

PN/AAP 670

PN-AAP-670/62
REPORT ON A CONSULTANCY
TO DEVELOP A COMPETENCY-BASED CURRICULUM
FOR FIVE HEALTH-RELATED
RESEARCH AND DEVELOPMENT ORGANIZATIONS
IN THE PHILIPPINES

ISN-34161

A Report Prepared By:
John McCollum, Ph.D.
Lori Vanderschmidt, Ph.D.

During The Period:
January 18 - February 15, 1981

Supported By The:
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
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AUTHORIZATION:
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Assgn. No. 583054

ACKNOWLEDGMENTS

The consultants would like to acknowledge the outstanding support of the staff of the Food and Nutrition Research Institute for their help in teaching and ministering the workshop. Special thanks are due to Ofelia Valdecañas, whose outstanding teaching skills were essential to the program's success. Thanks are extended also to Victoria Miranda, Alma José, Catherine Castañeda, and Felicidad Velandria for their administrative support during the workshop. In addition, we would like to thank Dr. Josefina B. Jayme for her support in planning and implementing the project.

The consultants thank Dr. Segundo Roxas, Deputy Minister, National Science Development Board, and Dr. Melecio S. Magno, Minister, NSDB, for their support of the project.

Two members of the USAID staff, Dr. Rosendo Capul and Dr. Stephen Sinding, were supportive and helpful in organizing and monitoring the project.

Dr. Barry Karlin, APHA, deserves thanks for his special help in disseminating competency-based health training projects.

Finally, we would like to express our appreciation to each participant of the Systematic Course Design Workshop for his hard work and enthusiasm. We wish all of them success in their efforts.

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ABBREVIATIONS

APHA	American Public Health Association
ARDA	AID Research and Development Abstracts
CEDH	Center for Educational Development in Health
FAO	Food and Agricultural Organization
FNRI	Food and Nutrition Research Institute
LDC	Less Developed Country
NIST	National Institute of Science and Technology
NSDB	National Science Development Board
PIC	Philippine Inventor's Commission
SCD	Systematic Course Design
SFP	Science Foundation of the Philippines
USAID	United States Agency for International Development
WHO	World Health Organization

I. INTRODUCTION AND BACKGROUND

Purpose of Assignment

In July 1979, a staff member from the Food and Nutrition Research Institute (FNRI) of the Government of the Philippines National Science Development Board (NSDB) spent two weeks in Boston at the Center for Educational Development in Health (CEDH), Boston University. (In February 1979, the CEDH had conducted a ten-day workshop in the Philippines to train Ministry of Health staff in the CEDH process. As a result of that workshop, the director of the FNRI arranged to send a member of his staff to Boston. At the same time, he requested a similar workshop for NSDB staff.) He was enrolled in an accelerated tutorial program in curriculum methodology, "Competency-Based Curriculum Development." This approach, a technique in systematic curriculum development, was developed under a contract with the United States Agency for International Development (USAID), AID/tac 1355, Teaching Community Medicine, Phase III. One product of the contract was a teacher-training handbook that is used extensively in lesser developed countries (LDCs).

The most recent request for CEDH services for NSDB agencies came in Cable 17189, dated September 1980 (see Appendix A). Two purposes were listed in the cable: to improve staff competence in the transfer of scientific knowledge and to focus on curriculum planning, teaching methodologies, materials development, and the design of evaluation instruments. It was indicated that John McCollum of the CEDH had been in contact with the FNRI and could "furnish further details."

Upon receipt of a copy of the cable, Dr. McCollum contacted Dr. Barry Karlin, of the American Public Health Association (APHA), and Mr. Edward Muniak, in the AID Development Support Bureau. It was agreed that he would communicate with the FNRI to further refine the scope of work.

On November 26, 1980, Dr. McCollum sent a letter to Dr. Carmen L. Intengen, director of the FNRI, responding to the cable and offering some suggestions for the content and focus of the workshop. (A copy of this letter is included in Appendix B.)

In the meantime, the FNRI sent a letter, dated December 1, 1980, to Dr. McCollum that also proposed workshop procedures. The two letters, though they crossed in the mail, supported each other.

In a subsequent cable sent directly from the FNRI, it was stated that the starting date of the workshop would be changed from January 19 to January 26. It was suggested that CEDH staff arrive in Manila on January 19.

Scope of Work

The scope of work, which is described in the correspondence and cables (see Appendix A), eventually was carried out, with two minor exceptions. First, the outline for the workshop, which was mailed to the FNRI by Dr. McCollum on December 18, 1980, was modified during discussions with FNRI staff after CEDH staff arrived in Manila on January 20, 1981. (A copy of the revised outline is included in Appendix C.) Second, the third week of the workshop was to have been devoted to discussions about project management. However, it was decided during pre-workshop planning to hold the third week in abeyance and to determine later whether or not it might be useful for participants to field-test materials produced in the first two weeks. Field-testing did eventually take place.

Methodology

The course outline (see Appendix C) describes the basic approach to and content of the technical assistance. The purpose was to train NSDB staff in competency-based techniques. The objectives were to train workshop participants in the CEDH techniques of competency-based curriculum development and to structure the workshop so that trainees can learn to develop competency-based curricula, tests, and handouts for students and participate in practice-teaching.

The major role of CEDH staff was to act as facilitators during the workshop, encouraging the participants to take major responsibility for teaching and conducting the proceedings. Specifically, CEDH staff completed the following tasks:

1. CEDH staff played a key role the first morning, lecturing on the Systematic Course Design (SCD) approach and setting the stage for the workshop.
2. Thereafter, each of the major steps (see Appendix C) was introduced and explained by a workshop participant and critiqued by a CEDH staff member. This not only reinforced the idea that the Systematic Course Design process is simple to grasp, but it also gave participants an opportunity to acquire experience as practice-teachers.
3. The introduction and explanation of the steps in Systematic Course Design required one to two hours per step (there are eight steps). After each step was explored, the participants worked alone or in teams of twos or threes to develop a particular step in their own course. During this activity, CEDH staff

walked around the classroom and assisted team members as they worked on their courses.

4. When participants completed a given stage in the curriculum development process (they wrote a portion of their curriculum), CEDH staff reviewed the written material in the classroom or at home in the evening.

Two weeks were required to prepare the training courses. A third week was devoted to product-testing in the field (two to three days for each team), curriculum revision based on the results of the field tests (one to two days per team), and the formulation of plans for implementing or developing additional courses (one day per team).

Thirty persons were enrolled in the workshop. They completed 17 courses or learning packages.

II. RESULTS OF THE WORKSHOP

This technical assistance consisted of a workshop, 21 working days in length (7 hours per day), that involved 30 participants (see Appendix D) from NSDB agencies. During the workshop, the participants were taught the principles and techniques of Boston University's competency-based curriculum approach and produced courses, information packages, and manuals.

Based on past experience with similar workshops, 20-25 of the participants are now sufficiently skilled to conduct similar workshops for their colleagues.

The participants produced and developmentally tested 17 courses (see Appendix E) and training and information packages. Minor modifications were made, and 8-10 of these packages were prepared for dissemination in the field. The remaining materials will be modified once the results of the tests conducted on February 10 and 11 are known and after reading materials and handouts have been produced.

The reports submitted by agency teams during the closing ceremony (see Appendix F) on February 13 contain detailed recommendations on the dissemination of materials and plans for three competency-based curriculum development training workshops (see Appendix G). These workshops would be conducted by the participants. The National Science Development Board has agreed to support the dissemination of the programs by providing 8,000 pesos (U.S.\$1,050). The National Institute of Science and Technology will disseminate programs to rural areas.

The participants evaluated the technical assistance effort on February 13. They indicated in their confidential evaluations that they were pleased with the results of the workshop (see Appendix H). Of the 27 who returned evaluations, 27 said they could use the approach in their work, 25 said they could teach a SCD workshop, and 20 said that the SCD approach was very useful.

The participants appreciated the "democratic," "learning-by-doing" approach to the workshop (see Appendix I). They commended the resource persons for their competency, friendliness, and hard work.

III. RECOMMENDATIONS

The consultants prepared the following recommendations:

1. Participant courses and projects should be followed up 3-6 months after the consultation to determine how well the projects have been disseminated. Specifically, the projects should:
 - train more teachers in Systematic Course Design workshops;
 - train teachers to include projects in their own teaching; and
 - train community members to use projects.
2. Participants should continue to field-test projects and courses to ensure that these will meet their stated objectives.
3. Participants should revise the curriculum after they have taught a course. In this way the course will continue to improve.
4. Participants should enroll in a course to construct tests and evaluate programs to improve their skills in these areas.

Appendix A
REQUEST FOR TRAINING ASSISTANCE

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PAGE 01
ACTION AID-35

MANILA 17189 051453Z

054471 AIDF131

ACTION OFFICE

INFO	AAAS-01	ASEM-01	ASPT-02	ASDP-02	STA-10	ASPO-03	AAOS-01
	OSHE-01	OSM-03	CH3-01	RELC-01	MAST-01	7033 AA	S

INFO OCT-01 /236 W

-----122393 051454Z /34

P 050339Z SEP 80
FM AMEMBASSY MANILA
TO SECSTATE WASHDC PRIORITY 5333

UNCLAS MANILA 17189

ADM AID

E.O. 12065: N/A
SUBJECT: REQUEST FOR TRAINING ASSISTANCE FROM APHA

REF: STATE 230092, MANILA 15397

1. GOP FOOD AND NUTRITION RESEARCH INSTITUTE (FNRI) IS REQUESTING A TWO TO THREE WEEK WORKSHOP WITH SOME 30 PARTICIPANTS FROM THEIR SENIOR AND MIDDLE LEVEL STAFF.
2. WORKSHOP IS INTENDED TO IMPROVE STAFF COMPETENCE IN THE TRANSFER OF SCIENTIFIC KNOWLEDGE IN FOOD AND NUTRITION TO GOVERNMENT RURAL WORKERS. WORKSHOPTOPICS REQUESTED INCLUDE CURRICULUM PLANNING (ESPECIALLY NON-FORMAL TYPE), EFFECTIVE TEACHING METHODOLOGIES, INSTRUCTIONAL MATERIALS DEVELOPMENT, AND DESIGN OF EVALUATION INSTRUMENTS.
3. IF POSSIBLE FNRI IS REQUESTING THE SAME TEAM FROM BOSTON UNIVERSITY CENTER FOR EDUCATIONAL DEVELOPMENT IN HEALTH (CEDH) THAT CONDUCTED THE SYSTEMATIC COURSE DESIGN WORKSHOP FOR THE GOP MINISTRY OF HEALTH IN EARLY 1979.
4. DR. JOHN MCCOLLUM OF CEDH HAS BEEN IN CONTACT WITH FNRI AND CAN FURNISH ADDITIONAL DETAILS REGARDING THIS REQUEST. FNRI WANTS THE WORKSHOP TO BE CONDUCTED WITHIN THE LAST QUARTER OF CY 1980. THE SPECIFIC DATES TO BE DETERMINED BY CONTRACTOR'S AVAILABILITY. ROSENTHAL

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Appendix B
CORRESPONDENCE ON NSDB-CEDH WORKSHOP



Boston University

Center for Educational Development in Health
53 Bay State Road
Boston, Massachusetts 02215
617/353-4528

November 26, 1980

Dr. Carmen L. Intengan, Director
Food and Nutrition Institute
Pedro Gel, ERMITA
Manila, Philippines

Dear Intengan:

We recently received a copy of a cable from USAID/Philippines requesting that Center for Educational Development in Health (CEDH) join your Institute in conducting the workshop we have planned for some time.

I send a copy of that cable.

I understand that the workshop has been scheduled to start January 19, 1981. This date is agreeable to us.

Also, it is agreeable that the same team (who conducted the MOH workshop) be assigned, that is, Dr. Lori Vanderschmidt and myself.

We propose a workshop of 12 to 15 days focusing on these topics (taken from the cable):

1. Curriculum development techniques (nonformal approaches) especially competency-based techniques.
2. Effective teaching methodologies.
3. Instructional materials development.
4. Evaluation techniques.

Items 1, 2 and 3, would be intermingled, that is, while trainees are actually developing courses, they will get experience teaching portions of their curriculum and the workshop. Then toward the end of the workshop we would propose to devote blocks of time directly to teacher training and evaluation.

We will also bring with us (or send in advance) appropriate materials.

If this approach seems reasonable to you, I propose we send you a draft outline of the proposed workshop for your review and comments.

Dr. Carmen L. Intengan, Director
November 26, 1980
Page Two

Our plan is to arrive in Manila on or about January 13. The remainder of that week would be devoted to revising the workshop outline and completing final details with you and your colleagues. The program could get underway January 19, and depending on the length of the workshop it could be completed at least by February 4, 1981.

The workshop can be conducted at any site of your choice. We would like two rooms or one large room with possibilities of breaking the group of 30 participants into two groups of 15 each.

We prefer (though this is not necessary) to conduct the workshop in a round table fashion.

A day or so before the workshop gets under way we would appreciate the opportunity to review resumes of participants.

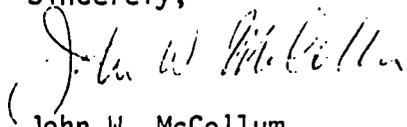
Ideally, participants should be staff members (at any level) who upon completion of the workshop will have responsibilities in teaching others "to transfer scientific knowledge" or in actual curriculum planning.

As I told you when we last met, Dr. Vanderschmidt and myself are looking forward very much to working with you and your colleagues.

We shall be most grateful for your comments on this letter especially the topics of the workshop, the proposed starting and completion dates. And, of course, if you have any questions or suggestions, please feel free to contact Dr. Sinding's office.

If at all possible, we recommend that Ms. Ofelia G. Valdecanas (who was in Boston studying competency-based curriculum development) participate in the workshop.

Sincerely,



John W. McCollum
Director, Asian Programs

Enclosure

cc:

Dr. Barry Karlin, American
Public Health Association
Mr. Edward Muniak, USAID/Washington
Dr. Steven Sinding, USAID/
Philippines
→ Dr. Lori Vanderschmidt, CEDH,
Boston University

Appendix C

**DESCRIPTION OF COMPETENCY-BASED
CURRICULUM DEVELOPMENT WORKSHOP**

**SYSTEMATIC COURSE DESIGN WORKSHOP
COMPETENCY BASED CURRICULUM DEVELOPMENT**

January 26, 1981 – February 6, 1981

SPONSORED BY:

**FOOD AND NUTRITION RESEARCH INSTITUTE
NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY
SCIENCE FOUNDATION OF THE PHILIPPINES
OF THE**

NATIONAL SCIENCE DEVELOPMENT BOARD

REPUBLIC OF THE PHILIPPINES

MANILA, PHILIPPINES

AND

THE CENTER FOR EDUCATIONAL DEVELOPMENT IN HEALTH (CEDH)

BOSTON UNIVERSITY

BOSTON, MASSACHUSETTS, 02215

U. S. A.

2. The education of the learner must proceed from an analysis of the actual home conditions and instructional objectives rather than from the arbitrary assignment of hours of instruction to traditional topics and.
3. The training course must change with shifts in the needs of the people based on available evaluation studies.

The Handbook is an educational approach to help the technical staff responsible for planning and implementing education and training programs. It seeks to define what the learner is expected to do from the objectives for instruction from which content is derived (sic).

The use of the model in designing science education and training programs will avoid the commonly observed information overload. When so designed, education and training courses will be attuned to the actual needs of the intended audiences."

Participants:

Participants will include those responsible for planning and implementing the respective agency's education and training programs. There will be a maximum of 30 participants.

Workshop staff:

Two resource persons from the Center for International Development in Health at Boston University will guide the workshop. They are:

1. Dr. John McCollum, Director, ASIA Programs
2. Dr. Luigi Manderscheidt, Assoc. Director of CIBH, Prof., Boston University, School of Education.

In addition, Mrs. Gracie C. Valdesolinas, F.S.M., will provide technical assistance.

Each participant is regarded as a resource person himself considering each one's expertise, training and background experience.

Best Available Document

Objectives:

The specific objectives of the workshop are:

1. To train workshop participants in the application of the competency based curriculum process described in the handbook;
2. To develop during the workshop, specific programs based on the process in the handbook; and,
3. To provide opportunities to practice teach courses developed in the workshop.

Expected Outputs:

At the completion of the workshop participants will:

1. be familiar with the process of developing competency based courses, training programs and information packages;
2. be able to teach the process to others ;
3. have developed during the workshop a course or program based on the techniques outlined in the handbook.

Workshop Procedures:

Each participant will be given a copy of the handbook referred to above -- **Developing Competent Health Workers**. The handbook contains the instructional materials to be used in the workshop. The course outline which follows describes the day-to-day activities of the workshop.

The major role of the workshop staff will be as facilitators to provide technical assistance, problem-solving and workshop management.

The participants who are acting as resource persons themselves, will actually conduct the workshop by introducing and explaining to the group each new step or process. Following this introduction the group will then break into small groups of two to three members each with each small group developing a course, a training module or an information package based on the step-by-step process in the handbook.

WORKSHOP

COMPETENCY BASED CURRICULUM DEVELOPMENT

January 26 through February 6, 1981

WEEK ONE

	Monday January 26	Tuesday January 27	Wednesday January 28	Thursday January 29	Friday January 30
8:30 a.m.	Welcome Introduction Purposes and Expectations of Trainees The Systematic Course Design Approach	Continued	Continued	Continued	Develop a Course Evaluation Plan
10:00 a.m.		COFFEE			
10:15 a.m.	Define the Instructional Situation	Continued	Continued	Produce a Task Analysis	Continued
12:00 p.m.		LUNCH			
1:00 p.m.	Develop a Job Description	Revise Job Descriptions	Specify Participant Entry Level Behavior	Continued	Continued
2:45 p.m.		COFFEE			
3:00 p.m. 4:00 p.m.	Verify Job Descriptions	Specify Desired Job and Training Perform- ance	Continued	Continued	Summary: Week One

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WEEK TWO

	Monday February 2	Tuesday February 3	Wednesday February 4	Thursday February 5	Friday February 6
8:30 a.m.	Produce an Activities Plan	Continued	Continued	Continued	Participant Presentations
10:00 a.m.	COFFEE				
10:15 a.m.	Develop Course Syllabus	Develop Session Plans	Develop Tests	Develop and Identify Participant Handouts	Participant Presentations
12:00 p.m.	LUNCH				
1:00 p.m.	Continued	Continued	Continued	Continued	Presentations and Closing Exercises
2:45 p.m.	COFFEE				
3:00 p.m. 4:00 p.m.	Continued	Continued	Continued	Continued	Continued

WEEK TWO

	Monday February 2	Tuesday February 3	Wednesday February 4	Thursday February 5	Friday February 6
8:30 a.m.	Produce an Activities Plan	Continued	Continued	Continued	Participant Presentations
10:00 a.m.		COFFEE			
10:15 a.m.	Develop Course Syllabus	Develop Session Plans	Develop Tests	Develop and Identify Participant Handouts	Participant Presentations
12:00 p.m.		LUNCH			
1:00 p.m.	Continued	Continued	Continued	Continued	Presentations and Closing Exercises
2:45 p.m.		COFFEE			
3:00 p.m. 4:00 p.m.	Continued	Continued	Continued	Continued	Continued

Appendix D
BIOGRAPHICAL DATA ON
WORKSHOP PARTICIPANTS AND STAFF

WORKSHOP ON SYSTEMATIC COURSE DESIGN

January 26 - February 13, 1981

National Science Development Board
Center for Educational Development in Health (CEDH)
Boston University, Boston, Mass., U.S.A.

Bicutan, Taguig, Metro Manila, Philippines

BIOGRAPHICAL DATA

Participants and Staff

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<u>Name</u>	<u>Address</u>	<u>Professional Course of Studies</u>	<u>Degree</u>	<u>Title</u>	<u>Agency</u>
1. Estrellita M. Almero	Sta. Maria St., San Antonio Valley XIV, Sucat, Parañaque	Nutrition	BSFN	Science Research Specialist IV	FNRI
2. Teresita N. Angelo	St. Jude Ave., Lopez Village Parañaque, Metro Manila	Nutrition	BS	Science Research Specialist III	FNRI
3. Felicidad E. Anzaldo	10 D. Aguila St., Philam Vill. Las Piñas, Metro Manila	Pharmacy	Pharm.D.	Sr. Science Res. Specialist	NIST
4. Elisa A. Aquino	113 Int. 7, Antipolo Street Tondo, Manila	Chemical Engineering	BS	Science Research Associate I	NSDB
5. Eugenia M. Aspera	Block 27, Lot 20 Chrysanthemum Village San Pedro Laguna	Chemistry	BS	Science Research Associate III	SFP
6. Filemon P. Balahadia	16 Saling St., Proj. 7, Q.C.	Political Science	BA	Information Officer	FIC
7. Minda Flor T. Brandares	1249 E. Quintos, Samp., Mla.	Pharmacy	BS	Administrative Assistant	NIST
8. Catherine Quimpo-Castañeda	1783-H Concepcion Aguila St. Quiapo, Manila	Food and Nutrition	MS	Science Research Specialist II	FNRI
9. Tomas Casiano	1748 Taft Ave., Pasay City	Applied Chemistry Gen'l Science	MA	District Science Promotion Officer	SFP
10. Myrna I. Consolacion	214 Barlan St., Caridad Cavite City	Education Child Psychology	MA MEd	Supervising Planning Officer	NSDB
11. Lourdes A. Corpuz	36 G. del Pilar Street Parang, Marikina, Metro Mla.	Chemistry General Science	MAT	Science Research Associate III	SFP
12. Pureza M. Delgado	Block 5, Lot 18, Emapalico Homes, Las Piñas, Metro Mla.	Educational Administration	MA	Research Assoc. III	SFP
13. Veneranda B. Eclar	7702 Jacinto Street, Makati, Metro Manila	Chemistry Public Administration	BS	Sr. Management & Audit Analyst	NSDB
14. Zoraida R. Espiritu	62-B Naning Ponce Street España Extension, Q.C.	Biology	BS	Science Research Associate II	SFP
15. Jovita C. Duremdes-Ferrer	107 1C 8th Street, Ramas, Q.C.	Sociology	BA	Sr. Science Ed. Officer	NSDB
16. Alicia C. Garcia	2559 Suter Ext., Sta. Ana, Mla.	Food & Nutrition Planning	MPS	Senior Planning Officer	FNRI

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17.	Alma E. Jose	60 Rivera St., San Juan Metro Manila	Nutrition	BSPN	Science Research Specialist III	FNRI
18.	Irma Laudencia	75 Auditing St., GSIS Vill. Q.C. 3008	Fisheries	BS	Planning Officer	NSDB
19.	Lilia R. Lauron	3158-B Camagong St., United Parañaque Subd. 2, Parañaque Metro Manila	Mathematics	MAT	Science Research Associate III	SFP
20.	Victoria P. Miranda	33 Natividad St., Pasay City	Food and Nutrition	BS	Science Research Specialist I	FNRI
21.	Concepcion Pigao	19 Villa Verde homes Subd. Novaliches, Q.C.	Pharmacy	BS	Science Research Specialist IV	NIST
22.	Herminia Ll. Ramos	160 P. Burgos Street Calamba, Laguna	Chemical Engineering Physics	MAT	Science Research Specialist III	PIC
23.	Jorge L. Reyes	Lot 18, Block 9, Phase II Street 2, Pacita Complex San Pedro, Laguna	Forestry	BS	Supervising Planning Officer II	NSDB
24.	Herminia P. Rimando	15 Maximo Drive, Novaliches Q.C. Tel. # 90-21-21	Agriculture Home Technology	BS	Science Research Associate II	SFP
25.	Rub Roan	5 Matimtiman St., Teachers Village, Diliman, Q.C.	Biology	BS	Science Research Associate I	SFP
26.	Felicidad V. Velandria	23 Mayaman St., U.P. Vill. Diliman, Q.C.	Nutrition	BSPN	Science Research Specialist III	FNRI
27.	Jaime R. Velasco	Block 9, Lot 10, Villa Carolina Subd., Muntinglupa Metro Manila	Public Administration Education	MS	Science Education Officer IV	NSDB
28.	Merle A. Villanueva	15 E. Cruz St., T.S. Cruz Subd., Zabarte, Novaliches, Q.C.	Chemistry Bio-Chemistry	BS	Science Research Specialist II	NIST
29.	Natividad R. Villostas	Rainbow Drive Opp. Fuchsia St. Goodwill Subd. 2 Parañaque Metro Manila	Chemistry	BS	Science Research Specialist II	NIST
30.	Carmelita C. Viray	#3 Palm Grove St., Bartville Subd., Dela Paz, Pasig Metro Manila	Out-of-School Science Education		District Science Promotion Officer Regional	SFP
	John McCollum	S.E.R.D. 5454 Wisconsin Ave. Washington, D.C. 20015 U.S.A.	Sociology Economics	Ph.D.	Coordinator Director of Asian Programs	FU CEDP

Ofelia C. Valdecañas

93 Blumentritt, San Juan
Metro Manila

Nutrition ES, MA
Communication

Science Research FURI
Specialist IV

Lori Vanderschmidt

Boston University/CEDH
67 Bay State Road
Boston, Mass. 02215
U.S.A.

Psychology Ph.D.
of Education

Associate Director BU
CEDH

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Appendix E
COURSE TITLES AND DEVELOPERS
OF NSDB-CEDH WORKSHOP

SYSTEMATIC COURSE DESIGN WORKSHOP
NSDB-CEDS Boston University
26 January - 13 February 1981

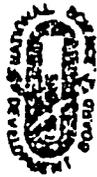
National Science Development Board (NSDB)
National Institute of Science and Technology (NIST)
Food and Nutrition Research Institute (FNRI)
Science Foundation of the Philippines (SFP)
Philippine Inventor's Commission (PIC)

<u>Course Title</u>	<u>Developer(s)</u>
1. Improvement of the Parañaque Type Solar Salt Making Technology for Industrial Purposes	Concepcion Pigao, NIST
2. Identification and Use of Medicinal Plants	Felicidad E. Anzaldo Minda Flor Brandares Merle Villanueva NIST
3. Improvisation of Simple Science Teaching Aids in Elementary Schools (Teacher Training Course)	Jaime B. Velasco ETD, NSDB
4. Proliferation of Solar Dryers	Elisa Aquino Myrna Consolacion NSDB
5. Dissemination of Charcoal Making Technique for Farmers	Jorge Reyes Irma Laudencia NSDB
6. Preparation of High Protein Coconut Sapal Pretzels	Lilia Lauron, SFP Jovita Ferrer, NSDB Veneranda Eclar, NSDB
7. Training Course on Identifying Research Areas	Catherine A. Castañeda Alicia C. Garcia FNRI
8. A Course on Research Utilization for Community Nutrition Workers	Victoria P. Miranda Alma M. Jose FNRI
9. A Course on Dietary Data Collection and Evaluation for Dietary Researchers	Estrellita M. Almero Felicidad V. Velandria Teresita N. Angelo FNRI

- | | |
|---|--|
| 10. Energy Education Program for Elementary Students | Ruby Z. Roan, SFP |
| 11. Manual of Investigatory Projects for Science Club in and Out of School (Elementary High School) | Pureza Delgado
Zoraida Espiritu
SFP |
| 12. Handbook for Rank Advancement Scheme for Science Clubs | Lourdes Corpuz
Herminia F. Rimando
SFP |
| 13. Improvement of the Quality of Ceramic Earthenware Bodies Produced by Small Scale Ceramic Industries | Natividad Villostas
NIST |
| 14. Training Program on Supervisory and Management Skills for Field Personnel of the SFP | Carmelita Viray
SFP |
| 15. A Course on Inventions Development | Herminia Ll. Ramos
PIC |
| 16. Effective Information Dissemination Promotion and Marketing of Developed Inventions in the Rural Areas | Filemon P. Balahadia
PIC |
| 17. Out of School Science Education Laboratory (OSSEL) Learning Module on Vinegar Making from Rice Washings | Eugenia M. Aspera
SFP |

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Appendix F
CLOSING PROGRAM FOR
NSDB-CEDH WORKSHOP



CLOSING PROGRAM
of the
NSDB-CEDH Boston University
Workshop on Systematic Course Design
January 26-February 13, 1981
on
Friday, February 13, 1981, 11:00 a.m.
at the
Crimson Room Kowloon Restaurant
West Avenue, Quezon City

VI

(This serves as an invitation)

27

P R O G R A M M E

Pambansang Awit

Presentation of Participants and Introduction of Guests **Dr. Josefina Bulatao-Jayme**
Officer-in-Charge, Food and Nutrition Research Institute

An Overview of the Workshop **Dr. John McCollum**
Director, Asia Program
Center for Educational Development in Health, Boston University

Workshop Accomplishments and Plans by Agency

- **National Science Development Board**
- **National Institute of Science and Technology**
- **Food and Nutrition Research Institute**
- **Philippine Inventors Commission**
- **Science Foundation of the Philippines**

Talk **Honorable Melecio S. Magno**
Minister, National Science Development Board

. **Mr. William F. McDonald**
Acting Deputy Mission Director
USAID Philippines

Presentation of Certificates **Minister Melecio S. Magno**
Assisted by: Dr. Josefina Bulatao-Jayme and
Dr. Hannelore Vanderschmidt
Associate Director, CEDH
Boston University

Acknowledgements

Ofelia C. Valdecañas
Master of Ceremonies

Appendix G
DECISIONS ON COMPETENCY-BASED TRAINING

Appendix G

DECISIONS ON COMPETENCY-BASED TRAINING

At the closing ceremonies of the Systematic Course Design Workshop, February 13, 1980, the following decisions were announced in disseminating competency-based training:

- The National Sciences Development Board has appropriated 8000 pesos for disseminating projects developed in the workshop.
- The Food and Nutrition Research Institute will conduct an "ECHO" Seminar (repeat of the Systematic Course Design Workshop) on March 15, 1981.
- The Science Foundation of the Philippines will conduct two "ECHO" seminars in April 1981.
- The National Institute of Science and Technology will package projects developed in the workshop with the help of its appropriate technology group.

Appendix H

**PARTICIPANT EVALUATION OF THE WORKSHOP
ON SYSTEMATIC COURSE DESIGN (SCD)**

Appendix H

PARTICIPANT EVALUATION OF THE WORKSHOP ON SYSTEMATIC COURSE DESIGN (SCD)

n=27

- | | |
|---|--|
| 1. Usefulness of the Systematic Course Design Approach. | 1. Very useful (20 responses) |
| | 2. Useful (2 responses) |
| 2. Can you now teach a course on Systematic Design? | 1. Yes (25 responses) |
| | 2. A Little Later (2 responses) |
| 3. Were the presentations clear? | 1. Very Clear (10 responses) |
| | 2. Clear (15 responses) |
| | 3. Average (1 response) |
| 4. List chief weaknesses. | 1. Field Test Too Short (10 responses) |
| | 2. Some Student Presentations Poor (5 responses) |
| 5. List chief strengths. | 1. Resource People Thorough, Friendly, Competent, Available (13 responses) |
| 6. Difficulties with handbook. | 1. Needs Diversity of Examples (6 responses) |
| | 2. References Sometimes Wrong (6 responses) |
| 7. Arrangements. | 1. Good (10 responses) |
| | 2. Food Can Be Improved (8 responses) |
| | 3. Venue Too Far From Manila (4 responses) |
| 8. Suggestions. | 1. Follow-up Workshop Desirable (6 responses) |
| 9. Can you apply the Systematic Course Design process? | 1. Yes (27 responses) |
| | 2. No (0 response) |

Appendix I
SELECTED COMMENTS ON NSDB-CEDH WORKSHOP

Appendix I

SELECTED COMMENTS ON NSDB-CEDH WORKSHOP

"The course was conducted in such a way that the participants really shared in the discussion. The resource persons were very accommodating and sincere.... The course content was simple and concise...."

"Democratic participation is the whole atmosphere during the workshop. This motivates the participants to forget their inhibitions."

"Blue book presented very clear descriptions of competency-based curriculum; minimized need for lectures."

"Emphasis on the evaluation before the formulation of the specific course content is a very effective innovation in the formulation of curriculum materials."

Appendix J

LIST OF DOCUMENTS FOR WORKSHOP PARTICIPANTS

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LIST OF DOCUMENTS FOR WORKSHOP PARTICIPANTS*

SYSTEMATIC COURSE DESIGN WORKSHOP
FOOD AND NUTRITION RESEARCH INSTITUTE
NATIONAL SCIENCE DEVELOPMENT BOARD
NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY
SCIENCE FOUNDATION OF THE PHILIPPINES
PHILIPPINE INVENTOR'S COMMISSION

January 26 - February 13, 1981

- AID, Bureau for Development Support. AID Research and Development Abstracts (ARDA). Vol. 7. Norfolk, Virginia: AID R&D Report Distribution Center, November 1, 1979; 29 pp.**
- Bertrand, Jane T. Communications Pre-Testing. The University of Chicago Press: Communications Laboratory, Community and Family Study Center, 1970; 144 pp.*
- Cameron, Margaret, and Yngre Hofvander. Manual on Feeding Infants and Young Children. 2nd edition. New York: United Nations, Protein Advisory Group, 1976; 175 pp.
- de Sweemer, Cecile. Manual for Child Nutrition in Rural Indies. New Delhi: Voluntary Health Association of India, 1978.
- Ghosh. The Feeding and Care of Infants and Young Children. New Delhi: Voluntary Health Association of India, 1976.
- Haupt and Kane. The Population Reference Bureau's Population Handbook. Washington, D.C.: Population Reference Bureau, 1978.
- Hersey, Paul, and Kenneth Blanchard. Management of Organizational Behavior Utilizing Human Resources. Englewood Cliffs, New Jersey: Prentice Hall Inc., 1977; 360 pp.
- Holmes, Alan C. Visual Aids in Nutrition Education, A Guide to Their Preparation and Use. Rome: FAO, 1968.*
- Huff, Darrell. How to Lie with Statistics. New York: W.W. Norton Co., Inc., 1954; 142 pp.*

* Books provided directly by the consultants.

** P.O. Box 353, Norfolk, Virginia 12501.

- Jones, Edna M., Sara J. Munger, and James W. Altman. A Field Guide for Experimental Determination of the Effects of Nutrition in Developing Countries. Allison Park, Pennsylvania: Synectics Corporation for USAID, TA Bureau, Office of Nutrition, June 1975; 72 pp.*
- Koppert. Nutrition Rehabilitation: Its Practical Application. London: Tri-Med Books, 1977.*
- Lappe and Collins. Food First: Beyond the Myth of Scarcity. New York: Ballantine Books, 1977.*
- Mayer, Jean. Priorities in Child Nutrition in Developing Countries. New York: UNESCO, E/ICEF/L. 1328, UNICEF, March 1975.*
- Mayer, Jean, and JoAnna Dwyer. Food and Nutrition Policy in a Changing World. New York: Oxford University Press, 1979.*
- Pacey. Gardening for Better Nutrition. London: Intermediate Technology Publications, 1978.
- Project Share: Productivity in Human Services, Measurement, Improvement, and Management. Rockville, Maryland: Project Share.
- Rasmussen, Mark. Current Practices and Future Directions in Nutrition Education in Developing Countries: A Research and Policy Assessment. USAID, TA Bureau, Office of Education and Human Resources, June 1977.*
- Shack, Kathryn. Teaching Nutrition in Developing Countries or the Joys of Eating Dark Green Vegetables. Meals for Millions Foundation, 1977; 193 pp.
- Synectics Corporation. A Field Guide for Evaluation of Nutrition Education, An Experimental Approach to Determination of Effects on Food Behavior in Less Developed Countries. Allison Park, Pennsylvania.
- Vanderschmidt, Lori, Tom Frostman, John McCollum, and Ascher Segall. Developing Competent Health Workers, A Handbook for Designing Education and Training Programs. Boston: Boston University, CEDH, 1981; 222 pp.
- Vanderschmidt, Lori, and Maria Lent. Systematic Project Design, A Handbook for Volunteers. Boston: ACTION, Boston University, CEDH, 1981; 156 pp.
- Weiss, Carol H. Evaluating ACTION Programs: Readings in Social Action and Education. Boston: Allyn and Bacon, 1973; 364 pp.

Western Center for Health Planning. Educational Manual for HSA Volunteers
The Health Planning Process, Module VI. Washington, D.C.: U.S. De-
partment of Commerce, National Technical Information Service, HRP-00/
6094, 1976.

World Health Organization, The Health Aspects of Food and Nutrition.
Manila: WHO, 1979.

Appendix K
LIST OF CONTACTS

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- Dr. Elizabeth Abernathy, Director, Peace Corps, 2139 Agno Street, Malate, Manila, R.P.
- Dr. Zenaida Bagabaldo, Director, Physiology Department, University of the Philippines, College of Medicine, Pedro Gil Street, Manila, R.P.
- Dr. W. Morris Baker, Deputy Director, Peace Corps, 2139 Agno Street, Malate Manila, R.P.
- Dr. Anbara Banzon, Director, Office of Health Education and Personnel Training, Ministry of Health, Rizal Avenue, Manila, R.P.
- Dr. Rosendo Capul, Health Department, USAID, Magsaysay Building, Roxas Boulevard, Manila, P.I.
- Dr. Fely Marilyn Elegado, Executive Secretary, Committee of the Institute of Health Sciences, University of the Philippines, Institute of Health Sciences, Tacloban, R.P.
- Dr. Corazon Gonzales, Director, WHO National Teacher Training Center, University of the Philippines, College of Medeare, Pedro Gil Street, Manila, R.P.
- Dr. Eric Goon, Chief, Health Manpower, World Health Organization, Regional Office of the West Pacific, United Nations Avenue, Ermita Manial, R.P.
- Dr. Josefina Bulgatoe-Jayme, Officer in Charge, Food and Nutrition Research Institute, Pedro Gil Street, Taft Avenue, Manila P.I.
- Dr. Melecio Magno, Minister, National Science Development Board, Bicutan, R.P.
- Mr. William F. McDonald, Acting Deputy Mission Director, USAID/Philippines, Magsaysay Building, Roxas Boulevard, Manila, R.P.
- Dr. Gunawan Nugroho, Chief, Primary Care, World Health Organization, Regional Office of the West Pacific, United Nations Avenue, Ermita, Manila, R.P.
- Dr. Segundo Roxas, Deputy Minister, National Science Development Board, Bicutan, R.P.
- Dr. Stephen Sinding, Chief, Health, USAID, Magsaysay Building, Roxas Boulevard, Manila, R.P.