list-style-type: none"> - Demonstrates techniques for breast feeding with special emphasis on: <ul style="list-style-type: none"> -comfortable position for mother, -baby's head position, -correct suckling, -manual expression for complete emptying. <p>Communicating:</p> <ul style="list-style-type: none"> - Conveys the importance of correct technique and attitude 	<p>principles of breast feeding</p>
TASK: Explains advantages and disadvantages of breast feeding. (5)	
<u>SKILL</u>	<u>KNOWLEDGE</u>
<p>Communicating:</p> <ul style="list-style-type: none"> - Explains in a convincing and non-threatening way the advantages of breast feeding to mothers 	<p>advantages of breast feeding for mother and child--biological, psychological, sociological, economic.</p>

<p style="text-align: center;"><u>SKILL</u></p> <ul style="list-style-type: none"> - Explains disadvantages when appropriate 	<p style="text-align: center;"><u>KNOWLEDGE</u></p> <p>disadvantages of breast feeding; when and if to make reference to them.</p>
<p>TASK: Evaluates success of breast feeding efforts. (6)</p>	
<p style="text-align: center;"><u>SKILLS</u></p> <p>Thinking:</p> <ul style="list-style-type: none"> - Makes decision for supplementing when actual weight is below expected percentile. - Evaluates percentile level in weight of child. <p>Communicating:</p> <ul style="list-style-type: none"> - Explains how to wean gradually and painlessly. 	<p style="text-align: center;"><u>KNOWLEDGE</u></p> <p>concepts of growth and development and the percentile levels of weight that indicate under and mal-nutrition. What supplementary foods to give, how to prepare foods, how often to give additional food.</p>
<p>TASK: Conducts nutrition education for lactating women. (7)</p>	
<p style="text-align: center;"><u>SKILLS</u></p> <p>Thinking:</p> <ul style="list-style-type: none"> - Develops a nutritional plan according to available foods, including quality and quantity needed. 	<p style="text-align: center;"><u>KNOWLEDGE</u></p> <p>nutritional requirements for lactation</p>

EXAMPLE B

<p style="text-align: center;"><u>SKILLS</u></p> <p>Communicating:</p> <ul style="list-style-type: none">- Explains quality and quantity of food needed- Emphasizes the need to avoid certain foods, drugs and alcohol during lactation.	<p style="text-align: center;"><u>KNOWLEDGE</u></p> <p>avoiding certain foods, drugs and alcohol</p>
<p>TASK: Explains and arranges for socio-economic benefits. (8)</p>	
<p style="text-align: center;"><u>SKILLS</u></p> <p>Thinking:</p> <ul style="list-style-type: none">- Arranges for benefits and/or referral when appropriate <p>Communicating:</p> <ul style="list-style-type: none">- Explains eligibility and purpose of benefits	<p style="text-align: center;"><u>KNOWLEDGE</u></p> <p>kinds of benefits available for mother and child; requirements for eligibility</p>

<u>COURSE EVALUATION PLAN</u>	
<u>CONDITIONS</u>	<u>PERFORMANCE</u>
	When given...
(ENT)	1. a case history (written)
(PRE)	2. a comprehensive multiple-choice test on breast feeding
(PROG)	3. a multiple-choice test on anatomy of breasts and physiology of lactation
(PROG)	4. a group discussion on advantages and disadvantages of breast feeding
(PROG)	5. mannikin
(POST)	6. a woman attending post-natal clinic
(POST)	a comprehensive multiple-choice test on breast feeding
	The student will...
	indicate procedures for putting patients at ease
	choose correct answers with 85% accuracy
	choose correct answers with 85% accuracy
	prepare and hand in a complete but brief report on breast feeding
	demonstrate the correct technique of examining breasts, the correct procedure for preparing and caring for breasts and nipples in lactation and the correct technique to breast feed
	take the history of previous lactation, will examine breasts and will give instructions and demonstrations on preparing and caring for breasts and how to adequately breast feed and wean a baby, including education on breast feeding nutrition and drugs and socio-economic benefits
	choose correct answers with 85% accuracy

EXAMPLE B

<u>ACTIVITIES PLAN</u>	
EVALUATION EVENTS	ACTIVITIES
<p style="text-align: center;">Pre-test/Entry Level Test</p> <p>1. When given a comprehensive multiple-choice test on breast feeding, the student will choose correct answers with 85% accuracy</p> <p>When given a written case student indicates how he would put patient at ease</p> <p style="text-align: center;">Progress Test</p> <p>2. When given a multiple-choice test on anatomy of breasts and physiology of lactation, the student will choose correct answers with 85% accuracy</p> <p style="text-align: center;">Progress Test</p> <p>3. When given a group discussion on advantages and disadvantages of breast feeding, the student will prepare and hand in a complete but brief report on breast feeding</p> <p style="text-align: center;">Progress Test</p> <p>4. When given a mannikin, the student will demonstrate the correct technique of examining breasts, the correct procedure to prepare and care for breasts and nipples in lactation and the correct technique to breast feed</p>	<p>A. Pre-test/Entry Level Test</p> <p>A. Lecture on history and trends in lactation (showing graphs).</p> <p>B. Lecture on relationship situation between breast weaning and malnutrition (showing slides).</p> <p>C. Reading assignment on anatomy and physiology.</p> <p>A. Group discussion and/or playing roles on advantages and disadvantages of breast feeding.</p> <p>B. Prepare (at home) breast feeding report, and hand it in.</p> <p>A. Demonstration with mannikin of preparation and care of breasts for lactation and correct technique of breast feeding.</p> <p>B. Individual exercise for practicing.</p>

EXAMPLE B

COURSE SYLLABUS

Course:

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u> (To be completed this session)	<u>OUTSIDE ACTIVITIES</u> (To be completed before next session)
#1 Time: 2 hrs.	<ol style="list-style-type: none"> 1. Introduction to course: review of syllabus, requirements (attendance, participation), evaluation. 2. Pretest, Entry Level Test 3. Lecture: Historical review of breast feeding. Trends observed in Chile and its relationship with malnutrition and infant mortality. 	<ol style="list-style-type: none"> 1. Read handout on anatomy of breasts.
#2 Time: 2 hrs.	<ol style="list-style-type: none"> 1. Instructor led discussion: Anatomy of breasts. 2. Lecture: Preparation and care of breasts for lactation. 	<ol style="list-style-type: none"> 1. Read handout on physiology of lactation.
#3 Time: 2 hrs.	<ol style="list-style-type: none"> 1. Group discussion: Critical review of preparation and care of breasts, own experience and cultural, prevalent practices. 2. Lecture: Physiology of lactation. 	<ol style="list-style-type: none"> 1. Review of preceding sessions for test.

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p>#4 Time: 2 hrs.</p>	<ol style="list-style-type: none"> 1. Test: Anatomy and physiology 2. Group discussion: Advantages and disadvantages of breast feeding. 	<ol style="list-style-type: none"> 1. Prepare report on advantages of breast feeding for next session.
<p>#5 Time: 2 hrs.</p>	<ol style="list-style-type: none"> 1. Lecture: Techniques of breast feeding, including manual expression. 2. Demonstration of techniques for preparing, caring, breast feeding, and expressing with mannikin. 	<ol style="list-style-type: none"> 1. Practice individually with mannikin.
<p>#6 Time: 2 hrs.</p>	<ol style="list-style-type: none"> 1. Practice with mannikin, individually and in small groups of 2 or 3 with immediate feedback from classmates and instructors (practicing techniques). 2. During practice, instructor plays role of mothers, and students practice giving health education 	<ol style="list-style-type: none"> 1. Read handout on nutrition of lactating women.
<p>#7 Time: 2 hrs.</p>	<ol style="list-style-type: none"> 1. Lecture: Nutrition requirements of lactating women. 2. Group discussion: Nutrition and supplementary food programs for women. 	<ol style="list-style-type: none"> 1. Practice individually with mothers attending clinic (make appointment with instructor for supervision and feedback). 2. Read handout on socio-economic benefits

EXAMPLE B

<u>SESSION</u>	<u>IN CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p>#8 Time: 2 hrs.</p>	<ol style="list-style-type: none"> 1. Lecture: Drugs and lactation 2. Group discussion: Socio-economic benefits for lactating women 	<ol style="list-style-type: none"> 1. Practice individually with mothers (appointment with instructor). 2. Review for practical and final examination.
<p>#9 Time: 2 hrs.</p>	<ol style="list-style-type: none"> 1. Practical Exam: Group exam with mannikin and/or mothers. 2. Final Exam (POSTTEST) 3. Evaluation of course 	

SESSION PLAN	
(Session #1)	
ACTIVITIES	APPROACH
1. Introduction to course	<p><u>30 minutes</u></p> <p>Explain in detail the purpose of the course and its requirements.</p> <p>Discuss the characteristics of participants, multi-disciplinary team with very different backgrounds, and how this is a challenge for both participants and teachers, but at the same time a means of interchanging experiences and enriching discussions.</p>
2. Pretest/Entry Level Test	<p><u>15 minutes</u></p> <p>Multiple-choice test.</p> <p><u>15 minutes</u></p> <p>Entry level test</p>
3. Lecture: Historical Review of Breast Feeding	<p><u>60 minutes: 30 Lecture, 30 Discussion</u></p> <p>Have prepared charts and diagrams displayed in order of use. Begin with trends in infant mortality and malnutrition in Chile. Compare areas and then relate nutritional status with trends in breast feeding. Offer opportunity for questions. If no questions: Ask how they have seen breast feeding relating to malnutrition in the clinic or other places where they might have worked. How does this show in individual cases (for example, what was the history of breast feeding in one of the malnourished infants they have been seeing?)</p>

EXAMPLE B

ACTIVITIES	APPROACH
<u>Reminders</u>	Make enough copies of the handout on the anatomy of breasts; Give them out to be studied for next session. (Have same handout sent to guest lecturer for next session). Be sure copies of the multiple choice test and entry level test are available. Prepare directions for administering these tests.

<u>SESSION PLAN</u>	
(Session #2)	
<u>ACTIVITIES</u>	<u>APPROACH</u>
<p>1. Lecture: Anatomy of Breasts</p>	<p>Three days in advance: Call guest lecturer to be sure she/he remembers time and place of lecture and if the handout has been received. Ask for any special arrangements needed (projector, etc.).</p> <p><u>60 minutes</u></p> <p>Introduce guest. Projector should be plugged in and slides in order.</p> <p><u>15 minutes</u></p> <p>Break</p>
<p>2. Guest Lecture: Preparation and Care of Breasts for Lactation</p>	<p><u>45 minutes</u></p> <p>Have prepared diagrams and charts in order. Begin with preparation during pregnancy with a brief review of immediate post-natal period. Open discussion and ask for questions. If no questions: Ask the midwife to tell what she does and/or what she was taught to do. (Midwives provide most of the prenatal care in the country, that's why asking her is important.) If there is not enough time, discuss the subject in groups next session.</p>
<p><u>Reminders:</u></p>	<p>Make enough copies of handout on Physiology of Lactation and give these out to be read for next session.</p>

EXAMPLE C

Nutrition Education
for Public Health Workers

- COURSE DESIGN CONTENTS -

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INSTRUCTIONAL SITUATIONASSIGNEDWOULD PREFER

COURSE TITLE: Nutrition Education for Public Health Workers.

COURSE PURPOSE: To equip public health workers for carrying out nutrition education among the rural population in Malaysia.

EXPECTED STUDENTS: College graduates with varied academic backgrounds—usually in health-related areas, maybe only in social science fields. They have been given the jobs of public health workers within the ministry of health. 30-40 students will participate.

CONSTRAINTS: Dates of course:
July 3rd to Aug. 8th, 1978

Total Hours:
200 hours (40 hrs. per week, 5 weeks)

Course reputation:
First time course is given.

Expectation:
Students are expected to be well equipped as nutrition educators at end of course.

College graduates with a background in health fields and some working experience with people.

280 hours (7 weeks)

Expectations must be lowered. Much more needs to be learned through experience than what can be taught during this course.

EXAMPLE C

	<u>ASSIGNED</u>	<u>WOULD PREFER</u>
<u>RESOURCES:</u>	<p><u>Funds:</u> Funds are available for transportation of students by bus to and from field study areas, and to cover costs of handouts, slides, reprints, etc.</p> <p><u>Audio-visual Aids:</u> Available for use.</p> <p><u>Facilities:</u> Kitchen facilities, laboratory, if needed.</p> <p><u>Personnel:</u> Two full-time instructors and a wide range of guest speakers from government, quasi-governmental and academic institutions in the country.</p>	

JOB DESCRIPTIONJOB TITLE: Public Health Worker

The public health worker comes into contact with the population at the ground level and implements government health programs and policies at the level of the village community. He/she is mainly concerned with health education, of which nutrition education is a major component, although he/she also carries out other tasks such as: liaison with other government personnel (agricultural workers, education extension workers, etc.); consultation/advising on the area or community in which he/she works; implementation of other health programs; assistance in other areas (e.g., anti-malaria campaign, breast-feeding campaign, etc.).

JOB WHICH IS RELATED TO COURSE:

Nutrition Education and how to carry that out in the village community.

TASKS:

1. Investigates and assesses the nutritional status of a village community in order to prepare for the planning and carrying out of nutrition education. This includes investigating and assessing the nutritional status of individuals and families, although not necessarily from a clinical perspective.
2. Plans and teaches: How to plan teaching sessions and how to take advantage of opportunities for informal sessions at very short notice. How to relate to people when carrying out nutrition education for different groups in the community--mothers, children, general villagers, village leaders. What aspects to stress to which group. The general emphasis will be on mothers, pregnant and lactating women and children as these are considered the "vulnerable groups" in the population. Therefore, most of the nutrition education would be aimed at women of child-bearing age, with special emphasis on pregnant and lactating women and women with young children.
3. Evaluates and obtains feedback. How to evaluate the achievements/failures of work done and how to obtain feedback from the community regarding what is being carried out by the public health worker.

Each of these tasks is related to the purpose of the course. The main concern is with simulating actual job situations as closely as possible.

EXAMPLE C

FIELD STUDY

This is a first course of its kind, given in conjunction with a redefinition of the role of the public health worker, who has previously mainly been concerned only with hygiene, but is now redefined on a broader perspective. As such, job verification cannot be according to what exists, but feedback can be obtained from village leaders, the village community on the whole and other field workers.

To ask other types of health and field workers:

1. What is the incidence of nutrition-related disease and malnutrition such as kwashiorkor and marasmus?
2. What is occurring more frequently: kwashiorkor (protein malnutrition) or marasmus (protein-calorie malnutrition)?
3. Which groups are most severely affected?
4. How often does it recur? i.e., how often is a child brought back after being treated?
5. Has nutrition education (or health education) ever been attempted in that community?
6. What food or other kinds of taboos do health workers have to face when dealing with the villagers?

To ask villagers/village leaders:

1. Are there problems of insufficient food, low calorie consumption, etc. due to insufficient income?
2. What crops are planted? Are they consumed by villagers themselves?
3. What other vegetables, fruits are usually planted in backyards, gardens?

To ask mothers:

1. Questions regarding family food consumption patterns.
2. Do you breast feed your infants? Until when?
3. What is your diet when you are expecting a child? Are there any taboos? Do you practice any restrictions?

Questions should, of course, be asked with sensitivity. They should allow the public health worker to judge what level of nutritional knowledge the worker has and what kinds of food practices are prevalent, whether they can/should be changed.

EVALUATION WORKSHEET*

Describe Desired Job and Student Performance

TASK: Investigates and assesses nutritional status of a community. (1)

CONDITIONS	PERFORMANCE
<p>When given...</p> <p>hospital records and charts, information regarding the disease patterns of a village community</p>	<p>The student will...</p> <p>have a rough idea of the general health problems in that community, identify those related to nutrition, and determine how serious they are.</p>
<p>descriptions of a village community, village homes and the people and children there, as well as slides of the village</p>	<p>make a general assessment of the socio-economic and nutritional status of the village community, identify protein-caloric malnutrition in children from the slides, spot popular foods used and deduce the nutritional value of these, link cause and effect (if any) to nutritional problems.</p>
<p>descriptions/slides/pictures of food available at the market place</p>	<p>know precise nutrient values of foods available, plan balanced meals from them and know which foods to be recommended to which particular group in the village (within the constraint of a tight budget).</p>

* In this example, the work on the job is identical to the desired student performance. The section on job performance has therefore been omitted.

TASK: Plans and teaches nutrition education sessions. (2)	
CONDITIONS	PERFORMANCE
When given... a variety of foods and their prices	The student will... know the nutrient values of each food, (qualitative and quantitative) and compare foods according to their prices, therefore knowing how to get the best value for the cost.
an assignment to prepare a meal	prepare a balanced meal (knowing also how to express quantities used in colloquial terms as well as in the standard measuring terms and also knowing about local foods and local diet and food habits) as well as how to store left overs.
assignments to prepare diet plans for various sectors of the population	draw up diet plans as well as know how to prepare such foods as recommended (according to local methods) for: a. infants--children b. pregnant and lactating women c. others, in general d. the elderly
simple nutritional problems with which a public health worker might be confronted by village people, particularly mothers	advise and consult, or refer to others who would be able to help.
a child/infant	perform simple anthropometric measurements on the child, record them and know what they indicate.

CONDITIONS	PERFORMANCE
<p>When given...</p> <p>an assignment to give a lively presentation on nutrition to:</p> <ul style="list-style-type: none"> a) a general audience b) school children c) mothers d) pregnant and lactating women 	<p>The student will...</p> <p>plan the presentation with specific forms on the issues related to the particular group in question, using as much as possible, real-life demonstrations, models, audio-visual aids, slide shows, etc.</p>
<p>an unexpected situation such as a group of pregnant women in the waiting room of a clinic</p>	<p>use his/her ingenuity and innovativeness to carry out a short nutrition education session using whatever resources happen to be available.</p>
<p>an assignment to do a home visit</p>	<p>conduct nutrition education on a one-to-one basis, being sensitive to the particular needs of that individual.</p>
<p>NOTE: The carrying out of Task #2 will be facilitated by an understanding of the nutritional status of the village community as obtained from Task #1.</p>	
<p>TASK: Evaluate nutrition education efforts and programs. (3)</p>	
CONDITIONS	PERFORMANCE
<p>When given...</p> <p>an assignment to assess the outcome of a particular nutrition education session</p>	<p>The student will...</p> <p>obtain feedback regarding the lessons learned by knowing what questions to ask and how to ask them at the beginning and end of the teaching session.</p>

EXAMPLE C

EVALUATION WORKSHEET	
Describe Student Entry Level Performance	
CONDITIONS	PERFORMANCE
When given... a set of multiple choice questions on general nutrition	The student will... answer these with 80% accuracy

<u>TASK ANALYSIS</u>	
<p>TASK: Investigates and assesses nutritional status of a community. (1)</p>	
<u>SKILLS</u>	<u>KNOWLEDGE</u>
<p>Thinking:</p> <ul style="list-style-type: none"> - Interpreting (anthropometric measurements and charts), deducing disease patterns from statistics. - Evaluating and making judgments (of nutritional status) - Assessing (nutrient values) 	<p>anthropometric measurements, disease patterns nutrition</p> <p>protein calorie malnutrition</p> <p>nutrient value, balanced meal</p>
<p>TASK: Plan and teach nutrition education sessions. (2)</p>	
<u>SKILLS</u>	<u>KNOWLEDGE</u>
<p>Thinking:</p> <ul style="list-style-type: none"> - planning (nutrition education sessions) <p>Doing:</p> <ul style="list-style-type: none"> - Run a slide projector and other audio-visual aids - Demonstrate preparation of a meal <p>Communicating:</p> <ul style="list-style-type: none"> - Talk to people and educate with a humble attitude so that the villagers would be more willing to accept what is being taught 	<p>nutrient values, prices; balanced meal, measures of food; diet plans, infants, pregnant and lactating women; nutritional problems; child and infant, anthropometric measurements.</p> <p>demonstrations, planning, slide shows</p> <p>nutrition education; sensitivity</p>

EXAMPLE C

<ul style="list-style-type: none"> - Teach in a clear and concise manner. - Communicate with another person with warmth and sensitivity, learning also from that other person. 	
<p>TASK: Evaluate nutrition education efforts and programs. (3)</p>	
<p style="text-align: center;"><u>SKILLS</u></p> <p>Thinking:</p> <ul style="list-style-type: none"> - Design an evaluation plan. - Design questionnaire to obtain feedback. - Apply questionnaire. - Make necessary changes. <p>Communicating:</p> <ul style="list-style-type: none"> - A high level of sensitivity is needed for the student to communicate well with the villagers so as to be able to obtain feedback. 	<p style="text-align: center;"><u>KNOWLEDGE</u></p> <p>evaluation, feedback</p>

<u>COURSE EVALUATION PLAN</u>	
CONDITIONS	PERFORMANCE
<p>(PRE ENT)</p> <p>When given...</p> <p>1. A set of written questions on general nutrition</p>	<p>The student(s) will...</p> <p>- write answers to them within an hour (PRE) (Entry Level).</p>
<p>NOTE: The pretest is given in this course solely for the purpose of getting a sense of the level of nutrition knowledge in the class; so as to know what lessons to emphasize/deemphasize, what remedial instruction is needed, if any.</p>	
<p>(PROG) Task #1</p> <p>2. A set of anthropometric records and growth charts and some statistics on disease patterns</p>	<p>- write a 150-word preliminary assessment of what those data indicate and what he/she can infer about the nutritional status and problems in that community (PROG).</p>
<p>(PROG) Task #1</p> <p>3. Slides of a village and its people and living conditions (including slides of mal-nourished children).</p>	<p>- discuss orally with the instructor, the general socio-economic condition of that community, probable nutritional problems and be able to identify the different stages/forms of malnutrition and nutrition related diseases (PROG).</p>
<p>(PROG) Task #1</p> <p>4. A list of local foods available and their prices and questions regarding their nutrient values</p>	<p>- answer questions with 80% accuracy as well as identify any tendency for any particular nutrient to be lacking from an average villager's diet (PROG).</p>
<p>(PROG) Task #1</p> <p>TASK #1</p> <p>5. When taken to a village community and arrangements made for a one-day visit, and when given the assignment of evaluating the nutritional status of the community</p>	<p>- use their initiative in gathering nutritional information about that village, and write a comprehensive report on the nutritional status of that community, showing how conclusions were arrived at and how deductions were made (POST).</p>

EXAMPLE C

	CONDITIONS	PERFORMANCE
(PROG) Task #2	6. An assignment to buy food from a market and prepare a balanced meal	- prepare a balanced meal and prepare a chart showing the quantity of various nutrients present in the foods cooked and respective prices
(PROG) Task #2	7. A specific population group, e.g. infants	- write a short paper discussing the nutrition of that specific group and whatever nutrition problems might be present in that group
(PROG) Task #2	8. A model of an infant or child/or a real child, if possible	- take height, weight, arm circumference measurement and demonstrate the correct method of keeping records.
(POST) Task #2	9. A set of conditions, i.e. what kind of audience, in what setting, number of people present, etc.	- prepare and deliver a 15 minute talk (maybe longer) with use of audio visual equipment for the purpose of nutrition education
(POST) Task #3	10. A set of questions and answers, such as a short dialogue	- make some observations regarding what can be deduced from that dialogue and/or discuss some of the criteria he/she would use to judge student performance

ACTIVITIES PLAN

EVALUATION

1. Pretest: When given questions on general nutrition, the student will write answers to them.
2. Prog. test for task #2: When given a practical assignment on preparing a balanced meal/ planning a balanced diet, the student will demonstrate knowledge acquired in the form of charts and meal plans.
3. Prog. test for task #2: When given a specific population group, the student will write a short paper on the nutrition issues relevant to that population group.
4. Prog. test for task #1: When given a model of an infant or child or a real child, if possible, the student will take anthropometric measurements and record them.

ACTIVITIES

Content of Nutrition Education

- A. Discussion of nutrients, nutrient values in various foods: quantitative and qualitative.
 - B. Discussion of balanced diet and balanced meals.
 - C. Measures of food, interconversion, practical demonstration to show price for food value ratio, balanced diet and meal, preparation and storage.
 - D. Discussion of local foods, diet, food habits and taboos.
-
- A. Discussion of nutrition problems specific to particular sectors of the population, identification of pregnant and lactating women and their infants as the target group. Reasons why.
 - A. Discussion of reasons for doing investigation and assessment. Different methods of doing it. What does each method achieve; limitations.

EXAMPLE C

EVALUATION	ACTIVITIES
<p>5. <u>Prog. test for task #1</u>: When given a set of statistics, the student will write a 150 word preliminary assessment.</p>	<p>B. Assessment of nutrient status of individuals--different methods.</p> <p>C. Anthropometric measurements as one of the methods. The different measurements and how to do them as well as keep a record.</p> <p>A. Nutrition assessment of a community: various ways of doing it. Discuss their limitations and note that assessment is just a rough indication within a certain specific context.</p>
<p>6. <u>Prog. test for task #1</u>: When shown slides of a community, foods available, and of malnourished children, the student will do a nutritional assessment.</p>	<p>B. Demonstration of what inferences to draw from anthropometric records and growth charts, medical (hospital) records and other disease/malnutrition statistics. Include pitfalls of misinterpretation of statistics.</p> <p>A. Discussion of how the socio-economic condition of a community is interrelated to health and nutritional status; also the interrelationship of agricultural activity to health and nutritional status.</p> <p>B. Malnutrition: causes and consequences. Interrelationships with other socio-economic variables, other nutrition related diseases, e.g., night blindness. How to identify the different stages of malnutrition.</p> <p>C. Local foods available and seasonal fluctuations. How these influence the nutritional status of a community. (Incorporation of slides for A,B,C).</p>

EVALUATION	ACTIVITIES
<p>7. <u>Post-test for task #1:</u> When taken to a village community for one day, the student will make an evaluation of the nutritional status of that community in detail.</p>	<p>A. Discussion on techniques of information gathering, importance of good interviewing techniques, general attitudes when dealing with village community, importance of cultivating a good impression.</p>
<p>8. <u>Post-test for task #2:</u> When given an assignment to carry out nutrition education in a specific context, the student will plan and deliver the assigned, using audio-visual aids if necessary.</p>	<p>A. How to plan presentations of various durations, objectives and how to achieve them. Different focus to achieve different aims.</p> <p>B. What issues to emphasize with respect to different groups (i) a general audience (ii) school children (iii) mothers (iv) pregnant and lactating women.</p> <p>C. Use of charts, models, slides, simple audio-visual aids, drawings, etc.</p> <p>D. How to make use of unexpected situations or "make do" situations, e.g., in a waiting room of a clinic, with mothers who are easily distracted because they have children with them, etc.</p> <p>E. Techniques of conducting nutrition education on a one-to-one basis. Attitudes and sensitivities. How to get your message across. Recorded interviews, maybe films.</p>

EXAMPLE C

EVALUATION	ACTIVITIES
<p>9. <u>Post-test for task #3:</u> When given specified conditions and audience, the student develops a set of questions to ask and carries out a dialogue with a group or an individual in order to obtain feedback regarding a nutrition education session which the student has carried out.</p>	<p><u>Obtaining Evaluation (Task #3)</u></p> <p>A. Discussion of the necessity of obtaining feedback, how to obtain it, how to use the feedback information to judge the student's own performance and how to adjust teaching activities according to feedback obtained.</p> <p>B. A set of questions and answers such as a short dialogue, Make observations of what can be deduced from that dialogue and/or discuss some of the criteria he/she would use to judge student performance.</p>

COURSE SYLLABUS

Course: Nutrition Education for Public Health Workers.

SESSION	IN-CLASS ACTIVITIES (To be completed this session)	OUTSIDE ACTIVITIES (To be completed before next session)
<u>First week</u>		
#1 Time: 4½ hrs.	<ol style="list-style-type: none"> 1. <u>Pretest, Entry</u> <u>Level Test:</u> One hour test on basic nutrition. 2. <u>Introduction:</u> Documentary film on Nutrition in Malaysia, health and nutrition problems of the different communities, governmental program and its implementation and effectiveness. 3. <u>Instructor led discussion</u> on the movie. 	<ol style="list-style-type: none"> 1. Read handouts on nutrients and balanced diet.
#2 Time: 2½ hrs.	<ol style="list-style-type: none"> 1. <u>Background information:</u> What is nutrition? Problem of malnutrition as it exists in Malaysia and hence the importance of nutrition education in dealing with this problem. The role of the public health worker in carrying out nutrition education. 2. <u>Course outline:</u> Discussion of objectives of course, outline, expectations. Go over pretest, entry level test. 	

EXAMPLE C

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p>#3 Time: 4½ hrs.</p>	<ol style="list-style-type: none"> 1. <u>Lecture</u>: on nutrients and nutrient values in various foods. 2. <u>Lecture</u>: on physiological function of various nutrients. 3. <u>Discussion</u>: on nutrient value of local foods. 	<ol style="list-style-type: none"> 1. Read handouts on measures of food, interconversions, food preparation and storage.
<p>#4 Time: 2½ hrs.</p>	<ol style="list-style-type: none"> 1. <u>Discussion</u> of balanced diet: how to plan, necessity for, consequences of not having a balanced diet. A balanced meal: what does it consist of? 	
<p>#5 Time: 4½ hrs.</p>	<ol style="list-style-type: none"> 1. <u>Lecture</u>: on measures of food (scientific measure and local measures) and how to do interconversions. 2. <u>Practical demonstration</u> to show price for food value ration, balanced diet and balanced meal. (Demonstrations of calculations, chart-drawing as well as cutting up and weighing out of food portions.) 	<ol style="list-style-type: none"> 1. <u>Assignment</u>: Problem set on interconversions of food measures and how to plan a balanced diet for a specified individual.
<p>#6 Time: 2½ hrs.</p>	<ol style="list-style-type: none"> 1. <u>Lecture and demonstration</u> on food preparation and storage. 	

EXAMPLE C

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p>#7</p> <p>Time: 4½ hrs.</p>	<p>1. <u>Panel Discussion</u> of local foods, diet, food habits, customs and taboos drawing very heavily upon the students' experiences. This session will stress students' participation. Questions such as what food taboos might be necessary to counter and how, etc. will be posed.</p>	<p>1. Read handouts on nutrition problems specific to particular sectors and age groups of the population. Some clinical nutrition case studies.</p>
<p>#8</p> <p>Time: 2½ hrs.</p>	<p>1. <u>Discussion</u> of assignment on interconversions of food measures and planning a balanced diet.</p>	
<p>#9</p> <p>Time: 3 hrs.</p>	<p>1. <u>Lecture and discussion</u> of nutrition problems specific to particular sectors of the population, identification of pregnant and lactating women and their infants as the target group.</p> <p>2. <u>Discussion</u> of case studies.</p>	<p>1. Progress test: Take home assignment on balanced diet and nutrient values, (a specific problem) due on Monday (next).</p> <p>2. Read handouts on investigation and assessment of nutritional status.</p>
<p>#10</p> <p>Time: 2½ hrs.</p>	<p>1. <u>Clinical (field trip) visit</u> to a general hospital or district clinic if possible and discussion/question-answer session with staff on nutritionally-related diseases and susceptibility to the different sectors and age groups of the population.</p>	

EXAMPLE C

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p><u>Week 2</u></p> <p>#11</p> <p>Time: 4½ hrs.</p>	<ol style="list-style-type: none"> 1. <u>Progress test</u>: on nutrition problems specific to a given group of people (eg. diabetics or the aged). 2. <u>Discussion</u> of reasons for doing investigation and assessment. Different methods and their limitations. 	<ol style="list-style-type: none"> 1. Read handout on anthropometric measurements.
<p>#12</p> <p>Time: 2½ hrs.</p>	<ol style="list-style-type: none"> 1. <u>Discussion and lecture</u> on the assessment of nutritional status of individuals. Different methods and their applicability. 	
<p>#13</p> <p>Time: 4½ hrs.</p>	<ol style="list-style-type: none"> 1. <u>Lecture and practical demonstration and lab exercise</u> on anthropometric measurements. How to take and record them. 	<ol style="list-style-type: none"> 1. Read handout on nutritional assessment of a community.
<p>#14</p> <p>Time: 2½ hrs.</p>	<ol style="list-style-type: none"> 1. <u>Discussion</u> of progress tests on balanced diet and on nutrition problems. 	
<p>#15</p> <p>Time: 4½ hrs.</p>	<ol style="list-style-type: none"> 1. <u>Progress test</u>: on anthropometric measures (practical test where instructor has one-to-one sessions with each individual student). 	<ol style="list-style-type: none"> 1. Read handout on interrelationship of socio-economic conditions, agricultural activity, etc. to health and nutrition status of a community.

EXAMPLE C

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p>#16 Time: 2½ hrs.</p>	<p>1. <u>Lecture and discussion</u> of nutritional assessment of a community.</p>	
<p>#17 Time: 4½ hrs.</p>	<p>1. <u>Demonstration</u> of what inferences to draw and how to use anthropometric records, growth charts, medical records, vital statistics and disease/malnutrition statistics.</p> <p>2. <u>Discuss</u> handling and use of statistics.</p>	<p>1. <u>Progress test (take home)</u> on statistics and records. Due next Monday (Third week).</p> <p>2. Read assignments on malnutrition.</p>
<p>#18 Time: 2½ hrs.</p>	<p>1. <u>Lecture and discussion</u> (guest speaker) on how socio-economic conditions, agricultural activity, etc. are interrelated to health and nutrition.</p>	
<p>#19 Time: 3 hrs.</p>	<p>1. <u>Lecture</u> (guest speaker) malnutrition: cause and consequence, interrelationship with other socio-economic variables.</p>	<p>1. Read handouts and assignments on stages of malnutrition and other nutritional diseases.</p>
<p>#20 Time: 2½ hrs.</p>	<p>1. <u>Lecture</u> on local foods available and seasonal fluctuations, how these influence the nutritional status of a community.</p>	

EXAMPLE C

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p><u>Week 3</u></p> <p>#21</p> <p>Time: 4½ hrs.</p>	<p>1. <u>Lecture and slide presentation</u> on different stages of malnutrition. How to identify. Other nutrition-related diseases eg. night blindness, diabetes, goitre.</p>	<p>1. Review all material on malnutrition.</p>
<p>#22</p> <p>Time: 2½ hrs.</p>	<p>1. <u>Discussion</u> of progress test (see Session #17).</p>	
<p>#23</p> <p>Time: 4½ hrs.</p>	<p>1. <u>Progress test</u> on malnutrition. This involves an oral discussion with the instructor.</p>	
<p>#24</p> <p>Time: 2½ hrs.</p>	<p>1. <u>Discussion</u> on techniques of interviewing, general attitudes when dealing with a village community. Briefing on field trip for next day. (Post-test incorporated into field trip.)</p>	
<p>#25,26</p> <p>Time: 8 hrs.</p>	<p>1. <u>Field trip</u> to a nearby village (post-test).</p> <p>2. <u>Session #25</u>: Students are shown around and given information about the village.</p> <p>3. <u>Session #26</u>: Students are encouraged to make their own investigations in order to make an evaluation of the nutritional status of that community.</p>	

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
#27 Time: 4½ hrs.	1. <u>Oral presentations of findings and impressions of students from field trip.</u>	
#28 Time: 2½ hrs.	1. Students are given time to write down detailed report of field trip, incorporating observations of other students (learned from morning session) if necessary.	
#29 Time: 3 hrs.	1. <u>Discussion of field trip reports.</u> Individual cases and reports discussed.	1. Read assignments on "how to teach nutrition to different people".
#30 Time: 2½ hrs.	1. Continuation of morning session with instructor bringing out problems and issues which may not have been noted by students. Discussion of possible government programs which could be implemented to alleviate problems.	
<u>Week 4</u> #31 Time: 4½ hrs.	1. <u>Lecture with audio-visual aids</u> (short film strips) on how to plan and give presentations of various lengths with different approaches to the different objectives.	

EXAMPLE C

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p>#32</p> <p>Time: 2½ hrs.</p>	<p>1. <u>Lecture and discussion</u> on different aspects of nutrition education, as related to different groups (i) general audience (ii) school children (iii) mothers (iv) pregnant and lactating women.</p>	
<p>#33</p> <p>Time: 4½ hrs.</p>	<p>1. <u>Lecture and demonstrations</u> on the use of charts, models, slides, drawings.</p>	<p>1. Assignment: preparation of charts, models, diagrams for a nutrition education session that is specified.</p>
<p>#34</p> <p>Time: 2 hrs.</p>	<p>1. <u>Lecture and demonstration</u> on the use of simple audio-visual aids. (slides, film projectors, tape recorders, etc.)</p>	
<p>#35</p> <p>Time: 4½ hrs.</p>	<p>1. <u>Laboratory</u> on audio-visual equipment. Practice by students.</p>	
<p>#36</p> <p>Time: 2½ hrs.</p>	<p>1. <u>Discussion</u> of homework assignment on use of charts, etc.</p>	
<p>#37</p> <p>Time: 4½ hrs.</p>	<p>1. <u>Lecture, discussion and showing of short film-strips</u> on: How to make use of unexpected situations to carry out nutrition education. Improvisations.</p>	

EXAMPLE C

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p>#38 Time: 2½ hrs.</p>	<p>1. <u>Filmstrips and recorded interviews and discussions</u> on techniques of conducting nutrition education on a one-to-one basis. Attitudes and sensitivities. How to get your message across.</p>	
<p>#39 Time: 3 hrs.</p>	<p>1. <u>Guest speaker</u>: a professional person involved in nutrition education, speaking on his/her job experience.</p>	<p>1. <u>Post-test</u>: assignments to carry out nutrition education.</p>
<p>#40 Time: 2½ hrs.</p>	<p>1. <u>Guest speaker</u>: Public health nurse who has rich experience in dealing with mothers in administering health care, speaking on her experiences with village women.</p>	
<p><u>Week 5</u> #41 Time: 4½ hrs.</p>	<p>1. <u>Laboratory</u> in preparing audio-visual aids for presentations (post-test).</p>	
<p>#42 Time: 2½ hrs.</p>	<p>1. <u>Laboratory</u> continued.</p>	
<p>#43 Time: 4½ hrs.</p>	<p>1. <u>Post-test</u>: Oral presentations by students.</p>	

EXAMPLE C

<u>SESSION</u>	<u>IN-CLASS ACTIVITIES</u>	<u>OUTSIDE ACTIVITIES</u>
<p>#44 Time: 2½ hrs.</p>	<p>1. <u>Post-test</u> continued.</p>	
<p>#45 Time: 4½ hrs.</p>	<p>1. <u>Evaluation</u> of oral presentations. Criticisms and suggestions for improvement.</p>	
<p>#46 Time: 2½ hrs.</p>	<p>1. <u>Discussion</u> of the necessity for obtaining feedback, how to use it to judge students' performance and respond by adjustment of own teaching methods if necessary.</p>	<p>1. <u>Post-test</u>: Students are given an assignment to develop a set of questions aimed at obtaining feedback.</p>
<p>#47 Time: 4½ hrs.</p>	<p>1. <u>Simulation</u>: Student carries out dialogue in order to obtain feedback (post-test).</p>	<p>1. <u>Evaluation</u> questionnaire.</p>
<p>#48 Time: 2½ hrs.</p>	<p>1. Continuation of Session #47.</p>	
<p>#49 Time: 4½ hrs.</p>	<p>1. <u>Discussion</u> of post-test. Evaluation of student's performance.</p>	
<p>#50 Time: 2½ hrs.</p>	<p>1. <u>Discussion</u>: Evaluation of course objectives and achievements. Discussion of questionnaire.</p>	

SESSION PLAN

(Session 1)

<u>ACTIVITIES</u>	<u>APPROACH</u>
1. Pretest/Entry Test on basic nutrition.	<p><u>60 minutes</u></p> <p>Explain reasons for giving a pretest/Entry test, that is, that it is for getting a general feeling for the nutrition knowledge of the class. Students should give brief answers to questions.</p>
2. Documentary film on Nutrition in Malaysia.	<p><u>90 minutes</u></p> <p>Introduce film by talking a little bit about its background and what it intends to show.</p>
3. Instructor led discussion on the movie.	<p><u>30 minutes</u></p> <p>Break.</p> <p><u>90 minutes</u></p> <p>Point out important issues pertaining to health and nutrition in Malaysia. Note differences of problems in different groups of the population. General discussion on reasons why. Trace history of governmental health and nutrition programs, evaluation of their implementation and effectiveness. Ask questions which would generate discussion as to the importance of health and nutrition in the context of national development.</p>
<u>References and Resources</u>	<p>film projector, documentary film, pretest, handouts on balanced diet and nutrients (for next session).</p>
<u>Reminders</u>	<p>Reserve movie projector and check film. Prepare pretest. Prepare handouts.</p>

SESSION PLAN

(Session #2)

<u>ACTIVITIES</u>	<u>APPROACH</u>
<p>1. Lecture on "What is Nutrition?" Problems of malnutrition, as it exists in Malaysia and hence the importance of nutrition education, amongst other things in dealing with this problem.</p> <p>2. Discussion: The role of the public health worker in carrying out nutrition education.</p> <p>3. Brief overview of course; outline, objectives, expectations. Briefly review the pretest.</p>	<p><u>60 minutes</u> This should be a broad overview of the whole field and yet be a clear statement of the problem. This should also give a perspective within which to situate nutrition education.</p> <p><u>60 minutes</u> Encourage participation of students by asking for their opinions on specific issues, such as, what responsibility should a public health worker assume to carry out his/her activities. Bring in case-studies and examples of public health workers confronted with specific problems and discuss solving them in a general way, emphasizing attitudes of learning from others.</p> <p><u>30 minutes</u> Stress objectives and give a clear sense of direction.</p>
<p><u>References and Resources:</u></p> <p><u>Reminders:</u></p>	<p>Outline of course, pretest.</p> <p>Prepare lecture.</p> <p>Prepare case studies and examples for discussion.</p> <p>Evaluate pretests.</p> <p>Prepare course outlines.</p>

G L O S S A R Y

You may not know some of the words in this book. To help you - here is a list of some words and an explanation.

activities	things which are done
analyze	to break down into simpler parts
assess	to find out, to look at
consider	to think about
constraints	things which make it difficult to do something
"crammed"	full to the top
demonstrate	to show how something is done
design	to work out a plan for doing something
desired	what you would like to see happen
discuss	to talk about something
duplicate	to copy exactly
estimate	to think of how much of something is needed
event	something that happens in the classroom
feasible	something which is possible to do
feedback	ongoing information about work in progress
format	a way of presenting information
frame of reference	a way to relate one thing to another
framework	a way of organizing things
guidelines	a way to show how to do something
identify	to find out and tell
indicate	to show or to point out
interact	to do something with other people
master	to be able to do something well
match	to bring close to something
model	to teach by showing an example
motivate	to make people interested in something
objective	what you are trying to get done
overview	to look at something without looking at details

participation	taking part in something
performance	what someone does
practice	to learn how to do something by doing it many times
prerequisites	what students need to know <u>before</u> starting a course
provide	to give
relate	to bring together
resources	things you can use to teach your course
respond	to show that you know what is happening
revise	to look at again and change
rung	one of the steps of a ladder
segment	a part of something larger
sequence	to put in the right order
session	a lesson given in a certain time period
specify	to tell or give details about something
successive	next to each other
supplement	to add to something
task	a part of a larger job
"tone"	a mood or atmosphere
verify	to find out if what you think is correct