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Curriculum Evaluation Specialist  
Final Report  
based up  
National Education Association  
Team Work Plan  
of  
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submitted to  
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1201 - 16th Street NW  
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by  
Paul V. Robinson  
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Best Available Document

Curriculum-Evaluation Specialist

This position in the TMED Project is responsible for helping "generalize the existing process" of curriculum development currently in use, and if necessary, suggest alternative models suitable for host country implementation. Using the data from subject areas of mathematics and science, this Team members working strategy has been to analyze "what is" the existing process in these areas first, and then attempt to generalize to a broader field, before suggesting possible alternative models. Thus, the working activities of the Curriculum-Evaluation Specialist and Mathematics and Science Specialists are highly interrelated.

Objective / 13 Will assist with the evaluation of the curriculum process (development/, tryout/evaluation/feedback) as it now exists.

Objective / 14 On the basis of evaluation, will help conceptualize a modified process.

Designated Activities

The Curriculum Specialist will assist in the analysis of curriculum and the evaluation of the curriculum process as it exists, utilizing structured interviews within the Nepalese educational agencies charged with the development of various portions of the curriculum (elements) to determine their independent roles and modes of operating within the overall development process. Specific activities will include:

- (1) The development of process models of existing operations of HEG, JEMC, SLC, and JEMC to determine the types of activities carried out, the agency feedback points in relation to the development process and linkage points with other agencies and governing bodies;
- (2) The development of guidelines for the team review and analysis of curriculum;
- (3) The provision of assistance to the mathematics/science specialists in their analysis of the existing curriculum (making certain that all curriculum elements and concerns have been dealt with, and that linkage points are considered) and assistance in development of strategies to strengthen inter-agency cooperation and
- (4) the development of a process model for curriculum development that accounts for all elements of the curriculum including mathematics/science as subject areas.

Outputs

Analysis and development of process models of the roles of HEG/CDC, JEMC and SLC in curriculum development were prepared. These models were used as discussion topics with HEG groups and in workshops for HEG personnel and IOS Inservice Training for Supervisors; they were used in degree level lecture/discussion with students and given to IOS staff in curriculum. The establishment of the TMED Advisory Council and the continued reference to the NEA Model for curriculum evaluation brought out weakness in the present HEG processes and suggested modifications at these coordination points which seemed critical in the development process.

Development of the Team model for curriculum evaluation was completed early in the Contract and included the Elements (1) Objectives, (2) Content, (3) Activities--teacher and student, (4) Resources and Materials, and (5) Evaluation--What Is, What Is Desired?.. This model was adopted by the TMED Advisory Council. "Curriculum Evaluation Guidelines" based on these elements were prepared for two levels of education--the School Level and Higher Education. These were printed in quantity and served as guides to the Ministry and the University in a number of evaluation activities and projects (in Math, Science, HEG Textbook Evaluation and National Curriculum Evaluation Study in Nepali, English, Social Studies, Agriculture and Secretarial Science at classes 1, 4, and 8). They are currently being used by TU/CDC in curriculum development conferences on various campuses throughout the Kingdom. A paper on developing criteria for

Utilizing data from the structured interviews with local personnel (administrators, specialists, teachers, etc.) findings of the team members, analyses of personal visitations and process models, the NESP documentation and literature on curriculum development, the Curriculum Specialist will synthesize information into a generalized model of curriculum development (accounting for linkages, elements and concerns) appropriate to the Maltese educational situation.

- Objective # 15 Will work closely with the science and mathematics curriculum specialists for developing and trying out the "process"; and as elements of the process prove themselves will have basic responsibility to generalize the findings into other subject areas.
- Objective # 16 Will help refine evaluative techniques already in use, revise them in terms of findings, and develop a method for incorporating improvements in curricula and teaching methods.

#### Assigned Activities

Since mathematics and science constitute the primary subject areas for analysis and development in the Contract, the Curriculum Specialist will utilize these areas for gathering basic input data for other subject areas by other team specialists in the preparation of curriculum analysis guidelines, questionnaires, evaluation methods, checksheets, reports, workshops and inservice training in this area will be as follows:

- (1) Review methods and classifications of information collection on schools, teachers and students and suggest standard formats useful for long term curriculum evaluation.

evaluating the Health Education Curriculum was based on this model. The proposed NEA model has been adopted by HMG/CDC as the model to be used for subsequent school level curriculum evaluation. - See Gopi Nath Sharma paper of 15 May 1977- and the procedures developed for the National Curriculum Evaluation Field Analysis have been adopted for the implementation of the model into the data collection and analysis phases.

#### Outputs

Assisted in the curriculum analysis of Math and Science in areas requiring team effort in analysis formulation, design and presentation. Prepared model questionnaires, evaluation guidelines, process models for planning interagency cooperation. Assisted in the design of the Science Field Study component and in planning the Science Equipment Center's role in curriculum development. Many of these activities were translated into procedures which were later used in other curriculum studies and analysis, i.e., Textbook Analysis, and Curriculum Analysis of classes 1, 4 and 5. Initiated the Professional Development Seminars at HMG/CDC and participated in the IOB Inservice Course for Secondary Supervisors. Designed and supervised the National Curriculum Evaluation of Classes 1, 4, and 5

## Designated Activities

- (2) Review present system for handling of student performance (achievement) data in order to make improved use of this information for curriculum development.
- (3) Review of the examination system as it relates to the evaluation of the objectives stated in the Curriculum to determine:
- 1) The adequacy of the objectives for purposes of evaluation,
  - 2) The adequacy of the examinations in assessing those performances stated in the objectives and
  - 3) The adequacy of textbook materials in providing content guidance for the student and/or the teacher.
- Other activities in this area will include improving procedures and techniques in collecting field information for purposes of curriculum development, development of materials for instruction of CDC staff & field study techniques, and instrument refinement for specific research work by other Team members and counterparts when application to other subject areas is apparent.
- For purpose of long range planning of curriculum there are several areas of evaluation and data collection which need some attention. In order to assess the degree to which curricular objectives have been achieved by students, descriptive data is essential to identify those subject areas which need improvement as well as to identify schools and students that may need attention in special subject areas or in teaching methods. The Curriculum Specialist will

## Outputs

in Nepali, Social Studies, English, Vocational Agriculture and Secretarial Sciences.

Developed C/D model questionnaires and interview schedules in a format which would find more relevant data about schools and the curriculum, in line with the model and the guidelines mentioned earlier. These instruments were developed to permit more uniform data collection and analysis than those presently in use by HRE/CDC. These questionnaires were tried out and have been used in at least four major field studies related to school level information collection--Science Curriculum Analysis, HRE Textbook Analysis of Classes 1, 4, and 8, the National Curriculum Evaluation Study and development of the questionnaires for the Health Education Curriculum.

Assisted in the analysis of the IOE Professional Courses Curriculum and designed and assisted in the conduct of a Primary Teachers Needs Analysis Study and Recommendations. The needs analysis and course analysis procedure are currently being considered for adoption by IOE as the method for information collection to be used prior to curriculum redesign in line with the new University plan for 5 credit courses in all Institutes. Assisted in the preparation of models of curriculum schemes for IOE program at all levels, considering the new University requirements. Met with IOE Subject Committee Chairman as well as TU/CDC personnel in planning for pending curriculum changes.

Allied to Objective 16, served as the Consultant to the TU Research Core Group in formulation, development, administration and data analysis and report preparation of a new University Entrance Test. The Test was the first to utilize an objective-type examination of various ability factors as a means of determining eligibility and placement in University programs. The Test in its second year of development and use.

### Designated Activities

Review the present system of sampling, reporting and collecting school data to provide improved information to schools and students. Activity sessions, as well as in the preparation of operational and research proposals. This will be done for the purpose of developing model procedures and documents which will be made available to other subject areas and will provide information, skills regarding curriculum development. Training in other subject areas will be carried out through seminars, inservice courses, using printed materials and reports.

Objective # 17 Will serve as a general consultant and resource person to IOE and CDC in all school curriculum areas.

### Designated Activities

The Curriculum Specialist will serve these subject areas and service agencies of the MOE where needs are identified and tasks assigned through the TNEB Advisory Council. He will undertake activities related to IOE courses such as periodic lectures to degree students on development of curriculum, resources development and curriculum evaluation; work on the revision of syllabi of the IOE degree program in Curriculum; will participate in curriculum development workshops and seminars of the TU/CDC, develop courses, evaluation schemes and participate and assist in organizing special seminars on curriculum development at IOE and CDC. The Spec. list will arrange for and participate in meetings of specialists in other subject areas from CDC, IOE, SLC, JHE to consult on curriculum development as it relates to their special needs and areas.

### Outputs

### Outputs

A review of the monthly report activities can provide a more comprehensive view of the activities and outputs related to the General and Resource functions which have been completed. These are summarized here by categories.

Workshops--Participated in workshops sponsored by various of HEGovernment: MOE, 6 workshops; HSE/CDC 4 workshops; IOE, 3 workshops; TU, 1 workshop.

Planning Sessions--Participated in planning sessions for activities within various agencies. These are reported here according to different types of planning for activities, some of which involved several meetings, others lasted for a period of weeks and involved the development of materials: MOE, 6 activity topics; HSE/CDC, 8 activity topics; IOE, 7 activity topics; SLC, 3 activity topics; TU, 6 activity topics; NRC 2 activity topics.

Lectures--Prepared either papers or presented the following lectures related to curriculum development: HSE/CDC, 5 lectures and papers; IOE, 5 class lectures, plus 30 lectures for inservice course for Secondary Supervisors; TU, 3 lectures.

## Designated Activities

## Outputs

Course Development--Activity related to course development was carried out primarily in relation to the University level through IOE;

Syllabus: Analysis of Teaching

Syllabus: Degree internship (Practicum)

Syllabus: Curriculum Development

Degree Program: Booklists

New Schema: Certificate Level Program

Diplom Level Program (1 and 2 year)

Degree Level Programs

TU Workshop: Course Definition and Development, Education and Business

Field Visitations--Made visitations to districts and schools for the purpose of curriculum development, evaluation or workshop activity: Kaski District, 12 days, workshop and field study; Saptari District, 13 days, workshop and field study; Kavre district, 8 days, field study; Dhanusha District, 12 days, field tryout and field study; Kathmandu District, 12 days, field study; Lalitpur, 8 days, field study.

## Resource Development--

NVTC Library--over a six-month period assisted in the reorganization development and design of book and instructional resource collections in the IOE Campus Library at Sanathimi.

Science Equipment Center--Participated in the planning and development of roles of various EBE agencies in the system of determining, testing, and distributing locally made equipment for use in school level programs.

TU Entrance Test--assisted, advised and trained personnel in the methods of organizing, developing, administering and developing systematic procedures for analyzing an abilities-type test for later development of an aptitude-type test for guidance and selection of students into University programs.

18 Will assume major (Team) responsibility for institutionalizing the curriculum development process.

### Integrated Activities

The Liberman concept of the adoption process (Training, Trial, Installation, Institutionalization) (stated in another way by Liberman) to test, to operationalize, to generalize, these activities are built into the Team activities through the Contract. Institutionalization is the act of the Host government. Evaluation of the total Team effort must be made to assess the degree and extent of the institutionalization process. Since this is a function of response on the part of the Host institutions to the Contract activities, Outputs need to be used in interactive pairs related to the institutional process.

### Output: Criteria

#### TRAINING

Host:- Staff was provided at the proper level (quantity, continuity, aptitudes, motivation and proficiency) so that training could be undergone and the necessary skills developed.

Contract:- Training activities were geared to the knowledge, skill and attitudes essential to deal with the proposed innovations in the curriculum development process.

#### TRIAL

There was enough experimentation and tryout of the developmental processes to provide a basis for assessing the quality, fit and value . . .

Host:- To the Host institutions

Contract:- To the Team

#### INSTALLATION

Host:- The characteristics of the innovations in the development process were acceptable by the Host as modes of operation compatible within Host institutions.

Contract:- The planning and design of the process innovations accounted for characteristic modes of operation within the Host institutions.

#### INSTITUTIONALIZATION

Host:- Changes were made in Host operations and provision was made for their continuing support.

Contract:- Recommendations for changes (innovations) in the development process were viable as a part of the ongoing operation of the program.

## Output Evaluation

### TRAINING

Host: Personnel provided by the host were trained subject specialists. This did not mean that their training included systematic approaches in dealing with curriculum matters. Although a considerable amount of training has gone on under the Contract, the heavy schedules and lack of clear priorities on the part of both the Ministry and the University caused many shifts in work assignments and personnel throughout the Contract. This has had a negative effect upon the training aspects and since it is likely to continue, there is some doubt that those who have been trained will be assigned or motivated to continue the development of their skills because of other priorities by government.

Contract: The contract training activities underwent many changes in an effort to adjust to the training needs specified by government. By and large these were geared to stated need areas and adjustments made to provide models at a level which was attainable by those being trained.

### TRIAL

Host and Contract: The period of this portion of the contract was brief (2 years) to move through an extensive try-out phase. Since design, development, tryout and feedback require a longer period than was possible in this time-period, experimentation had to be reduced to a minimum. In order to affect "process" which was the major effort in the contract, a longer period of modelling in all phases, would have better served the purposes of both the host and contract groups.

### INSTALLATIONS

Host: Most of the innovations introduced were based upon earlier efforts of the host to carry on curriculum development or run itself. At the host has not developed its priorities with enough clarity that its operations are coordinated or run easily. This is partly geographic and partly cultural and also characteristic of established operational procedures.

Contract: The contract personnel were experienced persons in overseas activity and were well aware of the problems of introducing innovations into cultures. The factors mentioned earlier were accounted for in the design of the process, but it is not known at this point which of the innovations will pass the test of time.

## INSTITUTIONALIZATION

**Start:** Many of the innovations have received strong support, financially, in policy statements and in ongoing activity. The nature of some of the activity planned was projected in to activity for the next three years. Those which were of a shorter duration have received verbal support, but their institutionalization will directly relate to a complex system of priorities and needs.

**Contract:** Recommendations for changes have been a continuing part of the dialogus in the TMD Advisory Council. Some changes have already be adopted and implemented. Recommendations have been a part of the process of systematizing the curriculum development process and those which yet have to be considered have been developed in close collaboration with personnel in the agencies with which the contract has been working.

### PRIORITY FOLLOW-UP ACTIVITIES SUGGESTED FROM THE NEA CONTRACT

#### 1. TEACHER EDUCATION

- 1.1 Adapt the content and methods used in all Teacher Training progress so that they reflect the necessary content and skills required by various school-level curricula.
- 1.2 Adapt the Degree level programs to reflect the needs of the professional teacher/educator in the various IOE campuses and in related educational agencies.  
Hold planning meetings with representatives of other IOE campuses and agencies to (1) determine the quantitative need for teacher/educators and (2) plan the level program objectives and basic syllabi.
- 1.3 Establish a specialized program at the Degree level for Primary and Pre-Primary levels for teacher/educator training of the two semester program (Phase I) of the Certificate level. Establish a Primary Education Subject Committee for the program. (This might be tied into the proposed developments of the "Integrated Curriculum" and "Basic Education".)

#### 2. CURRICULUM (School Level)

- 2.1 More fully develop and clarify the curriculum objectives at all levels and in all subjects to establish basic standards for pupil achievement (the degree of accomplishment of the objectives can provide an assessment of the students' progress and the curriculum's effectiveness.)
- 2.2 Conduct a critical study and cost analyses of some alternatives in the packaging and distribution of materials associated with curriculum and teaching.

## 2. CURRICULUM (School Level) (continued)

2.3 Conduct a critical study of costs for alternate ways of collecting accurate curriculum data to be used in the development of curricula.

2.4 CDC-SIC-JEMO-SEC Organization-- The professional roles in these agencies are not clear; the present organization is based primarily upon subject matter training, with little professional exchange going on between the content areas and specialists. The tasks of curriculum development assume both subject matter and professional content to be basic within the structure (where subject matter is the vehicle and professional content the organizing factor.) In part, this accounts for the lack of coordination in the horizontal curriculum. As CEDA conducts courses for upgrading of administrative officers, some formal means is needed to upgrade the professional education and skills for officers concerned with the development of school curricula.

## 3. LANGUAGE

3.1 Develop graded word lists for use by teachers, in development of curriculum and in production of texts and curriculum materials. (The Rongong study developed a preliminary word-frequency count at the primary level which could serve as a basis for the development of the basic word lists.)

3.2 Develop materials and procedures for the teaching of Nepali and English (UN language) as a Second Language. This approach will require basic research into the problems of teaching the different languages, as well as development of appropriate materials and methods. It will in all probability require pooling of information from various districts of the Kingdom, and may require overseas training in this specialized area. This should be a high priority activity since most of the present formal education is dependent upon Nepali at the school level and the demands for improved command of English are being made in higher education.

## 4. VOCATIONAL EDUCATION

4.1 The present vocational programs of the Lower Secondary level have little to do with the vocational programs developed in the Secondary curriculum; these subjects deal more with the arts and crafts and the manipulation of materials. Vocational content in the Secondary curriculum might be restructured and introduced into the curriculum at earlier stages in the form of guidance materials and science-related concepts. The two years presently allocated to vocational content and skills and attitudes does not provide enough practical training, nor is the time sufficient to achieve basic formulation of attitudes referred to in the NESP. There would appear to be ample evidence in vocational school enrolment trends to indicate that the relationship is the reverse of that intended by NESP. Alternatives to the present structure of the vocational subjects need to be explored and developed to bring them in line with the intent of the NESP and National development schemes.



Paul V. Robinson  
Curriculum/Evaluation Specialist