ABSTRACT
          This final report describes the activities and
conclusions of the Second Sub-Regional Workshop on Teacher Education
held in November 1971. The program was organized by the Asian
Institute for Teacher Educators, Quezon City, Philippines, with the
cooperation of UNESCO. The government of Thailand helped organize the
program for the following group of member states: Indonesia,
Malaysia, Pakistan, Singapore, and Thailand. The program centered
around seminars on the progress of teacher education in the
participating Asian member states, seminars on integration and
modernization, and workshops on integration and modernization
(applying a systems approach to integration and modernization of
teacher education). Three general conclusions found a) lack of
relevance to existing social needs and aspirations, b) divergence
between theory and practices, and c) divergence between training
institutions and school systems. Further conclusions dealt with
integrated curriculum, research, teaching procedures, methods and
techniques, social relevance of teacher education and status of
teachers. Appendixes include lists of officeholders, participants,
and observers; agenda and work schedules; and lists of participants
in the working groups. Speeches, figures, diagrams, and tables are
included. (MJM)

The ASIAN INSTITUTE FOR TEACHER EDUCATORS (Sponsored by Unesco) was established on the campus of the University of the Philippines at Quezon City following an agreement between Unesco and the Government of the Philippines. It is an autonomous institution and commenced operation in July 1962.

The programme of the Institute is designed to provide a forum and focal point for those responsible for teacher education in Asia, in order to enable them to meet and exchange experiences, discuss programmes, develop common standards and draw up plans for the development and upgrading of teacher education in Asia. In pursuance of this purpose, the Institute:

— offers high-level short courses;

— undertakes and promotes studies and research;

— organizes periodical meetings of teacher educators;

— promotes exchange of information on teacher education among institutions in the region.

INTEGRATION AND MODERNIZATION OF TEACHER EDUCATION CURRICULUM

FINAL REPORT

of the

SECOND SUB-REGIONAL WORKSHOP ON TEACHER EDUCATION

Organized by the Asian Institute for Teacher Educators
With the Cooperation of the Government of Thailand
Bangkok, 1-12 November 1971

ASIAN INSTITUTE FOR TEACHER EDUCATORS
(Sponsored by Unesco)
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Quezon City
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GENERAL REPORT

INTRODUCTION

1.1   The Regional Meeting of Teacher Educators in Asia organized by the Asian Institute for Teacher Educators, with the cooperation of Unesco, in September-October 1969 at the University of the Philippines, Quezon City, formulated the major directions for Curriculum Development in Teacher Education in the Asian Member States of Unesco. The Regional Meeting recommended that it should be followed up by sub-regional meetings and national meetings for elaborating on the theme with a view to helping in the implementation of revised programmes. The first Sub-Regional Workshop on Teacher Education was held accordingly in Taipei from 1-13 December 1969, with the following Member States participating in it: the Republic of China, Japan, the Republic of the Philippines, and the Republic of Korea. The Workshop concerned itself with developing necessary competencies in teacher educators for defining the objectives of foundation courses, the selection of curriculum content with reference to the objectives and their evaluation in terms of these objectives. The *Final Report* of this Sub-Regional Workshop was published by the Asian Institute for Teacher Educators early in 1970.

1.2   The Second Sub-Regional Workshop on Curriculum Development in Teacher Education in Asia was organized by the Asian Institute for Teacher Educators, Quezon City, Philippines, with the cooperation of the Government of Thailand, from 1-12 November 1971 for the following group of Member States: 1) Indonesia, 2) Malaysia, 3) Pakistan, 4) Singapore, and 5) Thailand.

1.3   The theme of this Workshop was 'Integration and Modernization of Teacher Education Curriculum'. Preparations for the Sub-Regional Workshop were made by an Organizing Committee composed of staff members of the College of Education, Prasarnmitr, Bangkok with Dr. Sudchai LaoSunthara, President of the College of Education, as Convenor. Dr. Lamaimas Saradatta, Vice President and Head of the Department of Educational Research, College of Education, served as Coordinator and Dr. Supon Sripahol, Assistant Professor, College of Education, Prasarnmitr, as Secretary-General. The Asian Institute for Teacher Educators deputed Dr. N.P. Pillai, Unesco Expert in Educational Research, as Director of the Workshop and Mrs. Penelope V. Flores, Executive Officer, as Coordinator. Documentation for the Workshop was prepared jointly at the Asian Institute for Teacher Educators, Quezon City, and the College of Education, Prasarnmitr.

1.4   The Asian Institute for Teacher Educators invited from each of the participating Member States three representatives, one from the Ministry of Education, and the other two from institutions for primary and secondary teacher training. The Government of Thailand sent seventeen observer-participants from the various universities, including the branches of the College of Education, the Department of Teacher Training, Ministry of Education, and the National Education Council. Observers were also invited from international organizations and the Unesco Regional Office for Education in Asia, Bangkok. Pakistan was not represented at the Workshop.

1.5   The Workshop was inaugurated in the forenoon of 1 November by His Excellency Sukich Nimmanheminda, Minister of Education, Thailand. Dr. Sudchai LaoSunthara, President of the College of Education and Convenor of the Organizing Committee for the Workshop,

welcomed the guests at the meeting. Dr. N.P. Pillai, Director of the Workshop, made a brief statement concerning the objectives of the Workshop. Mrs. Penelope V. Flores, Coordinator from AITE, read a message from Dr. Alfredo T. Morales, Director of the Institute. Texts of the speeches are included in *Annexes*.

1.6   The Orientation Session, which followed was devoted to the election of office bearers and a clarification of the work that was to follow.

    (*a*)   The following participants were elected office bearers of the Workshop:

> Chairman   :   Mrs. Nartchaleo Sumawong (Thailand)
> Vice-Chairman   :   Mr. Leong Chin Toong (Singapore)
> Rapporteur-General: Mr. Goh Keat Seng (Malaysia)

        A list of office bearers, participants and observers is attached (see *Appendix I*).

    (*b*)   The Agenda and Work Schedule and the Rules of Procedure were discussed and adopted. (See *Appendix II*.)

    (*c*)   The Director of the Workshop outlined the purposes of the Workshop with the following observations:

        (i)   The Regional Meeting on Curriculum Development in Teacher Education in Asia (1969) made two major recommendations concerning integration:

            (1)   a vertical integration of the curriculum for primary and secondary teacher education, and

            (2)   a horizontal integration of the teacher education curriculum, viewing the different courses as integral parts of a total programme, and each course along with others being oriented to the development of an effective teaching personality.

        (ii)   Other recommendations of the Regional Meeting included the following:

            (1)   Specific objectives should be enunciated in terms of behaviour changes, as such an enunciation could help direct teacher education programmes more clearly and closely towards desirable understandings, attitudes, skills and abilities.

            (2)   The relevance of each item in the teacher education programme to the enunciated objectives should be examined, and in it, a proper balance maintained between the elements of learning experiences which are directed to the development of a teacher's personality, and those which aim to cultivate his competence as a classroom instructor.

1.7   The Regional Meeting did not, however, spell out in detail how a vertical or horizontal integration of the teacher education curriculum could be implemented. It was suggested that student teaching could be used as the focus of a horizontal integration. A conceptual approach to the curriculum format was also suggested as a desirable way of integration.

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1.8 Since these recommendations were formulated, there have been serious attempts at integration of the curriculum, both vertical and horizontal, in some of the Member States. However, several difficulties are encountered. One of the major difficulties is how to integrate the teacher education curriculum vertically. Another is how to bring about a horizontal integration as a built-in part of the curriculum. In modernizing the content and professional courses and the methods of teaching many difficulties are also experienced, especially in the wake of new developments in educational technology.

1.9 The Second Sub-Regional Workshop is, therefore, devoted to developing the details of an integrated curriculum on the basis of a conceptual approach and indicating a sequential development of the curriculum (or a spiral approach to it) at the different levels of teacher education. This would help to bring about both a vertical and a horizontal integration of the curriculum in a very desirable way. To help modernization of the curriculum and the teaching-learning processes through innovation, including the utilization of educational technology, the Workshop is also to explore methods which are desirable and feasible and make suitable suggestions for implementation.

1.10 The end products of the Workshop will be documents setting forth:

(1) The formulation of a conceptual framework which would serve (*a*) as the basis of a relevant integrated teacher education programme, and (*b*) as a gestalt of the total field (giving a macro-cosmic view) and springboard for a detailed study of the related aspects of a subject curriculum (giving a micro-cosmic view) in the area of the foundation courses. This will be done with the syllabi models prepared by the Regional Meeting as the main frame of reference.

(2) Development of some selected concepts at differing levels without losing their sequence, and the differentiation of those which fall in the areas of specialization for primary and secondary teachers.

(3) A *statement* on modern methods of teaching and learning which should be adopted in teacher education to maximize its efficiency and economize the cost and effort involved in it, and directions on organizing instruction utilizing these methods profitably.

(4) The considered views of the participants, who have gone through the exercise of preparing an integrated curriculum — horizontal and vertical — about the problems to be tackled in adopting an integrated and modernized curriculum of teacher education in their own countries.

1.11 The Third Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia held in Singapore, 31 May - 7 June 1971, has directed attention to the need for a global innovative approach to educational reconstruction in the Second Development Decade. The success of this Workshop will be evaluated in this context. The Workshop may therefore adopt a systems approach, if possible. The curriculum which the Workshop proposes and the learning techniques it suggests should be innovations for development.

SEMINAR ON THE PROGRESS OF TEACHER EDUCATION IN
THE PARTICIPATING MEMBER STATES

2.1   The deliberations of the Workshop began with the presentation of progress reports on
        Curriculum Development in Teacher Education by the representatives of the participating
Member States.

2.11   The report from Malaysia outlined the existing pattern of teacher preparation
for primary, lower secondary and upper secondary levels of education and traced the steps
taken towards vertical and horizontal integration of the curriculum. Teacher education for
primary and lower secondary levels of schooling is the concern of separate institutions
under the Ministry of Education, while the teacher education programme for the upper
secondary level is with the Faculty of Education, University of Malaya. The qualifications
of the entrants to the institutions for primary and lower secondary teacher education are
the same (though better qualified candidates alone will be admitted to the institutions pre-
paring teachers for the lower secondary level); and their professional preparation follows
the same pattern (with academic and professional components) and has the same duration
(two years). The university course is offered as a consecutive course of one year's dura-
tion to graduates of the university and it mainly concentrates on professional courses.

Vertical integration of the primary and lower secondary teacher education curricula
was accepted in principle by the National Seminar on Curriculum Development in Teacher
Education at Penang in December 1970, which was sponsored jointly by Unesco and the
Ministry of Education, Malaysia. The implications of, and the problems involved in integra-
tion are currently being studied by a select committee appointed by the Teacher Training
Policy Review Committee of the Ministry. Practical steps have, however, been taken in
curriculum review towards effecting an integrated programme; the provision of a common
syllabus for Health Education in 1970, and the formulation of a revised common Educa-
tion syllabus to be implemented in 1972, are illustrative of this trend. This revised Educa-
tion syllabus has all subjects of the professional curriculum grouped under two heads:
Principles of Education and Practice of Education. Academic subjects are also integrated.

Notable examples are the teaching of Integrated Science instead of Physics, Chemis-
try and Biology as separate components; Home Science instead of Cookery, Housecraft and
Needlework; and Industrial Arts covering the areas of Woodwork, Metalwork, Electricity,
Power Mechanics and Technical Drawing. Horizontal integration of the hitherto separate
subjects is thus accomplished at the levels of primary and lower secondary teacher educa-
tion.

In the curriculum of teacher education for the upper secondary level, a fusion of many
related courses has also been effected. For instance, the Principles of Educational Practice
is an integrated course, while the Special Methods courses have been integrated into three
cognate areas, namely,

(a)   Language Methods, to include methods of teaching the Malaysian Language, Eng-
      lish and Chinese;

(b)   Science Methods, to include methods of teaching Biology, Chemistry, Physics,
      Mathematics, Agricultural Science and Engineering Technology; and

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(c) Social Studies Methods, to include the teaching of Economics, Geography and History.

Students learning to teach a given subject attend, besides lectures/demonstrations/tutorials which deal with common aspects of teaching each group of subjects generally, specialized lectures for the individual subjects concerned. The sixteen or more optional courses which were previously offered separately have also been regrouped into five studies (sociological, psychological, comparative, pedagogical and development), corresponding to the Divisions of the Faculty of Education. A centralization of the facilities available for instruction and research has also been effected.

The Faculty of Education, University of Malaya, has taken the lead in effecting innovations in teaching methods and techniques. Lectures, demonstrations, seminars, film shows, field trips, workshop sessions in the planning and preparation of instructional materials, actual teaching and evaluation of its effectiveness in the classroom situation, individual assignments, and group projects in the production of visual aids and in the research on the comparative efficacies of different methods and approaches in classes of differing abilities, have been employed in the training of teachers.

Attempts are being made to relate theory to practice. One method used is to relate the methods lectures to what is said and explored during the Principles of Educational Practice lectures, which are used as a base. Another way tried is to obtain from the schools the portion of the syllabus that is to be covered, so that staff and students are able to examine jointly and discuss the plan to teach the various topics during the relevant methods lectures. Assignments for each methods course are closely associated with practical teaching of the subject.

Recent innovations in teaching such as the utilization of language laboratories, video-tapes, programmed instruction, radio, television, simulated micro-teaching situations followed by discussion and criticism, record players, etc., are employed in the training of students at the Faculty.

In the training institutions for primary and lower secondary teachers, for both theory and methods courses the teaching staff normally use the lecture, discussion and debates, demonstration, experiments, projects, surveys and special programmes, problem-solving and discovery, field trips and visits. Some recent innovations in teaching procedures and techniques are already in use in a few of the existing institutions while other innovations are being considered for possible implementation.

In all the three types of teacher education institutions, one fundamental aim is to provide the student teacher with a wide range of experiences that will enable him to make his own decisions both in learning and teaching situations. The level of achievement, however, varies with each type of institution.

2.12 The Report from Singapore pointed out that different courses are given in the Teachers' College for preparing primary, lower secondary and upper secondary school teachers. Vertical integration occurs topically within subject areas. Differences in entrance requirements and in the required academic preparation for teaching at the three levels have made it

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difficult for the trainees to pursue the same course lectures. But in essence, a great deal of common ground is covered between the various courses for primary and secondary level teachers particularly in professional subjects. A Review Committee is working on horizontal integration particularly to relate educational theory to practice. The general method of teaching theory subjects is the lecture, followed by tutorials in small groups, sometimes supplemented by short films. Student teachers apparently tend to find the theory lectures somewhat irrelevant. New methods are, therefore, being sought to promote greater dialogue between staff and students, to reduce pure lecturing and to increase the opportunities for intellectual encounter. The ETV Unit of the Ministry of Education is presently offering telecasts to schools on regular lessons which add enrichment to the classroom teaching. Programmed materials for instruction and other aids, audio and visual, are already in use, the former experimentally, the latter as every teachers' classroom equipment in the schools, but little has so far been attempted in bringing the various technological devices to the aid of teacher training. In teacher education, closed circuit TV is being utilized to a limited extent in tutorial sessions. The videotape may also be used soon for simulation and micro-teaching to help student teachers prepare for practice teaching.

Teaching practice is now conducted during a block of 10 weeks each year. The teacher is encouraged to use his own initiative in dealing with all problems. It is proposed to provide observations of lower secondary classes for prospective primary school teachers, and *vice versa.* Assessment is proposed to be based more on projects and assignments than on examinations, as at present.

2.13   The Report from Indonesia showed how teacher education for teaching at the primary, lower secondary and upper secondary levels is organized as a continuum through the *S.P.G.* (3 years of training after nine years of school) and the *IKIP* (3 + 2 years after the *S.P.G.* or 12-year high school). The *S.P.G.* has three specialized streams, one for teaching Kindergarten, one for teaching Primary School (General) and one for teaching the handicapped. The courses offered have a common core of curricular subjects and, to that extent, are integrated. The *IKIP* curriculum for the first three years is also organized almost exactly as its counterpart at the University. This has resulted in making the professional component perhaps academic in nature and in minimizing the programme of student teaching. This has come in for criticism and resulted, among other steps taken for reform, in the organization of a pilot project in teacher education called *Pusat Pendidikan Guru* or Teacher Education Centre of Excellence (*PPG*) in Abepura, West Irian. Primarily, it is a research and experimentation centre related to the promoting of teacher education institutions in general. Its programmes, being oriented to innovation for teacher development, will not be restricted by the conventional patterns of teacher education in *S.P.G.* When the Comprehensive-Oriented Development School programme will be implemented in 1972, it is logical that the Centre should train Comprehensive-Oriented Development School teachers; in other words, it would have to offer a programme that would integrate the training of elementary and secondary school teachers. It is also expected to emphasize the importance of special programmes such as social development, leadership and adult education.

2.14   The Report from Thailand revealed that the certificate level of training, which is two years of training beyond grade 10, is intended for primary school teaching, while the higher certificate level with two more years of training is meant for lower secondary school teaching. Teachers with the higher certificate can thus teach at both primary and lower

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secondary levels. A single salary scale is in operation in both primary and secondary schools (and, in fact, in all kinds of Government Service) and the teacher's starting pay is determined by his qualifications, regardless of what level he teaches. Ample opportunities are provided for the teacher's further education and professional advancement through evening programmes, short summer courses and self study. These make any programme of vertical integration feasible when entrance qualifications can be made uniform. But this is, at present, difficult, because of the need to train a large number of primary teachers. Horizontal integration through integrating subject content is being attempted at the certificate level in the area of science and agricultural courses. Some progress has also been made in linking up the elementary and secondary core courses and the classroom study of teaching methods and practice teaching in schools, as could be seen from the new curriculum framework model of the Faculty of Education, Chulalongkorn University. (See *Figure 14.*)

Thailand is at an experimental stage with regard to the utilization of modern technology for teacher training. The Bansomdet-Chaopraya Teachers' College and a few others are trying out the video-tape/closed circuit television. Micro-teaching is also being experimented with at Dhonburi Teacher Training College. It is carried out without video-tape recording and some progress has been reported. Sound laboratories are made use of in almost all the teacher training institutions. The use of films and film strips is widespread and some attempts are being made in preparing movies of model teaching practices at the Department of Teacher Training and in the College of Education at Prasarnmitr.

2.2   In the discussions that followed, the various constraints operating against a vertical and horizontal integration of the curriculum as well as the utilization of educational technology in modernizing the programmes for teacher training became the major concern of the seminar. The difficulties in effecting a vertical integration of the programmes of primary and secondary teacher training arose mainly from the different salary grades generally applied to teachers in the two levels of the school system, which is generally related to the different entrance qualifications, and sometimes the difference in the duration of the training courses. The differences in the academic preparation of the staff in institutions for these two different programmes were also mentioned.

2.3   The main difficulty in bringing about a horizontal integration lies in the shortage of teacher educators who could cut across subject boundaries with ease and confidence and who lack experience in team teaching and cooperative programming of courses. The main difficulty in modernization is, of course, the shortage of funds provided to teacher training institutions in many of the Member States which makes it impossible for them to go in for sophisticated hardware and the production of software. The technical know-how for manipulating electronic or even mechanical devices having been almost universally absent in the teacher training programmes in Asia in the past, few teacher educators would feel confident about venturing into their utilization until programmes of training them in the use of these devices are introduced. Hence even when money is available, not much enthusiasm is generated in getting them down. It is hardly necessary to mention that most of these devices are not produced within the countries concerned.

2.4   The fact that many language laboratories are remaining unused because of mechanical troubles which could not be corrected by the technicians on hand (as mentioned in one country report) is one instance which reinforces the need for training qualified technicians

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to look after the maintenance of technological devices. Concerted measures have, therefore, to be taken for organizing new training programmes for producing such persons in the Member States themselves or in the Region as a whole. Simple audio-visual aids are being improvised in many centres, particularly those attached to universities and teacher training institutions, but their quality has to improve a great deal before we could dispense with the importation of even the ordinary equipment. In this climate, 'modernization' is often confused with 'Westernization', an idea which has to be combated. It may therefore be necessary to acquaint teacher educators in the Member States about the progress achieved in Asia itself in producing technological devices and the innovations in educational practices introduced in some of the developed or developing Asian countries.

2.5   In modernizing the teaching-learning processes of the classroom, the difficulty that faces the educator arises from two major factors, namely, the over-crowded curriculum, which is a hotchpotch of all kinds of subjects, and the requirements of written examinations, which are sometimes not entirely within the control of the instructors themselves. The traditional methods of student teaching are difficult to overcome unless a reorientation of the objectives and procedures are built into the teacher education system and both teacher educators and teachers are made aware of the changes. More than all these, the inertia on the part of educational administrators and supervisors in encouraging innovative practices, which might be experimented with by enterprising teachers, acts as a deterrent against any new idea being put into practice.

2.6   The group then reviewed the progress achieved in innovative approaches to teacher education which have been attempted with varying degrees of success. Malaysia has been experimenting with the training of specialist teachers for teaching separate areas such as languages, science and mathematics in the primary school. An area of specialization or concentration is incorporated in the primary teacher education curriculum in many of the Member States. The relative merits of these courses should have to be studied for incorporating the concept of specialization more meaningfully in an integrated teacher education curriculum. A broad-fields curriculum concept is gradually replacing the fragmented curriculum of teacher education in most Member States. Dr. Sim Wong Kooi's Pedagogical Model comprising of five interlocking components is an experiment in core curriculum for the training of secondary level teachers recently introduced in the University of Malaya. The five components are:

(a) School and Environment
(b) Teacher and Teaching
(c) Pupil and Learning
(d) Content and Curriculum
(e) Objectives and Evaluation.

A sixth component, Educational Administration and Services, has later been added. New experiments in instructional television have been carried out in the Philippines. Experiments in microteaching and simulation are carried out in Malaysia, Singapore and Thailand with modifications in techniques. These are known to few, except in the countries concerned. Many more attempts at innovation are happening in Asia. However, few are reported and fewer are published for wider dissemination. For encouraging innovation, wider dissemination of information concerning innovative practices is an urgent need.

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SEMINAR ON INTEGRATION AND MODERNIZATION

3.1 The country reports and the discussions that followed served as a background for the presentation of two working papers. The first was a paper on "Problems of Integration — Vertical and Horizontal—of the Teacher Education Curriculum," presented by Dr. N.P. Pillai. The paper examined in detail the problems confronted in vertical and horizontal integration of the curriculum and the psychological, social and economic justifications for integration which make it necessary to implement it in spite of difficulties to be confronted. Alternative ways of integrating the curriculum such as the broad-fields curriculum, the activity curriculum, the experience curriculum, the core curriculum and integration brought about through *ad hoc* or sequenced seminars or tutorials integrated with student teaching experiences, were explained and the merits in formulating a conceptual curriculum over any of the others established. The statement by Bruner that the structure of any subject can be taught "in some intellectually honest form to any child at any stage of development," and his concept of a spiral approach to the curriculum were elaborated. The formulation of a conceptual framework and its presentation in a way which would result in active learning by the student teacher were put forward as the best ways for bringing about a vertical and horizontal integration of the curriculum and its modernization. Models of integrated curriculum in arts, social studies and teacher education were presented to serve as a guide in evolving a conceptual curriculum for teacher education in Asia, which would be innovative and dynamic. The procedure in the Workshop for devising such a curriculum was:

(*a*) to analyse the tasks for which a teacher is to be prepared,

(*b*) to identify the concepts for teacher education in terms of the tasks,

(*c*) to formulate a sequential curriculum which would take into consideration the levels of difficulties, and

(*d*) to evolve models of integration.

3.2 The second paper was on "Problems of Modernizing Organization and Techniques of Teaching, Including Student Teaching" by Dr. Pruang Kumut, College of Education, Prasarnmitr. It emphasized the importance of re-patterning innovations in educational technology in accordance with local culture, economic situation and needs. The following observations were made:

(*a*) The general organization of teacher education in terms of aims, inputs and outcomes must take into consideration both individual and social needs.

(*b*) It is necessary to restructure the organization of teacher education, giving sufficient attention to all its components, namely, recruitment of staff and students, curriculum, facilities, instructional materials and financial support.

(*c*) In the restructuring of the curriculum, care should be taken to have a proper correlation between general education, specialization education and professional education.

(*d*) Modern instructional process involves first, the laying out of instructional objectives which are defined in behavioural terms; then, contents are selected to enable instruction to meet such objectives, strategies for teaching are laid out, and evaluation procedures are formulated in clear terms.

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(e) Instructional technology will solve both the problems of quantity and quality; but it should be viewed as a working whole of all kinds of mediating agents or devices together with the arrangements for instruction.

(f) The keystone of effective modernization of the teaching learning process and instructional technology is their correlation with student teaching programmes.

3.3 During the discussions, the utilization of instructional technology as a systematic way of designing efficient learning — viewed as a working whole of all mediating agents or devices together with arrangements for instruction — and the changes in the roles of students and teachers, which would come with the increasing utilization of educational technology, came up as important factors for consideration. The significance of micro-teaching, simulation and computerized instruction in student teaching was stressed in this context. Questions of feasibility and practicability in utilizing educational technology in the prevailing situation in Asia were also examined. While endorsing the need for adopting new techniques and technology, it was recognized that in the actual implementation of programmes which require the hardware of technology, the participating Member States would have to think in terms of the rate of development in these States, and must be able to modify procedures to suit respective economic and educational needs.

3.4 The group further agreed that the problems of modernization should be approached from three broad angles:

(a) Modernization of the teaching-learning process with the aim of improving ordinary teaching in the classroom by adopting techniques that will promote the spirit of inquiry and research such as small group techniques, brainstorming, panel discussions and debates, and by promoting pupil-pupil interaction as well as pupil-teacher interaction.

(b) Modernization of the teaching-learning process utilizing educational technology (including educational software and educational hardware), while at the same time exploring the possibilities of using educational mass media to improve the quantity and quality of instruction.

(c) Modernization of student teaching procedures by the utilization of modern techniques like micro-teaching, simulation and peer-group teaching.

WORKSHOP ON INTEGRATION AND MODERNIZATION

A. Planning a Systems Approach

4.1 The Workshop applied a systems approach to integration and modernization of teach · education. It agreed on a definition of integration as a structural and dynamic process of coordinating various educational components together into a goal-oriented functional system. The following basic assumptions were made:

(a) Education is a major key for national socio-economic development in terms of manpower development.

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(b) To be effective in the national development process, the total educational system must be modernized and fully integrated.

(c) Teacher education plays a crucial role in the entire educational system.

(d) To develop the total educational system, teacher education must be fully integrated and modernized.

(e) The heart of teacher education is the curriculum. Therefore, integration and modernization of the curriculum must receive priority in educational reform.

4.2 Integration was seen as operating on three facets:

(a) integration of teacher education within the profession (*Figures 11* and *12*);

(b) integration of teacher education with the national economic development plan and processes (*Figures 1* and *2*);

(c) integration of teacher education with the national social development plan and processes (*Figures 7, 8,* and *9*).

4.3 The Workshop thus adopted a macro-cosmic view of the total educational and social processes, and viewed teacher education in that perspective, as part of the total educational process correlated with other levels of education. Learning was seen as a process aimed at changing the learner's behaviour in desirable directions as set forth in the educational objectives (*Figure 6*). The cyclic interaction between educational bases and objectives, the content, materials and techniques aimed at promoting these objectives, the process of behavioural change, and the expected outcomes of this process are explained in diagrammatic form in *Figures 3, 4,* and *5.*

4.4 In *Figure 3,* various components of the total educative process are identified under Input, Process and Output. Components comprising the input are conceptualized as the following:

(a) Cultural heritage, social problems, needs and pressures

(b) Social philosophy

(c) Educational philosophy

(d) Educational objectives in behavioural terms

(e) Methods, contents and teaching aids

(f) Evaluation planning

(g) Curriculum development and construction.

The process is conceptualized as the following:

(a) Teacher education and demonstration

(b) Actual teaching and learning processes that take place at all levels of education.

Finally, the output components are seen as:

(a) educational outcomes

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(*b*)   system evaluation

(*c*)   educational placement and distribution.

4.5   Proceeding on the assumption that learning is a process aimed at behavioural change, the Workshop concluded that personality change in the student teacher should be viewed from the broad perspective of social change and development. The socializing process of behavioural change should hence be interpolated with personal, group and national perception of values and goals and the entire process followed through the consecutive stages of home and pre-school education (where entry behaviour of the student teacher is conditioned), primary and secondary education, and teacher education. Behavioural change is continued at these stages through the agencies of the teacher and the educative process. The expected outcome is a modernized, socialized and integrated teacher, capable of performing his roles. This is explained in *Figures 7 to 10*. A corollary of this basic assumption is that modernization, socialization and integration of the teacher educator is the key link in this cycle.

4.6   The focal point in this cycle was identified by the Workshop as the personality and role expectations of the teacher, and hence a teacher-centered approach to curriculum reappraisal and reform was adopted. This second cycle with the teacher as pivot emanates from a recognition of the teacher's relationship with his environment in the sphere of the school, the community and the broader world society, and this relationship pervades and interacts with his personality and qualities, his knowledge and abilities, and his role expectations. To set off the desired conversion process in this cycle, the Workshop recognized that the curriculum-maker must have a clear perception of the basic concepts in teacher education and the performance expectations of the teacher as explained in *Figure 10*.

4.7   With this overview of the teacher education process, the Workshop proceeded to identify its modes of operation and these were seen to be:

(*a*)   an analysis of the tasks of the teacher in the three areas of the school, the community and world society;

(*b*)   an analysis of the basic concepts of teacher education with identification in broad terms of the content area and practical knowledge that will assist in the conversion process, and enable the teacher to perform the tasks analyzed;

(*c*)   a formulation of the framework of a core curriculum applying the conceptual approach and giving allowances for treatment in depth of the content area at a later level; and

(*d*)   an examination of innovations in the teaching-learning process, methods, techniques and technology that may be applied in the conceptual curriculum.

B.   Workshop on Integration

4.8   To attempt the first two tasks, the Workshop was divided into two working groups (A-I and A-II). Group A-I worked on task analysis of the teachers' roles and Group A-II on the identification of concepts of teacher education. The list of participants in each group is given in *Appendix III*.

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4.9   *Task analysis of teachers' role in a democratic and developing society.* The areas in which teachers have to play a role were identified as the school, the community and the world, and the role expectations and functions were grouped as under:

Teacher role

School —

    (i)   Teacher-pupil
   (ii)   Teacher-colleague
 (iii)   Teacher-administrator

Community —

    (i)   Teacher-parent
   (ii)   Teacher-community
 (iii)   Teacher-society

World —

    (i)   Teacher-world society

The Teachers' Role and Personality Model (*Figure 10*) and the Teaching Model (*Figure 6*) were introduced to illustrate these role expectations and functions.

4.10   The tasks devolving on the teacher in each of these roles were then identified as given below. It was recognized that these were by no means comprehensive. Tasks involved in self-improvement were also identified as these have a bearing on all other tasks.

   I. *Tasks devolving on the teacher in his role in the school*

     A. *Formulate instructional objectives*

        1. Acquire familiarity with the following aims and functions of education in order to help pupils

          (*a*) Learn to learn — by developing the necessary cognitive, psychomotor and affective skills such as

             (i)   Effective and aesthetic expression — oral and written
             (ii)   Literacy and numeracy
           (iii)   Skills in identifying and solving problems, such as a habit of inquiry, art of questioning, and research skills
           (iv)   Good study habits
             (v)   A desire for continued learning
           (vi)   Resourcefulness in meeting new situations
          (vii)   Critical and creative thinking

          (*b*) Develop a self-concept, characterized by democratic values and attitudes

             (i)   A sense of duty, responsibility and loyalty, and a spirit of cooperation

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(ii) Respect for one's own country and a spirit of dedication for its development

(iii) Respect for the dignity of man

(iv) Respect for the dignity of labour

(v) Awareness of interdependence

(vi) International understanding

(vii) A sense of aesthetic appreciation

(viii) Eagerness to participate in productive work

(ix) Achievement motivation

(c) Promote good habits of living, characterized by

(i) A feeling of security

(ii) Good health habits

(iii) Good human relations

(iv) Good work habits

(v) An extension of the self to others

(vi) Multiple interests, which would help utilization of leisure profitably

2. Formulate objectives in terms of expected pupil behaviours (clarity)

3. Formulate objectives appropriate to the level of the pupils (viability)

B. *Secure a cooperative classroom climate*

1. Know pupils as individuals and give them personal and educational guidance

2. Form ability groups, work groups, discussion groups, etc.

3. Devise democratic methods of class management

4. Promote harmonious class interaction

C. *Organize learning experiences*

1. Organize learning experiences relevant to stated instructional objectives (primarily educational)

(a) Prepare a variety of instructional materials

(b) Examine critically and recommend reading materials according to the level of the pupils

(c) Provide learning experiences to pupils according to their abilities, interests and aptitudes

(d) Develop an activity approach to learning

(e) Acquire, select and use effectively a wide variety of materials and techniques

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(*f*) Adopt and apply current developments in the subject fields and in educational theory and practice

(*g*) Utilize teaching aids including the hardware of educational technology

(*h*) Clarify difficult concepts and processes through providing experiences

(*i*) Relate subject matter to pupils' real life or interests

(*j*) Make communication of ideas a free-for-all process

(*k*) Devise methods to promote interaction among pupils at the maximum

(*l*) React appropriately to pupil responses

(*m*) Provide opportunities to pupils to search out facts, find their relationships, interpret them and arrive at conclusions

(*n*) Provide experiences to facilitate development of skills in identifying and solving problems

(*o*) Make learning a process of 'inquiry' and 'discovery'

(*p*) Provide challenges for continued learning

(*q*) Provide opportunities to develop clear and critical thinking

(*r*) Encourage initiative and creative thinking

(*s*) Organize co-curricular activities to develop individual potentialities

2. Encourage group dynamics (objectives partly social)

(*a*) Devise experiences for promoting democratic group processes in learning and decision-making

(*b*) Provide opportunities to work out group projects

(*c*) Provide situations which promote international understanding

(*d*) Provide experiences (art, drama, music, etc.) for developing a sense of aesthetic appreciation

(*e*) Organize intra-class, inter-class and inter-school debates, discussions and athletic activities

3. (*a*) Use resource persons to enrich teaching and learning

(*b*) Improve teaching and learning as a result of feedback information obtained

(*c*) Devise situations to promote self-discipline in class

D. *Assess learning and teaching*

1. Diagnose pupil needs and difficulties

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2. Assess abilities, interests and aptitudes of pupils (for counselling)

3. Assess pupil growth and development

4. Assess pupil achievement of learning goals or objectives (to obtain feedback)

5. Construct class tests to assess achievement in subject areas

6. Analyze and interpret scores on tests

E. *Help in school administration*

1. Maintain registers, collect fees, keep records, etc., pertaining to the class

2. Serve in committees within the school (administrative and academic)

3. Organize, supervise or participate in the school's extra-curricular activities (staff and student activities)

4. Help in running school's welfare services

5. Help building up *esprit de corps*

6. Suggest revision of curriculum and take part in such revision (where this is within the powers of the school)

II. *Teacher's tasks in relation to community*

1. Play the role of a guide and counsellor to members of the community, especially in rural areas

2. Give leadership to the social and cultural activities in the community

3. Establish and maintain friendly relationships with parents and public and learn about the socio-economic and cultural background of the pupils

4. Participate in community education through working in adult literacy and social education activities

5. Influence those in community to utilize their leisure profitably

6. Help in the rural uplift activities and other aspects of community development, along with other social service agencies

7. Work for parent-teacher cooperation through organizations like the PTA for promoting the welfare of the children at school and for ensuring a suitable climate for their education at home

III. *Teacher's tasks in relation to the world*

1. Promote civic sense and international understanding

2. Effectively communicate new ideas and practices to the public and thereby help social change

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IV. *Tasks involved in self-improvement*

1. Acquire skills for self-improvement

2. Acquire familiarity with the country's educational system and problems

3. Keep abreast with current developments in one's subject fields and in educational theory

4. Be sensitive to the country's economic development and the process of social change

5. Be a continuing student, taking part in in-service courses, seminars and conferences for upgrading qualifications or updating one's knowledge and competencies

6. Engage in peer-group discussions

7. Use feedback information in the classroom to improve teaching and learning

8. Develop professionalism and follow its code of ethics

4.11   *Formulation of Basic Concepts of Teacher Education*

I. Before drawing up the concepts a study was made of

A. The syllabi models presented in the *Final Report* of the Regional Meeting of Teacher Educators in Asia, Quezon City, Philippines, 23rd September to 3rd October 1969, convened by Unesco with the cooperation of the Asian Institute for Teacher Educators.

B. The 10 concepts identified by Charles A. Reavis and Frank R. Whittacre in *Professional Education of Teachers: A Spiral Approach*.

C. The basic concepts tabulated by the members of the group.

II. The basic concepts were then formulated and broadly categorized under:

A. The personal aspect of teacher preparation

B. The professional aspect of teacher preparation

A. *Personal*

1. The teacher is an integrated individual. The teacher is both human and humane.

2. The teacher is a morally responsible and cooperative member of a democratic society.

3. The teacher is an effective communicator.

4. The teacher is a possessor of right attitudes to (*a*) knowledge and work, and (*b*) life.

5. The teacher has aesthetic appreciation.

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B. *Professional*

1. The teacher is a member of an educational institution.

(*a*) He has to deal with (i) his superiors, (ii) his peers, and (iii) children.

(*b*) He has to help children learn.

(*c*) He has mastery of subject matter.

(*d*) He has mastery of professional theory and methods.

(*e*) He has mastery of the art of communication.

(*f*) He has knowledge of organizational and administrative procedures.

(*g*) He is guided by professional ethics.

(*h*) He is a socializing agent.

(*i*) He is an innovator.

2. The teacher is a member of the community.

(*a*) He is guided by the spirit of service.

(*b*) He is a change agent.

(*c*) He has to assist in community education and development.

(*d*) He has to assist in promoting national integration and international understanding.

4.12 The abilities required for discharging the roles properly were then identified and classified under three heads: those which contribute to personal competency, subject matter competency and professional competency.

1. *Personal competency:* Knowledge of customs (social and religious)

culture and traditions

essentials of democracy

aesthetic appreciation and expression (art, music, dance, drama, etc.)

keen civic and social consciousness

right attitudes to (*a*) knowledge and (*b*) work

faith in human dignity

— to be developed through general education.

2. *Subject matter competency:* knowledge of academic subjects

— to be developed through specialization.

3. *Professional competency:* ability to understand and apply

(*a*) bases of education (philosophy, psychology, etc.)

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(b) theories of learning in relation to child development and behaviour

ability to communicate effectively
ability to handle subject matter
ability to understand and adopt teaching methods
ability to use teaching aids and facilities
ability to organize and implement programmes
(curricular and co-curricular)
ability to evaluate pupils' performance and achievement
ability to evaluate self and grow professionally

— to be developed through professional education.

These three competencies, when integrated, help the teacher in making proper decisions spontaneously on professional matters.

Professional decision-making competency is the result of —
{
personal competency
subject matter competency
professional competency
(including student teaching)
}

A *diagram* to show this integration was also worked out:

Diagram 1: Integration of Teaching Competencies
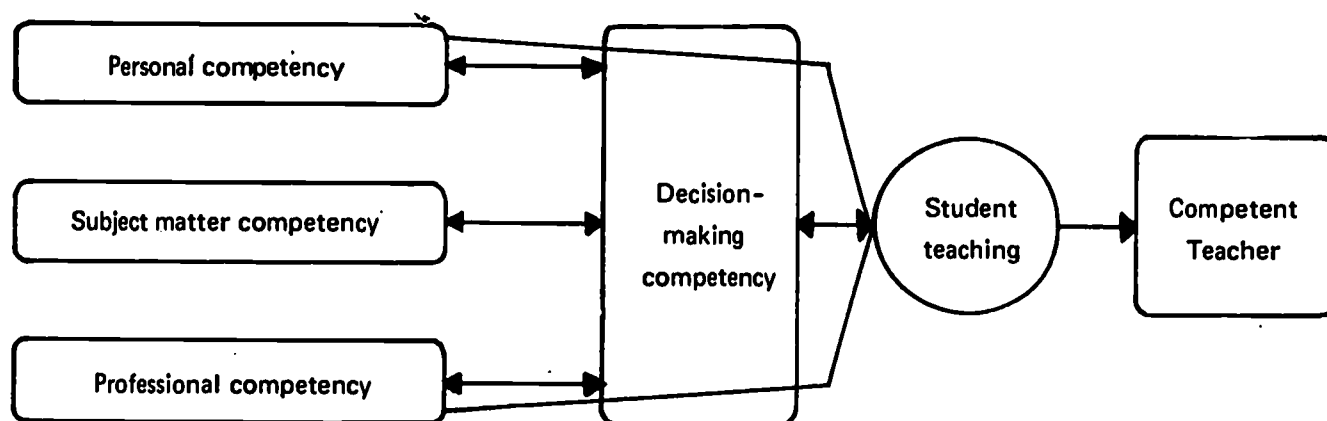
4.13   The subjects of the professional curriculum to which the basic concepts are to be related were taken from the Model Syllabi prepared by the Regional Meeting. They were listed as follows:

1. Foundations of Education (philosophical, psychological, sociological)

2. Teaching Materials and Methods; Evaluation and Research

3. School Organization and Administration

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    4. Community Education

    5. Health, Physical and Recreational Education

    6. Education in Practical Arts

4.14   The content areas to promote competencies were then grouped under each competency to be developed through them, as presented in the following *table*.

Table 1 — Content Areas to Promote Competencies

| I. To achieve personal competency the student teacher should be given a selection of the following areas of studies: | 1. The nature and scope of philosophy
   a. Why study philosophy
2. Philosophy and education
   a. Aims and objectives of education
   b. Freedom and discipline
   c. The content of education
   d. National philosophies and education
   e. Educational problems and their philosophical aspects
3. Education and values
4. Agencies for education
5. Education and social change
6. Education and social mobility
7. Interaction between school and society
8. The school and the community
9. Education and national integration
10. Incentives to teachers — economic and social
11. Community education — concepts and aims (social and economic)
12. Community development — fundamentals and purposes
13. Community education and the school, and concept of continuing education
14. Mass media and community education
15. Out-of-school education
16. Adult education — nature and scope, importance |

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II. To achieve subject matter competency the student teacher should have a sound knowledge of the following commensurate with the grades of pupils he is educated to teach in schools:

17. Literacy teaching — meaning and goals

18. Functional literacy — concept and scope

19. Problems in teaching adults

20. Integration of literacy instruction with community education

21. Importance of aesthetic studies (arts and crafts, music, drama) for teachers for personal development and effective teaching

1. Language

2. Mathematics

3. Sciences

4. Social Studies

5. Aesthetic Arts

6. Practical Arts
   (etc.)

III. To achieve professional competency the student teacher should be given a selection of the following areas of knowledge:

1. Why study philosophy of education

2. Relationship between philosophy and educational systems

3. What is education — the different concepts of education and their implications

4. Aims and functions of education — the individual and societal aims

5. Brief review of the historical and economic development of the country and region

6. Teaching as a profession

7. Nature and scope of sociology

8. The functions of the school

9. The school as a community

10. Informal agencies for education

11. Education and national integration

12. Education and international understanding

13. Psychology — meaning, nature and scope

14. Educational psychology — the learner, the learning process and the learning situation

15. The science of child study — and its contributions to educational process

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16. Methods and approaches to child studies

17. Basic concepts of child growth and development

18. Characteristics of development

19. Needs and developmental tasks of children

20. Individual differences — physical and psychological

21. Personality development

22. The learning process

23. Learning theories and their application in teaching

24. Principles and procedures in curriculum development

25. Locating, collecting and collating required information for teaching

26. Methods of preparing resource material

27. Audio-visual aids — locating, selecting, using and maintaining

28. Traditional and modern methods of teaching — and knowing the difference

29. Techniques of teaching — understanding the various types used

30. The use of textbooks — selection and use of manuals and guides, pupils' workbooks

31. The art of questioning

32. The art of presentation of lessons

33. Procedures involved in the teaching of skills

34. Uses of examinations and evaluation

35. Instruments of evaluation

36. Standardized tests and their uses

37. Simple principles of diagnostic testing

38. Literature on educational research and studies

39. A simple introduction to types of educational research

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40. The methods of action research

41. The idea of the classroom

42. Classroom organization—pupils and furniture

43. Classroom routines

44. Classroom management — discipline and relationship with classroom activity

45. Rewards and punishment

46. Different approaches to behavioural problems in the classroom

47. Planning of work schedules for maximum use of school facilities

48. Organization of school activities

49. School policies and regulations

50. Organization of school services

51. Organization of co-curricular activities

52. Staff council — composition, functions and responsibilities

53. Organizing the school for community service

54. Considerations in the selection of school sites

55. Provision, equipment and care of special rooms in schools

56. Types of school management

4.16   The group reports were presented in a Plenary Session for discussion. The major issues borne in mind were:

(a)   correlating the teachers' tasks with the basic concepts of teacher education,

(b)   determining the curriculum pattern in the light of this correlation, and

(c)   discussing the possible modernization of materials, methods and technology.

4.17   The correlation of the teacher role-personality factor with the basic concepts and teacher's tasks was viewed as in *Diagram 2* on page 24.

4.18   With this correlation in mind, it was possible to develop Integration Models for the teacher education curriculum with in-built flexibility for two-year or four-year courses, as illustrated diagrammatically in *Figures 11* and *12*. The Workshop observed that the time allocation should be left open for determination by Member States, but emphasized that for purposes of continuity, provision must be made for those completing Year II in *Model I* to go into Year III of *Model II*.

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Diagram 2: *Correlation of Teacher Role-Personality with Basic Concepts and Teacher's Tasks*
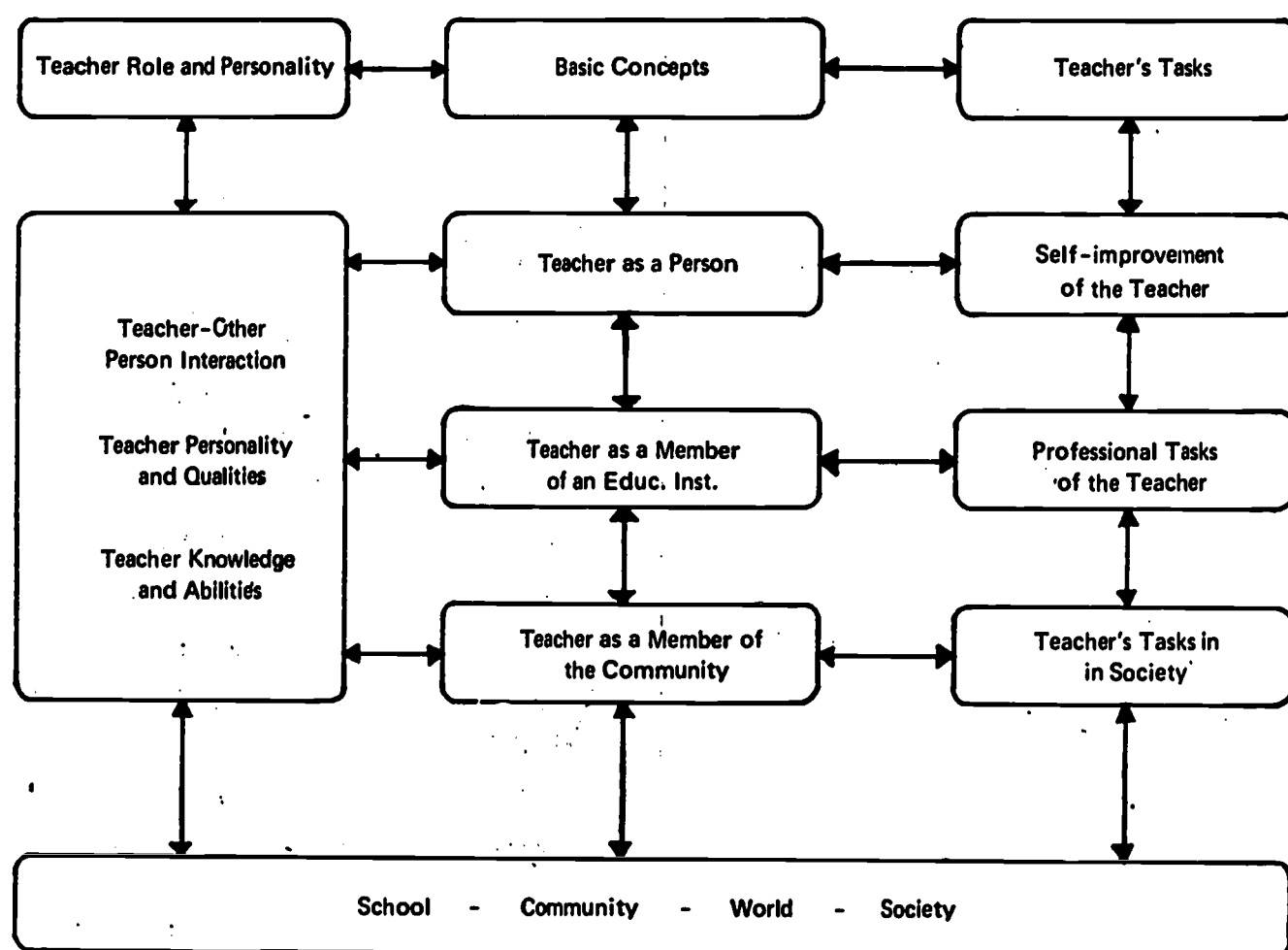
4.19   The basic concepts in teacher preparation, formulated in the light of teacher expecta-
tions and competencies, are to serve as a guide for all Asian countries in the teacher
education programme in the seventies. The two models worked out for the two levels of teacher
training would illustrate one way of sequencing concepts for vertical integration:

Model I — Fundamental concepts for a Two-Year Course for Primary and/or Secondary
Teacher Preparation

Model II — More difficult concepts for a Four-Year Course for Primary and/or Secondary
Teacher Preparation

The following assumptions were kept in view in formulating the Models:

(*a*)   The teacher is an integrated whole whose education is undertaken in three broad
areas:

    (i)   General education   — for personal growth
   (ii)   Academic education   — for personal and professional growth
  (iii)   Professional education — for professional growth

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(b) The entrance qualifications and duration of teacher preparation determine the course content. At present they vary between 10 to 14 years of schooling and 1 to 4 or 5 years of teacher training.

(c) The components of the teacher education programme are closely related to the teacher competencies to be attained.

The Integration Models worked out for the two levels are offered as a guide to help sequencing of the curriculum for the teacher education courses organized at varying levels and for varying durations. It was felt that it would be unrealistic if the Workshop were to attempt a grouping of content areas for the two different levels, as no content area is simple or difficult per se.

4.20   With regard to the content areas, the Workshop also observed that while these should be determined by Member States, a proper balance between the main components of (i) research on and development of teachers' personalities and attitudes, (ii) the core curriculum of effective courses in applied psychology, sociology, etc., (iii) effective courses on research methodology, and (iv) philosophical, psychological and social foundations of education should be maintained to promote the desired change processes and to produce the desired outcomes. This is explained in Figure 9.

C. Workshop on Modernization

4.21   In terms of the interacting model as depicted in Figure 3, modernization of teacher education consists of modernization of the educational bases and objectives, the contents, materials and techniques, the process of behavioural change and of the expected outcomes of this process.

4.22   The three broad components of the instructional process—methods of teaching, content structure, and teaching aids — in relation to educational objectives, behavioural objectives and evaluation plans and procedures is explained diagrammatically in Figure 6.

4.23   With this rationale, the Workshop was again divided into two working groups (B-I and B-II) to work on modernizing organization and techniques. (For list of participants, see Appendix III.) The techniques were differentiated as those which pertained to teaching in the classroom, and those which related to the use of technology in teacher education. Techniques in student teaching were considered separately. The Workshop adopted the following general points from the report prepared by the groups and made a Statement.

1. Techniques of teaching

Teaching techniques employed should encourage the spirit of inquiry, research and self-study. The new techniques should also promote pupil-pupil, and pupil-teacher interaction to foster close cooperation in the classroom and to realize the ideals of democracy. To encourage the spirit of inquiry, the process approach and the discovery method are recommended in the teaching of science. Accompanying this approach is the design and use of instructional materials (software) and the use of technological aids (hardware). This approach is recommended not only in the teaching of the sciences but the humanities and arts as well.

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Technological support to the teaching-learning process is outlined below:

Table 2 — Technological Support to the Teaching-Learning Process

A *Teaching-Learning Process*	B *Educational Software*	C *Educational Hardware*
inquiry, research, self-study laboratory experiences brainstorming, questioning discussion, workshop, seminar activity, role-playing group processes, group dynamics creative processes [socially materially team teaching tutorial teaching simulation teaching micro-teaching etc.	curriculum laboratory teaching materials teaching materials centres individualized programmes programmed instruction etc.	technological aids improvized devices audio-visual centres teaching machines language laboratories radio television: ITV — instructional television ETV — educational television CCTV — close circuit television etc.

RESEARCH AND EVALUATION

Explanatory Notes:

A. Some methods advocated are listed under teaching-learning process. These suggest approaches that will encourage initiative and promote self-study, project work, experimentation, and discussions stimulated by brainstorming, etc.

   In the teaching-learning process we are moving away from the teacher-centered concept and pupil-centered concept to a learning-centered concept which is an integrated approach in which both the pupils and the teacher play equally significant parts. The pupils and the teacher learn from each other in a give-and-take situation. The inquiry-discovery approach is re-emphasized because the main purpose of teaching today is to teach the children to learn. The students should be helped to see and understand the pattern of study to help them to help themselves — to keep up with the explosion of knowledge in the world of today and the world of tomorrow.

B. The materials that are to be used to support the teaching-learning process are itemized under Educational Software.

C. The new teaching-learning process is further reinforced with the use of modern sophisticated technology as described in the Educational Hardware column.

As reported by some participant Member States, some progress is being made but much more progress can be made and has to be made, and we have to act quickly. However, teachers are reminded that modernizing should be related to the findings of research in teaching. They are further cautioned not to throw all old methods overboard but to integrate the best in the old methods with the new approaches.

2. *Technology in Education*

A. *Rationale*

Technology in education is not a new concept in Asia and, considering the low economic level of the countries in this region, it may be seen that its use is fairly advanced in most of the developing countries. Comparatively, the western countries are way ahead in the use of technological aids.

Most of the developed as well as developing countries are faced with three educational crises:

(*a*) the rapid increase of student population,
(*b*) lack of competent instructors and
(*c*) the explosion of knowledge.

These, in turn, create problems of

(*a*) quantity and
(*b*) quality in education.

Technology can contribute substantially to meet these crises.

(*a*) To cope with enlarged and expanding classes, the use of technological devices like radio and TV have become necessary. The radio and television instructors are experts in their subjects and they can reach more children and influence them more effectively. Radio and ITV teaching are team teaching in which the class teacher cooperates to reinforce learning. Quality improvement and mass education are achieved together.

(*b*) The quality of teaching can be improved and learning can be facilitated in individualized instruction. Programmed materials can be utilized for this. In a programmed learning situation, the student can progress at his own rate and is benefiting from the cooperative effort of a team of competent instructors.

Thus, by introducing the new software and hardware into the system of education, the instructional programme can be made more effective. Instruction through mass media is to be supplemented by individualized instruction and the tutorial system.

To use software and hardware to advantage, we have to instruct not only the teachers but also the pupils in the utilization of these modern devices. We have to be more specific in regard to our objectives; and we have to select instructional strategies to realize the objectives

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of the course content. These instructional strategies should include the use of technological devices to make teaching more effective and learning more meaningful and permanent.

B. *Selection and Construction of Hardware and Software*

Some technological devices and materials have been developed in Asia; others are produced in Western countries. The task of the instructor is one of selection. A more difficult task in using most of these devices is that we have to make our own materials to accomplish our own educational objectives. The programme designer should consider the cooperation of those who will use and will assist in the use of materials and devices. The instructor, the instructional specialist and the media specialist should work closely together (*Figure 14*). The private, commercial sector should be encouraged to work hand in hand with the government, universities, and the professional organizations in producing instructional materials.

C. *Utilization and Evaluation of Technology in Education*

(a) Utilization courses may be run periodically to help the users of technological aids.

(b) Continuous evaluation has to be made to assess the benefits of modern technology in the different aspects of education and these reports should be published.

D. *Steps to be Taken to Help Modernization of Teaching*

(1) In order to incorporate the technology of education as a vital part of the education of the teacher, it is time that technological devices are selected or designed and constructed, and the technology of education incorporated into the teacher education curriculum.

(2) An organization should be set up to design and produce software to use with the hardware. The responsibility of this organization should be (i) not only to select, design and construct instructional materials but (ii) to do research and evaluation in this field.

(3) Courses may be run on the utilization of new materials, aids and the experimentation of new techniques with the cooperation of outside organizations in providing the expertise and funds.

(4) Special arrangements should be made for the teacher trainees and teachers in service to visit pilot demonstration centres and observe the use of technology in education and to go on study tours to progressive schools and learn new ideas developed in organizing the teaching-learning process.

(5) Teacher education should bring about an attitudinal change in teachers. Teachers should try to improve and to improvize — all through their professional life.

(6) The teacher education institutions should take the lead in modernization. All new techniques should be adopted in the teacher education institutions (e.g., team teaching), to expose the teachers-in-training to the new ways of teaching, if these are to percolate to the schools.

(7) Some provision should be made for a teacher exchange programme among the various teacher education institutions for students to broaden their outlook and extend their in-campus and out-of-campus experiences. This idea is sketched, thus:

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Diagram 3: A Teacher Exchange Model

Teachers' College A ⟶ In-campus experience

Teachers' College B ⟶ Out-of-campus experience
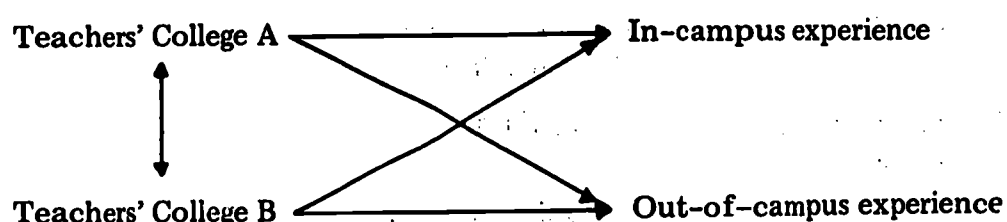
(8) Necessary steps should be taken to help administrators realize that changes are taking place in the teaching-learning process and to encourage the teachers to improve and improvize, by giving some form of recognition to teachers who are innovative and progressive. In-service courses, conferences, seminars and workshops should therefore be organized for all connected with education — administrators, supervising staff, etc., and whatever innovative ideas are given in the in-service courses should also be included in the pre-service courses, without much time-lag.

3. Student Teaching

Among the modern techniques to be used in student teaching, the following are recommended to be tried out with modifications to suit differing situations obtaining in the Member States.

1. Micro-teaching (peer teaching and observation, and demonstrations)
2. Tutorials
3. Simulation and role playing
4. Team teaching
5. Group dynamics (workshops, seminars, small group discussions, etc.)
6. Brainstorming

The techniques and their use in Asian countries are examined for wider applicability.

1. *Micro-teaching* is an innovative teacher education technique. It is a controlled situation, comprising a scaled-down teaching encounter, reduced in terms of both teaching time and number of students. The controlled situation is aimed at training student teachers in specific teaching skills such as set induction and questioning techniques. Video-taping is not essential but is a useful addition. Student teachers may participate at various points or on all points:

(a) in preparing and teaching a short lesson lasting 5 to 15 minutes
(b) in playing the role of pupils
(c) in observing how actual pupils behave
(d) in evaluating and making a critique of the lesson
(e) in making suggestions for improvement
(f) in re-teaching and re-evaluating.

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It is a valuable device with which to complement and supplement actual classroom student teaching. It could be used, for instance:

(a) to provide preliminary experience and practice in teaching before facing an actual class and help develop self-confidence.

(b) to develop specific teaching skills in student teachers during the entire training period.

(c) to provide with video-taped recording an opportunity for student teachers to observe their own performance, and thus improve their perceptions of their own teaching behaviours.

(d) to provide opportunities for a scientific and objective study of the teaching-learning encounter.

(e) to do research into the training effects under controlled conditions.

(f) to work toward the achievement of inter-rater reliability among supervisors of student teaching.

It should be realized that, in a way, micro-teaching is an artificial situation.

Experiments in micro-teaching, as conducted in some Asian Member States, are reported to show variations in practice.

(1) A Malaysian micro-teaching experience reported in the Working Group meeting is as follows: The focus was on 'skills in questioning'. The Science and Mathematics students were divided into 3 groups. The first group did not micro-teach but were in school for the whole teaching practice period. The other two groups spent half the period micro-teaching either before or after classroom practice. All students had to micro-teach the same topic for 15 minutes in both the pretest and the post-test. The purpose of this experiment was to assess the value of micro-teaching in the training of student teachers in Malaysia. The findings were:

(i) The performance of the group of student teachers who started off with micro-teaching before taking up practice teaching in schools was the best.

(ii) Those among the student teachers who had many years of teaching experience previously were also better.

(2) A version of micro-teaching experience, as observed in Thailand, was also reported. Instead of a video-tape, a tape cassette was used. The focus was also on a certain specific skill, later used as the focal point for the critique session.

(3) Another micro-teaching experience based on the students' analysis of educational objectives as derived from the curriculum was also reported. Focus was on precise statement of behavioural objectives, and a 'teaching model' was built. The teacher served as the catalyst to encourage pupils to ask questions; in other words, to inquire. The tape-recorded session was for the duration of 20 minutes, after which strong and weak points were listed during the analysis session.

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2. *Tutorials.* Singapore's experience of tutorials in the training of kindergarten teachers was reported. Two approaches were utilized, one at the commencement of a course where trainee teachers were shy, and needed assistance to stimulate them to participate freely at discussions. For the initial approach, themes/questionnaires were introduced by individual lecturers/supervisors to start the ball rolling. The second approach was used at a later stage when rapport between the teacher and taught had improved, and student teachers themselves would introduce topics or problems for group discussion. Person-to-person tutorials were also given in cases where the individual teacher trainee had special needs or problems.

3. *Simulation,* as an innovative technique, is a representation of a large-scale system or process. It is used for training in professional work. It is particularly useful in student teaching.

   The group tried out a simple 'In-Out Basket Simulation'. In this form of simulation, items that typically cross a teacher's desk and require action were reproduced and circulated for reaction and responses.

   The Workshop is strongly of the view that simulated experiences on instructional activities and problems, discipline or behaviour problems, relations with staff (professional and non-professional), and relations with parents would force a student to consider possible alternatives and develop perceptive skills, decision-making competency and sensitivity to classroom problems, and result in changing his behaviour through feedback.

   It offers a chance to err without causing damage, provides an element of reality, provides enrichment and maturity, and helps students see cues in solving problems.

4. *Role playing,* as a teaching technique, helps effectively to change behaviour as illustrated in *Diagram 4.* Student teachers could play different roles, e.g., those of administrators, different types of teachers one meets with in the school, etc. Roles can be assigned or played in each situation spontaneously. Good role playing will be much different from *acting* out roles. (See *Diagram 4* on page 32.)

5. *Brainstorming,* as a creative approach to teaching, must

   (*a*) present a need to answer or seek an immediate solution to a problem;

   (*b*) establish a climate of total permissiveness — a situation in which there is

       (i) no evaluation
       (ii) no rejection
       (iii) acceptance of all ideas regardless of how silly they may sound; and
       (iv) hitchhiking — of ideas — which is encouraged;

   (*c*) make an analysis of the original ideas recorded by using utilitarian criteria.

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Diagram 4: Changing Behaviour Through Role Playing

Behaviour

Theory ⟷ Practice

Change Through Role Playing

| Role Expectation | — | Position | — | Role Performance |

Evaluation and Feedback
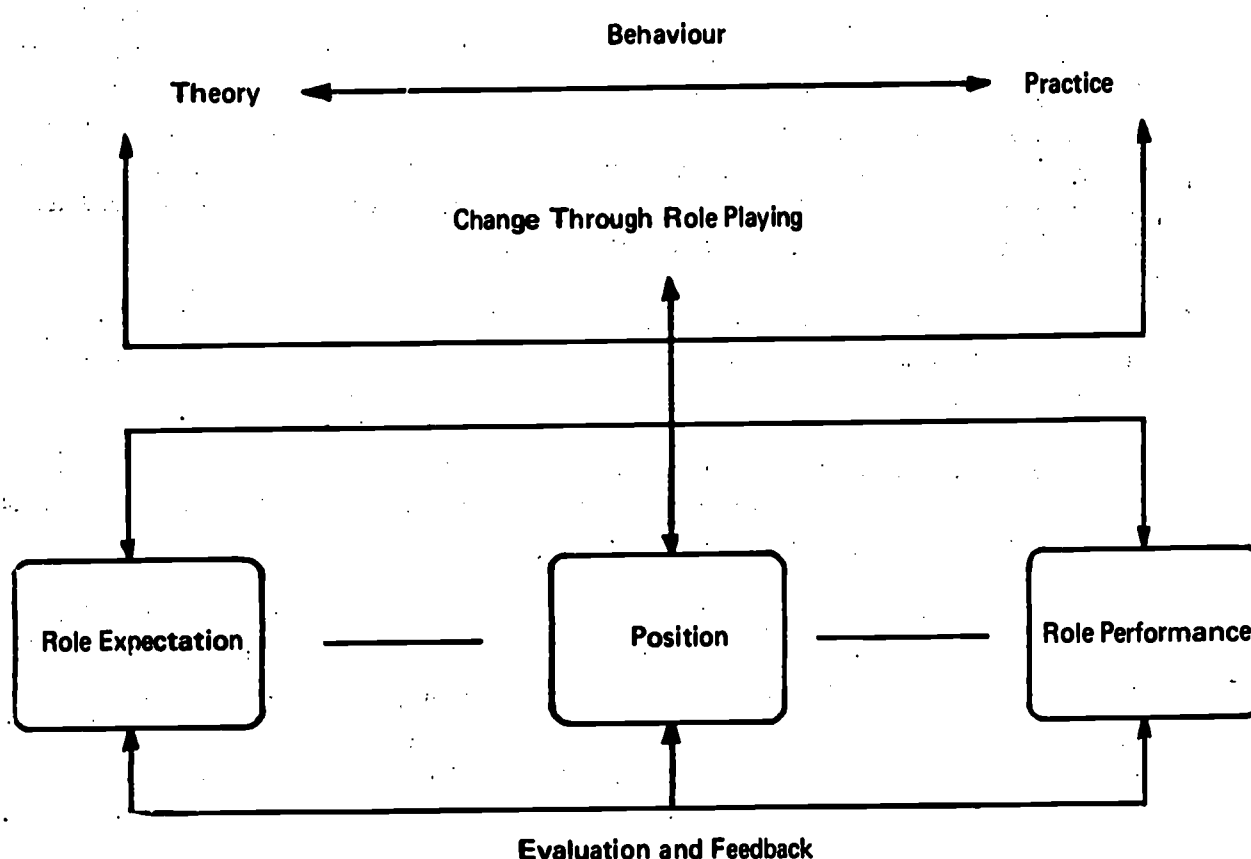
It can be used:

    (i) in translating educational objectives into behavioural terms;

   (ii) in finding out teaching and learning procedures appropriate for specific educational objectives; and

  (iii) in evaluating teaching and learning processes and outcomes.

6. *Team teaching* is necessary for integrating professional courses and concepts. It will always be advantageous to have a team of teachers sit together to discuss and teach, particularly in a 'General Methods' course.

7. *Group dynamics*. Small group discussions help to bring out initiative and give training in group decision-making. Their values are both social and educational.

OBSERVATIONS AND SUGGESTIONS

In the light of the deliberations during the Plenary Session and during meetings of the Working Groups, the Workshop agreed on making the following observations and suggestions.

5.1 General

Noting that in the past there have been several attempts to reform teacher education, institutionwise and statewise, and that there are still deficiencies such as

> (a) lack of relevance to existing social needs and aspirations,
>
> (b) divergence between theory and practice,
>
> (c) divergence between training institutions and the school systems,

this Workshop suggests that a complete reappraisal and reconstruction of the programme on the basis of a systems analysis should be made in order to improve the present situation.

5.2 Integrated Curriculum

> (a) The Workshop is of the opinion that steps should be taken to integrate primary and secondary teacher education. Wherever the problem is complex, the initial stage in this process may take the form of integration of primary and lower secondary teacher education.
>
> (b) The Workshop recognizes that curriculum revision and reconstruction in teacher education should take note of the desirability of having an in-built framework for horizontal integration.
>
> (c) The Workshop further feels that curriculum reappraisal in teacher education should be viewed from the perspective of educational development as an integrated whole, and should take cognizance of overall national development plans.
>
> (d) As an extension of the process of integration, the Workshop feels that comprehensive teacher education institutions providing courses for potential teachers for all levels — the kindergarten and primary and secondary schools — and all types — general education, special education and vocational education — should be developed.
>
> (e) The Workshop is of the view that teacher education would only profit by an inter-disciplinary approach making full use of the resources of other faculties in any institution.

5.3 Research

> (a) In view of the proposal for a total approach to reform in teacher education, the Workshop suggests that a Research and Development Centre for Teacher Education should be established in every Member State, and that support and assistance to establish and develop these centres should be given by regional and international agencies for education.
>
> (b) The Workshop feels that among the activities to be shouldered by the Research and Development Centre, priority should be given to the collection of research reports and instructional materials especially from Asian Member States and the dissemination of information relating to innovative practices, apart from serving as a clearinghouse for such materials.

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(c) To facilitate research in Asian Member States, the Workshop suggests that a list of research priorities should be prepared by a committee and that this list should be circulated.

(d) The Workshop suggests that personnel engaged in research and development in teacher education should be given assistance in the form of fellowships and grants and sponsored for teacher-exchange or training programmes by Unesco and other agencies in order to further their knowledge and experience.

(e) The Workshop feels that the spirit of research should be cultivated and promoted at all levels of education. This may take the form of

   (i) providing enrichment programmes to pupils in primary and secondary school levels which demand inquiry and research;

   (ii) farming out research projects on problems of education including problems of teacher personality and teacher preparation to different teacher education institutions, to be undertaken by the staff.

   (iii) providing a research orientation and courses on research methodology to student teachers in teacher education institutions.

5.4 Teaching Procedures, Methods and Techniques

(a) As a corollary to the development of an integrated teacher education curriculum, the Workshop feels that the teaching-learning process should be modernized by the introduction of innovations in teaching methods and techniques.

(b) The Workshop believes that to promote innovative approaches to teaching and learning, Unesco should assist Asian Member States in organizing seminars and workshops to explore and develop modern approaches to learning and gain experience in the utilization of new technological devices.

(c) The Workshop strongly feels that teacher education institutions should develop methods of measuring achievement-motivation and teaching effectiveness, as these would help in better teacher selection and teacher development.

(d) The Workshop suggests that emphasis should be given to the development of professional decision-making competency in the preparation of teachers, especially during student teaching.

(e) The Workshop feels that evaluation procedures should be clearly defined and carried out at every stage of the instructional process in the preparation of teachers.

5.5 Social Relevance of Teacher Education

(a) Keeping in mind the principle that teacher education should have social relevance, the Workshop feels that the curriculum should emphasize the processes of democratization and social change. Similarly, in the selection of candidates, a major criterion used should be their positive attitude towards democracy and modernization.

(b) The Workshop stresses that teacher education should be directly involved in the processes of social change and economic development, especially for the sake of harmonizing social and moral values with technological advancement.

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(*c*)   The Workshop suggests that in view of the importance of social relevance, teacher education should incorporate in its curriculum new subject areas like population education and developmental needs of the State; and in view of the importance of laying the foundations for right attitudes towards life, knowledge and society at the most formative stage, give emphasis to child psychology and pre-school development.

(*d*)   The Workshop believes that closer links should be forged between teacher education institutions and their neighbouring primary and secondary schools through contact programmes, school-improvement programmes, seminars and workshops, and that the teacher education institutions should serve as catalytic agents for innovation and change.

5.6   *Status of Teachers*

(*a*)   Recognizing that the teacher should play an important role in national development, the Workshop takes note of the need for maintaining high standards in the teaching profession, and believes this can be assured only by attracting better calibre students for teacher education.

(*b*)   The Workshop is of the view that due attention should be given to promoting the status of teachers and that the previous recommendations made by ILO and other agencies concerning upgrading of the status and salaries of teachers should be seriously studied for early implementation.

(*c*)   The Workshop strongly feels that salary grades for teachers should be based on their academic and professional qualifications and not on the levels of schools which they are to teach.

(*d*)   The Workshop firmly believes that improvement of the status of teachers in terms of academic and professional standards is the pivotal factor in any scheme of educational upgrading, and therefore recommends that facilities in the form of financial assistance and study leave should be provided by governments of Member States to teachers for improving their qualifications.

(*e*)   Noting that teachers should have opportunities for continuing education, especially in terms of innovative approaches to the teaching-learning process, the Workshop suggests that permanent centres for in-service education be established in every Asian Member State and that (*i*) in-service education be planned in graduated sequences to enable teachers to upgrade their qualifications and performance, and (*ii*) regular seminars and workshops be organized to promote and disseminate innovative ideas.

FIGURES

Figure 1: Economic Development Integration

A Manpower Development Process

Input

Process

Output

Economic Development Needs and Requirements

Social Development Needs and Requirements

Educational Development

Teacher Education Development

Higher Education Development

Secondary Education Development

Primary Education Development

Early Childhood Education Development

Manpower Development

Evaluation and Feedback

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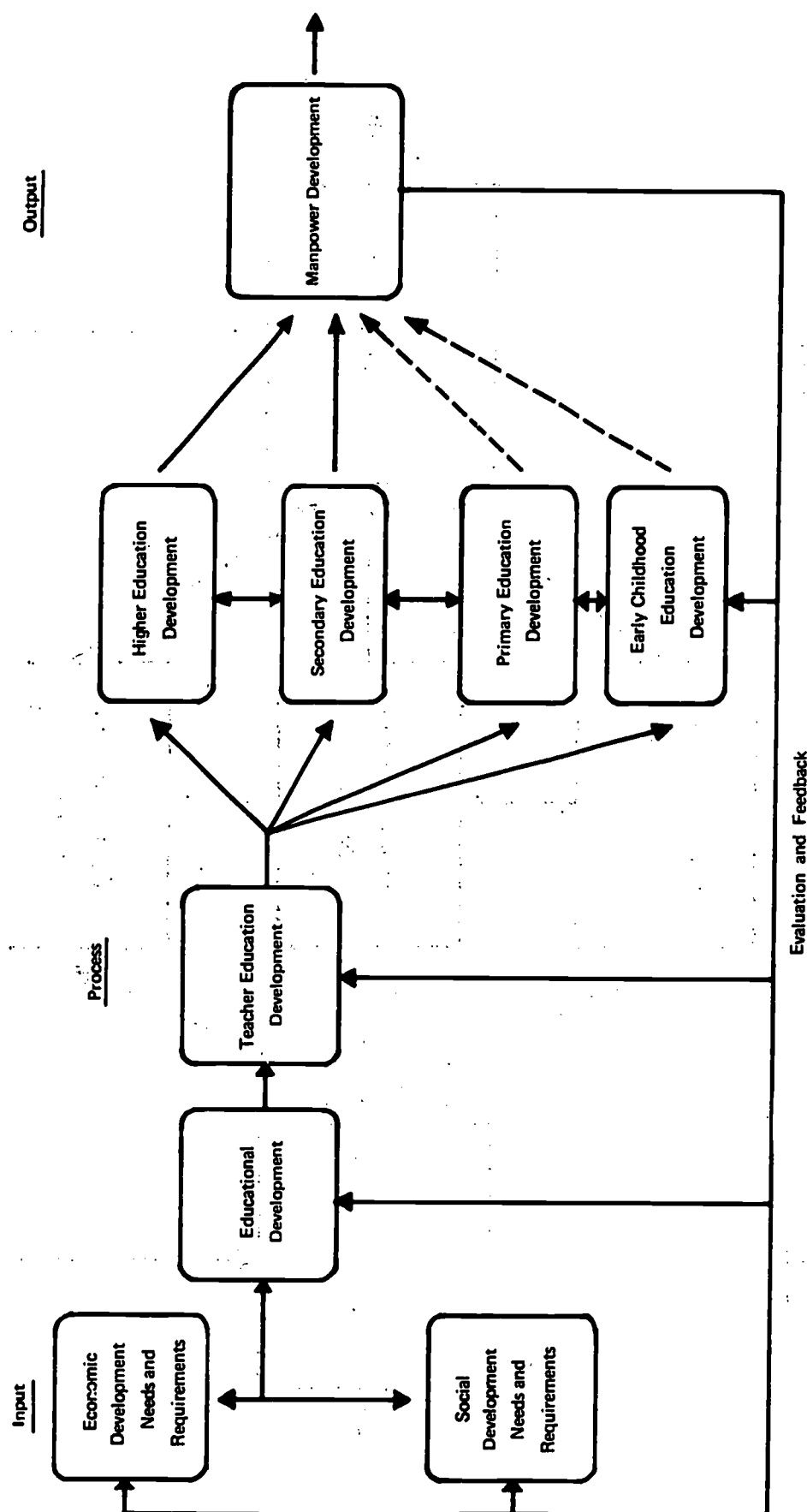
Figures

Figure 2: A National Development Process

Input

Process

Output

Developed Manpower

Natural Resources Development

Human Resources Development

Social Institutions Development

Developed Country

Evaluation and Feedback

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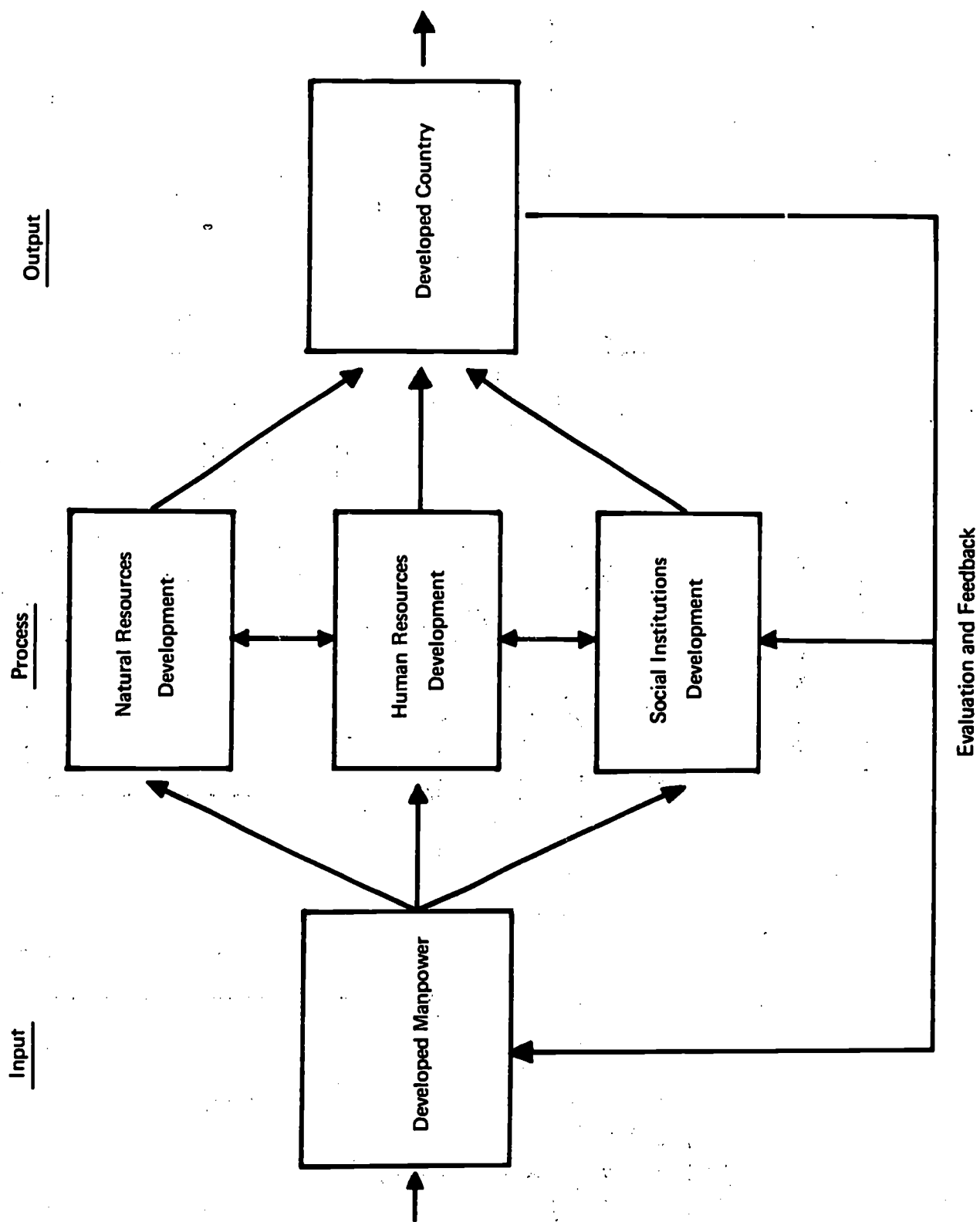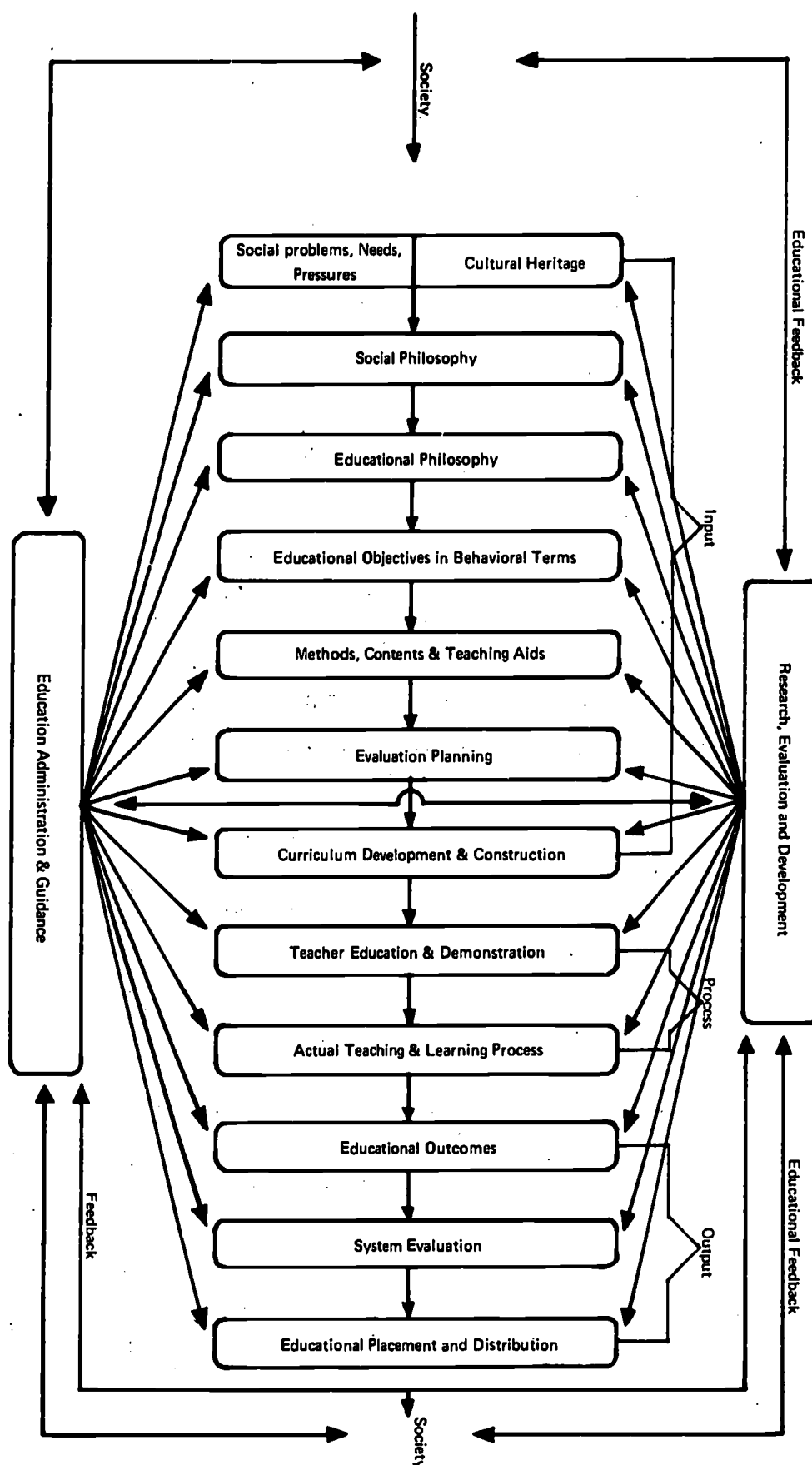
Figure 3: Professional Integration

Society

Social problems, Needs, Pressures | Cultural Heritage

Social Philosophy

Educational Philosophy

Educational Objectives in Behavioral Terms

Methods, Contents & Teaching Aids

Evaluation Planning

Curriculum Development & Construction

Teacher Education & Demonstration

Actual Teaching & Learning Process

Educational Outcomes

System Evaluation

Educational Placement and Distribution

Society

Education Administration & Guidance

Research, Evaluation and Development

Educational Feedback

Input

Process

Output

Feedback

Educational Feedback

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Figure 4: The System–Efficiency Model of Teachers
(A Two–Stage Model)

THE INPUT STAGE
TEACHER EDUCATION

THE OUTPUT STAGE
PROFESSIONAL WORK

Structure

Input → Conversion Process → Output → Input → Conversion Process → Output

Evaluation and Feedback

Dynamics

Educational Objectives
Expected Outcomes → Teacher Training
Learning → Outcomes
Teacher Competencies → Educational Objectives
Expected Outcomes → Teaching
Learning → Outcomes
Changed Behaviours

Evaluation and Feedback

Teacher Role and Personality

Developing

Performing

Basic Assumption: Learning is behavioural changes in the desirable directions as set forth in the educational objectives.

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Figure 5: A System of Working World
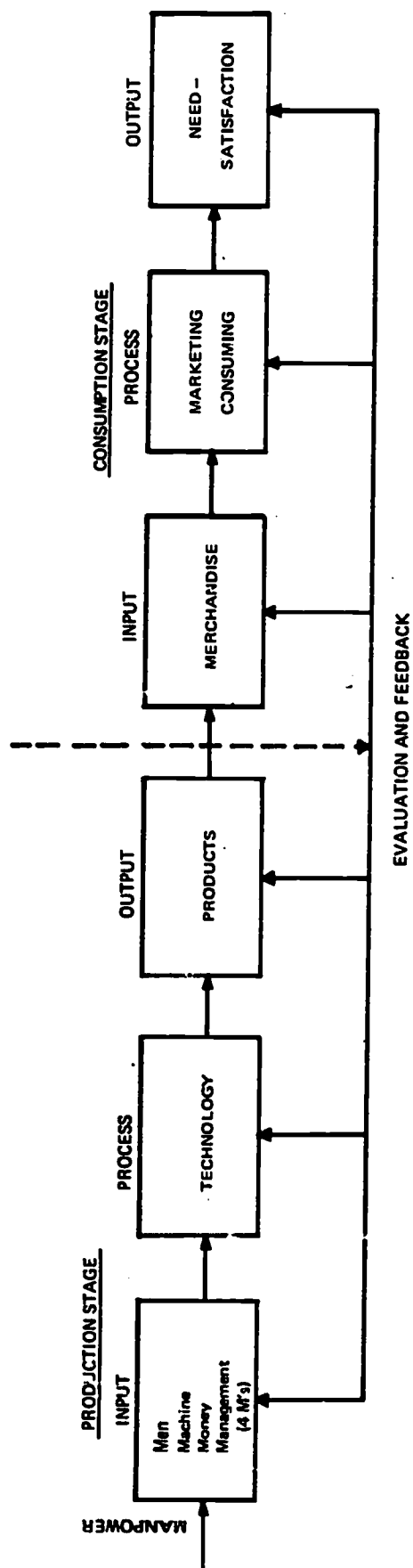
Figure 6: A Teaching Model

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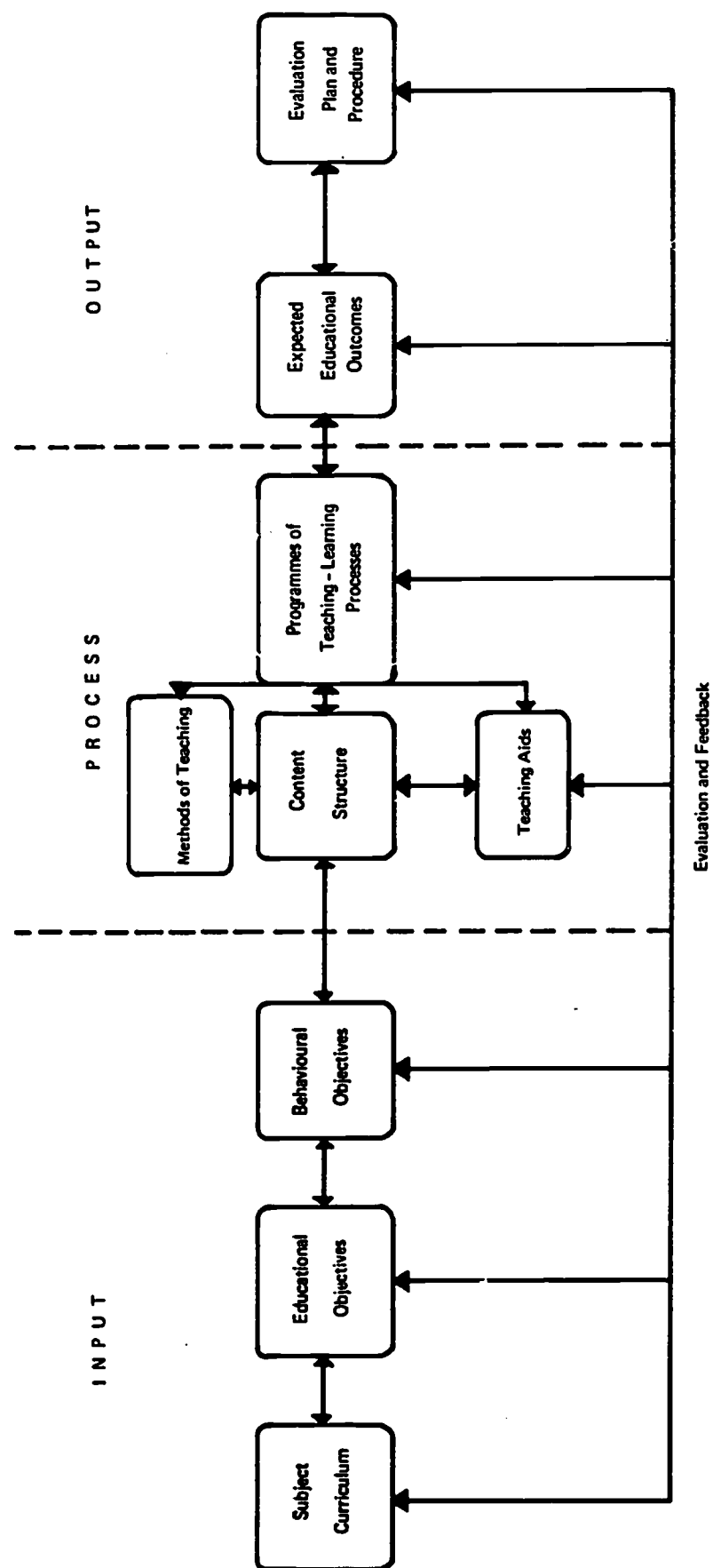
Figure 7: Social Development Integration
Education, Personality, Development and Social Change

Personal Perception Concept, Belief	Personal Values	Personal Goal
Interpersonal Perceptions	Group's Values	Group's Goals
Ideologies	Societal Values	Societal Goals
Cognitive	Affective	Conative

Individual Level or Personality

Group Level

National Level
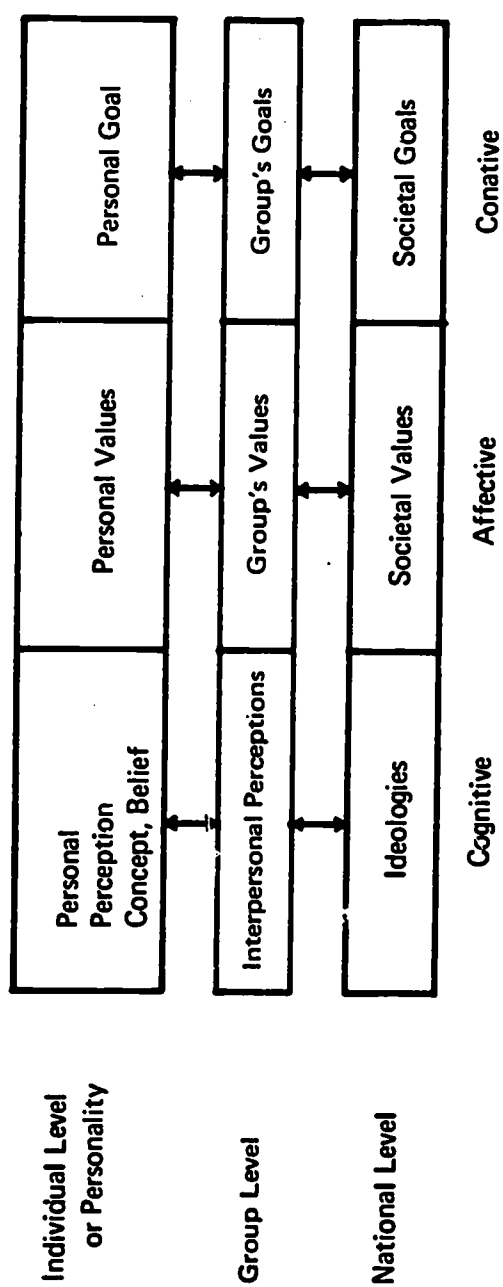
Basic Assumption: For effective Social Change, personality should be changed first.

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Figure 8: A Process of Personality Development and Social Change
(Personality Development of Student Teachers in a Pluralistic Society)
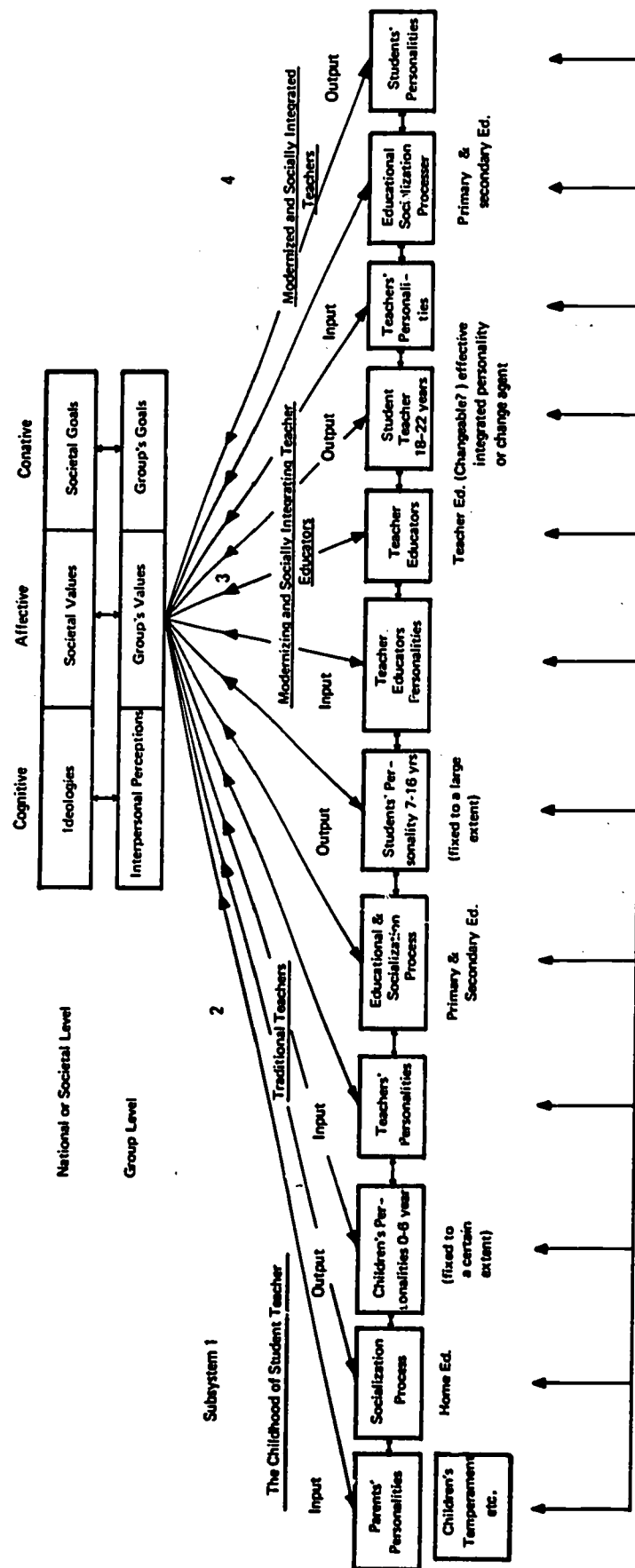
Figure 9: Basic Educational Programmes for Personality Development of Student Teachers

Input

Research on Teachers' personality as compared with others

Cross-Cultural Research on Personalities Attitudes

Core Curriculum of Effective Courses in Applied Psychology, Sociology, Social Psychology, etc.

Research methodology courses

Social, Philosophical & Psychological Foundations of Curriculum

Process

Self-Structure Analysis and Development

Group-Structure Analysis

Social-Structure Analysis

Output

Self Understanding

Interpersonal Understanding

Agent of Social Change

International Understanding

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Figure 10: A Teacher Role and Personality Model
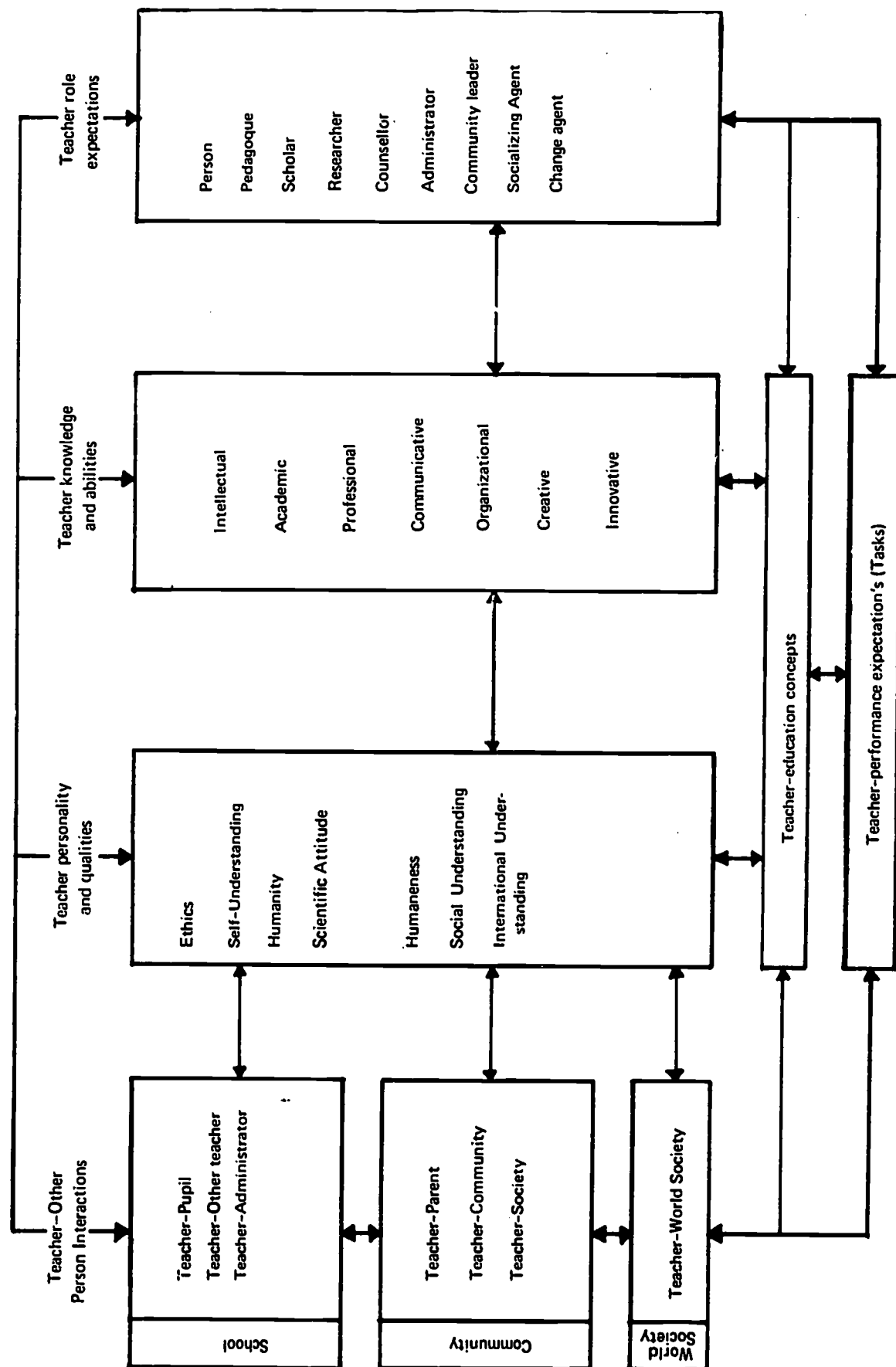
Figure 11: Integration Model I—Two-Year Course (Primary and/or Secondary)

Area or Areas of Concentration

General Education

Methods of Teaching Special Areas (Skills)

Education II (Foundation Courses linked with concepts)

Contents of School Subjects

Education I (Concepts-Introduction)

Student Teaching Practice

General Methods and Laboratory Experiences (Skills)

Laboratory Experiences

Working as Teacher Aid

Observation of Teaching

YEAR II

YEAR I
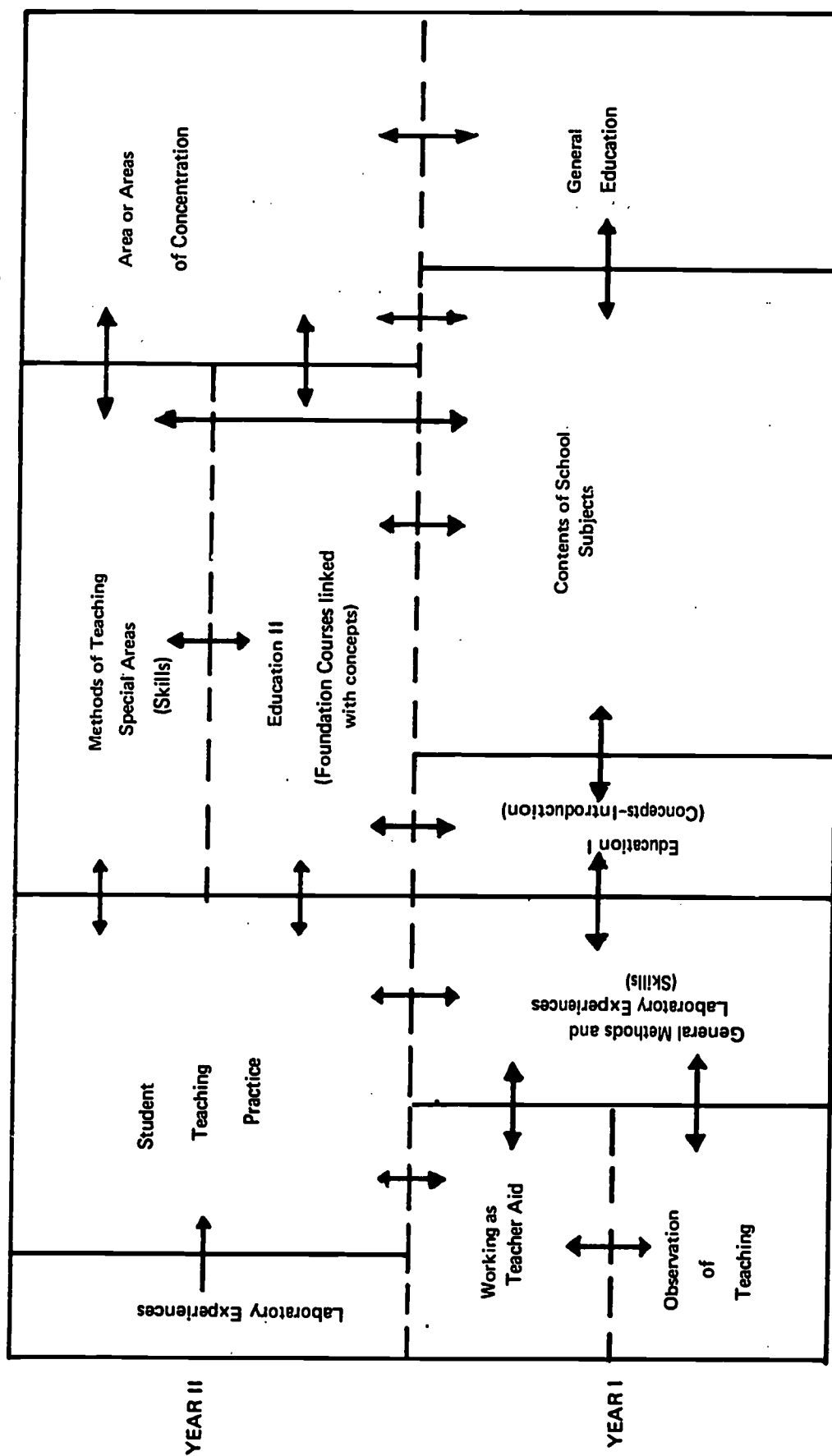
Figures

Figure 12: Integration Model II—Four-Year Course (Primary and/or Secondary)
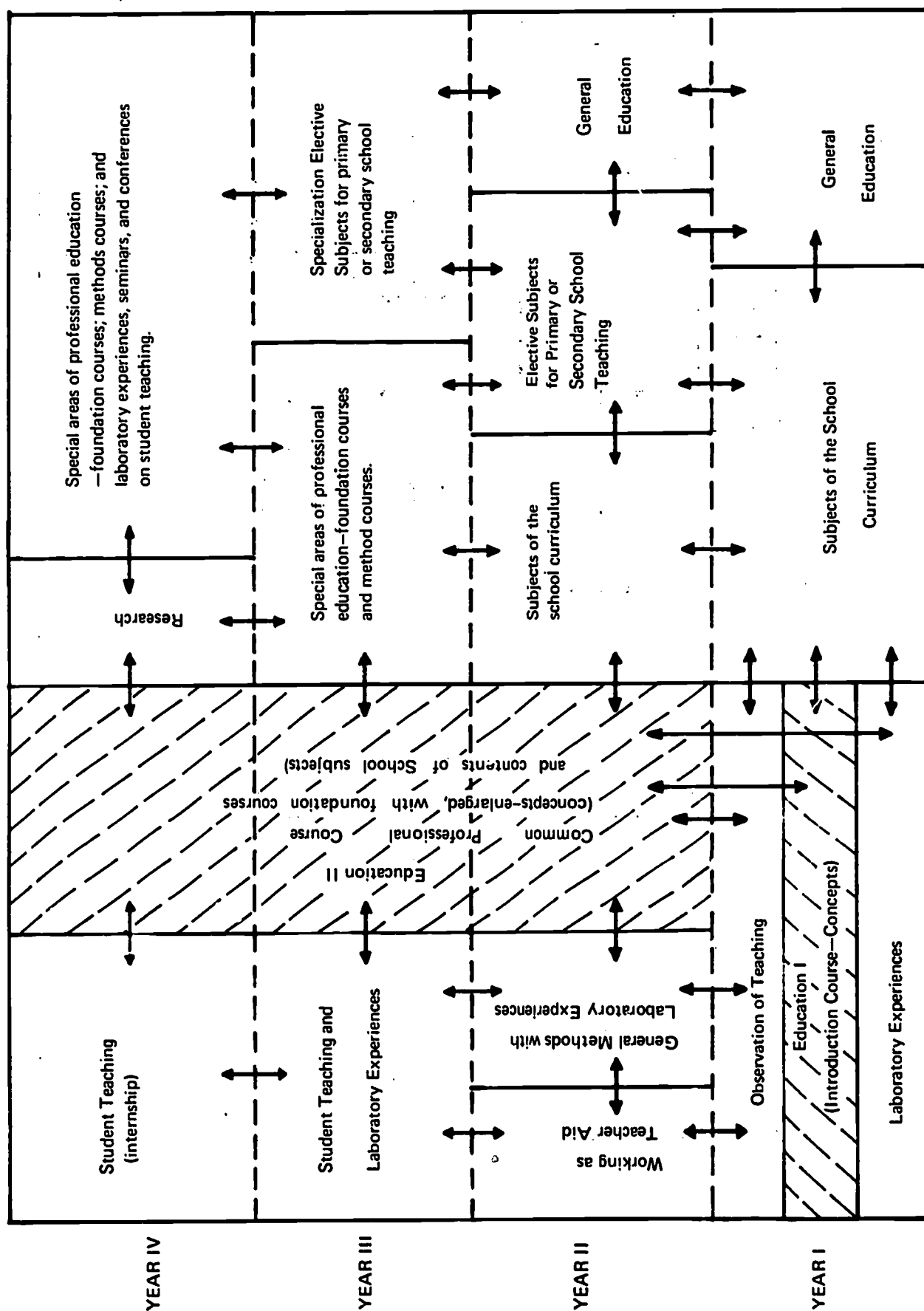
Figure 13: Teacher Educators–Student Teachers Interaction Model in the Process of Democratic Personality Development

Input

Extra–Curricular Activities

Cooperation between Teacher/student teachers

—Teacher educators and Student Teachers (Cooperation)

—Teacher educators and Student Teachers (as equals)

Process

Panel Discussion

Seminar

Symposium

Output

Understanding of:

—Democratic Processes

—Democracy

Better Attitudes Toward:

—Democratic Processes

—Interpersonal Relations and Interaction Between Teacher Educators and Student Teachers

Evaluation

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Figure 14: A Diagram to Show the Cooperative Effort of the Instructor, the
Instructional Specialist, and the Media Specialist in the Development
and Use of Instructional Materials and Technological Devices

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Curriculum Framework Model
Horizontally Integrated Approach in Area Courses

Theoretical Experiences   Practical Experiences

4th year	Gen. Ed.	Area of Specialization	Professional Ed.	Practice Teaching Experiences / Post-student Teaching Experiences
3rd year	Gen. Ed.	Area of Specialization	Professional Ed.	Participation, Lab. / Micro-teaching, etc.
2nd year	General Education	Area of Specialization	Professional Education	Laboratory / Participation
1st year	General Education	Area of Specialization	Professional Education	Observation of Classroom Teaching

Elementary Education   Secondary Education

General Education 35%   Area of Specialization 22%   Professional Education 43%

APPENDICES

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		Mrs. Somporn Torpradit Librarian College of Education Prasarnmitr
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		Miss Kattaliya Neokul Instructor of Economics College of Education Prasarnmitr

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AGENDA AND WORK SCHEDULE

November 1, Monday

8:30 - 9:00	Registration
9:00-10:00	Opening Ceremony
10:00-10:45	Getting Acquainted: Tea
10:45-11:15	Orientation for the Workshop
2:00- 3:20	Country Report: "Curriculum Development in Teacher Education" (Malaysia)
3:20- 3:40	Country Report: "Curriculum Development in Teacher Education" (Singapore)

November 2, Tuesday

9:00-10:20	Country Report: "Curriculum Development in Teacher Education" (Indonesia)
10:20-10:40	Tea
10:40-12:00	Plenary Session: Paper on "Integration — Horizontal and Vertical — of the Teacher Education Curriculum"
2:00- 3:30	Plenary Session (Continued)
3:30- 3:50	Tea
3:50- 5:00	Plenary Session (Continued)

November 3, Wednesday

9:00-10:30	Plenary Session: Paper on "Problems of Modernizing Organization and Techniques of Teaching, Including Student Teaching"
10:30-10:50	Tea
10:50-12:00	Plenary Session (Continued)
2:00- 3:20	Country Report: "Curriculum Development in Teacher Education" (Thailand)
3:20- 3:40	Tea
3:40- 5:00	Organization for the Workshop

November 4, Thursday

9:00-10:20	General Meeting on "Task Analysis of the Teachers' Role in a Democratic and Developing Country"
10:20-10:40	Tea
10:40-12:00	General Meeting on "Basic Concepts in the Preparation of Teachers"

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2:00- 3:20	Group Meeting
	Group I: "Basic Concepts in the Preparation of Teachers"
	Group II: "Task Analysis of the Teachers' Role in a Democratic and Developing Country"
3:20- 3:40	Tea
3:40- 5:00	Group Meeting I (Continued): Sequencing of the Concepts for Vertical Integration

November 5, Friday

9:00-10:20	Group Meeting I (Continued): Sequencing of the Concepts for Horizontal Integration
10:20-10:40	Tea
10:40-12:00	Meeting of the Two Groups
2:00- 3:20	Group Report on "Basic Concepts in the Preparation of Teachers"
3:20- 3:40	Tea
3:40- 5:00	Group Report on "Task Analysis of the Teachers' Role in a Democratic and Developing Country"

November 6, Saturday

9:00-10:20	General Meeting on "Integration of Teacher Education Curriculum"
10:20-10:40	Tea
10:40-12:00	General Meeting on "Modernizing Organization and Techniques of Teaching"

November 7, Sunday

Field Trip

November 8, Monday

9:00-10:20	Group Meeting
	Group I: "Integration of Teacher Education Curriculum"
	Group II: "Modernizing Organization and Techniques of Teaching"
10:20-10:40	Tea
10:40-12:00	Group Meeting (Continued)
2:00- 3:20	Group Meeting (Continued)
3:20- 3:40	Tea
3:40- 5:00	Group Meeting (Continued)

November 9, Tuesday

9:00-10:20	Group Report on "Integration of Teacher Education Curriculum"
10:20-10:40	Tea
10:40-12:00	Group Report on "Modernizing Organization and Techniques of Teaching"

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Appendix II

2:00- 3:20	Panel Discussion: "Integration and Modernization of Teacher Education Curriculum"
3:20- 3:40	T e a
3:40- 5:00	Panel Discussion (Continued)

November 10, Wednesday

9:00-10:20	Preparation of Group Reports
10:20-10:40	Tea
10:40-12:00	Preparation of Group Reports (Continued)
2:00- 3:20	Presentation and Discussion of Group Reports
3:20- 3:40	Tea
3:40- 5:00	Presentation and Discussion of Group Reports (Continued)

November 11, Thursday

9:00-12:00	Drafting of Main Report (Drafting Committee)
8:00- 6:00	Field Trip
2:00- 5:00	Mimeographing and Issuing of Draft of Main Report

November 12, Friday

9:00-11:00	Approval of Main Report
11:00-11:20	Tea
11:20-12:00	Closing Ceremony

LIST OF PARTICIPANTS IN THE WORKING GROUPS

(Group A-I)

Task Analysis of the Teacher's Role in a Democratic and Developing Country

Chairman   :   Mrs. Songsi Chutiwongse (Thailand)

Rapporteur   :   Miss Sundra Kanagasabai (Malaysia)

Members   :   Mrs. Sumon Amornvivat
                  Dr. Mallika Bhaopichitr
                  Dr. Chalio Buripakdi
                  Miss Mah Puay Kheng
                  Dr. Ongkan Indrambarya
                  Dr. (Miss) Boonchon Chaikosi
                  Dr. (Miss) Ratana Tanboonteck
                  Mr. Hardjono
                  Dr. (Mrs.) Saisuree Chutikul
                  Miss Parnsri Wichagonrakul
                  Miss Putrie Viravaioya
                  Mr. Leong Chin Toong

Consultant   :   Dr. N.P. Pillai

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(Group A-II)

Basic Concepts in the Preparation of Teachers

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		Mrs. Ambai Sucharitakul
		Mrs. Chaviwan Chungcharoen
		Dr. Chalermwong Vajanasoontorn
		Mr. Soetoto
		Dr. (Miss) Seela Chayaniyayodhin
		Mr. Charoon Milindra
		Dr. Sermsak Wisalaporn
		Dr. Pruang Kumut
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		Miss Nipaporn Anusornnitisarn
		Mr. Goh Keat Seng
		Dr. Suporn Sripahol
		Mrs. Nartchaleo Sumawong
		Mr. R. Sutaadji
		Mrs. Penelope V. Flores
		Dr. Willis P. Porter (Guest)
Consultant	:	Dr. N.P. Pillai

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(Group B-I)

Modernizing Organization and Techiques of Teaching

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		Mrs. Ambai Sucharitakul
		Mr. Soetaadji
		Mrs. Sumon Amornvivat
		Mrs. Chaviwan Chungcharoen
		Miss Amara Tunsutja
		Mr. Soetoto
		Dr. Pruang Kumut
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(Group B-II)

Utilizing Modern Techniques in Improving Student Teaching

Guest Chairman:		Dr. Weerayudh Wichiarajote
Rapporteur	:	Miss Mah Puay Kheng
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		Mrs. Pranee Thakerngpol
		Miss Varaphorn Bovornsiri
		Dr. (Mrs.) Mallika Bhaopichitr
		Dr. Sermsak Wisalaporn
		Mr. Hardjono
		Dr. (Miss) Boonchon Chaikosi
		Mrs. Penelope V. Flores

ANNEXES

A. Welcome Address by Dr. Sudchai LaoSunthara, President, College of Education, Prasarnmitr

B. Statement of Dr. N.P. Pillai, Unesco Expert and Director of the Workshop

C. Inaugural Address by His Excellency Sukich Ninmanheminda, Minister of Education, Thailand

D. Message from Dr. Alfredo T. Morales, Director, Asian Institute for Teacher Educators

E. Closing Address by Mrs. Nartchaleo Sumawong, Chairman, Second Sub-Regional Workshop on Teacher Education

WELCOME ADDRESS BY DR. SUDCHAI LAOSUNTHARA,
President, College of Education, Prasarnmitr

Your Excellency, Dr. Pillai, Distinguished Delegates, Ladies and Gentlemen:

The staff of the College of Education considers it an honour that this Second Sub-Regional Workshop on Teacher Education is held on our campus and that we are given the opportunity and the pleasure of collaborating with the Asian Institute for Teacher Educators in the organization of this Workshop. On its behalf and on my own, I would like to extend to you a warm welcome. For our colleagues from other lands, I wish you will enjoy a pleasant visit to our country.

I think this Workshop is most timely because soon after this, that is during December 12-17, the College and all its branches are holding a seminar on our undergraduate curriculum with a view to its reorganization and improvement. This seminar is partly a follow-up of a previous national seminar on Curriculum Development in Teacher Education held here last November with the generous assistance of Unesco and on the recommendation of the Regional Meeting on Curriculum Development organized by the Asian Institute for Teacher Educators in the Philippines, and partly an outgrowth of our own felt needs to bring our curriculum up to date and to eliminate some of the shortcomings which we have found in our experience. We are very much delighted, therefore, to have the opportunity of participating in this Workshop. It is my belief that through the exchange of ideas and experiences with other distinguished participants we shall gain new insights which will be useful in reorganizing our own curriculum.

I should like to take this opportunity to thank Unesco for the kind assistance we have received and to the Asian Institute for Teacher Educators for the valuable training and experiences provided for several of our lecturers during the last few years. To both organizations may I also express our heartfelt appreciation for making it possible for us to come together in this Workshop.

STATEMENT OF DR. N.P. PILLAI,
Unesco Expert and Director of the Workshop

Hon. Education Minister, Dr. Sudchai LaoSunthara, Dr. Lamaimas Saradatta, Ladies and
Gentlemen:

At the very outset, let me express how deeply thankful we are to the Government of
Thailand and to all those who have been responsible for making it possible for the Asian Insti-
tute for Teacher Educators, Quezon City, to hold this Second Sub-Regional Workshop on
Curriculum Development in Bangkok. On this auspicious occasion of its inauguration by the
Honourable Education Minister, I bring to you greetings and good wishes from the Director
of AITE, Dr. Alfredo T. Morales and from all my esteemed colleagues in the Institute for
the success of this Workshop. I am happy to find among the participants a few at least of our
alumni and many others who are known to me as distinguished educators in their own coun-
tries. I am also delighted to see before me a large group of prominent educators from the
host country, many of whom, I understand, are observers who will be with us throughout the
Workshop. On behalf of AITE, I have great pleasure in welcoming you all to the Workshop,
in which we would cooperate to make a real success of it.

It is with a profound sense of commitment that I rise to perform my duty, as Director
of this Sub-Regional Workshop, of clarifying its genesis and purposes, and the significance
of the theme on which we propose to work during the next two weeks. The mandate for con-
vening Sub-Regional Workshops emanates from the Regional Meeting on Curriculum Develop-
ment in Teacher Education held in the Asian Institute for Teacher Educators in September-
October 1969. As such, their purpose is to follow up the recommendations of the Regional Meeting
with action plans, which would help in accelerating their implementation at the national level.
The first Sub-Regional Workshop was held in Taipei, December 1969, with representatives of
the Republic of China, the Republic of Korea, Japan and the Philippines, participating. The
theme for that Seminar-Workshop was "Formulating Objectives, Learning Experiences and Eval-
uation Procedures for Selected Units of the Curriculum." The Report of this Sub-Regional
Seminar-Workshop, published by AITE contains the work done by the participants. This has
served to clarify working procedures relating to a major recommendation of the Regional
Seminar that pertains to the improvement of the teaching-learning process. For the Second Sub-
Regional Workshop, the theme selected is "Integration and Modernization of the Teacher Edu-
cation Curriculum." The Regional Meeting had recommended an integration of the professional
courses offered in teacher education institutions for preparing primary as well as second-
ary level teachers. This is a vertical integration, which would help to unify the teacher educa-
tion programmes for primary and secondary education. The assumption is that teachers who
take such a course with primary or secondary education as options, could, without repeating
the foundation courses, move from one level to the other of teaching, after taking the required
specialization courses only. The advantages resulting from this one reform would be to econ-
omize the cost of teacher education and facilitate the movement of teachers from one level to
the other without wasting time in repeating courses. The idea has been generally welcomed,
and a vertical integration of the teacher education curriculum has since been adopted in some

of the Member States. Many others would have moved in this direction but for some felt difficulties, consequent on the different qualification levels required of the entrants to the courses for teaching the two levels or the difference in the duration of these courses. It has therefore become necessary now to spell out how these felt difficulties could be circumvented.

The Regional Meeting had also stressed the need for integrating the different subjects in the curriculum of teacher education. This is a horizontal integration. One way of doing this is to relate all subjects of the curriculum with student teaching experiences as a focal point. Though this would leave many gaps, this is perhaps easier to accomplish. A better and more efficient way of achieving horizontal integration is to begin with forging a conceptual frame for the curriculum. Once this is done, the concepts and their sequencing would help not merely to see the unity of the different subject components in the curriculum, but to combine these subject components in a graded way to suit the different levels of those who take the teacher education courses. In other words, making a conceptual framework will help solve the major problems involved in both a horizontal and a vertical integration.

In selecting the concepts to form the basis for the teacher education curriculum, the needs of Asia will play a decisive role. These have been put in two catchwords — democracy and development. The Workshop will examine, in this context, the methods and techniques to be used in the education and training of the teacher which would help achieve these ends.

This is the rationale behind the selection of the topic for this Second Sub-Regional Seminar-Workshop. The work may not be easy to do, but let us face it with confidence and try to achieve it as best as we can.

The end products of the Workshop will be documents setting forth:

(1) The formulation of conceptual framework which would serve (*a*) as the basis of a relevant integrated teacher education programme, and (*b*) serve as a gestalt of the total field (giving a macro-cosmic view) and springboard for a detailed study of the related aspects of a subject curriculum (giving a micro-cosmic view) in the area of the foundation courses. This will be done with the syllabi models prepared by the Regional Meeting as the main frame of reference.

(2) Development of some selected concepts at differing levels without losing their sequence, and the differentiation of those which fall in the areas of specialization for primary and secondary teachers.

(3) A *statement* on modern methods of teaching and learning which should be adopted in teacher education to maximize its efficiency and economize the cost and effort involved in it, and directions on organizing instruction utilizing these methods profitably.

(4) The considered views of the participants, who have gone through the exercise of preparing an integrated curriculum — horizontal and vertical — about the problems to be tackled in adopting an integrated and modernized curriculum of teacher education in their own countries.

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Annex B

The Asian Ministers Conference held in Singapore recently has given a call for launching a global innovative approach to educational reconstruction in the Second Development Decade. The success of this Workshop will be evaluated in this context. Let us hope that the integrated framework of the curriculum we are able to forge and the teaching-learning techniques we recommend would be really an innovation for development.

Before I conclude, let me once again thank the host government for having given me this wonderful opportunity to participate in this function and thank all of you assembled here, for giving me a patient hearing.

INAUGURAL ADDRESS BY HIS EXCELLENCY
SUKICH NINMANHEMINDA,
Minister of Education, Thailand

Distinguished Participants, Ladies and Gentlemen:

It is indeed my privilege and pleasure to be with you here this morning at the opening ceremony of the Second Sub-Regional Workshop on Teacher Education, which is jointly organized by the Unesco-sponsored Asian Institute for Teacher Educators and the Ministry of Education of Thailand. May I, on behalf of the Government and the people of Thailand, extend our hearty welcome to the distinguished participants from Indonesia, Malaysia, Pakistan and Singapore, and to the officials of the Asian Institute for Teacher Educators.

I am very happy to learn that in addition to the participants and Thai observers, we have here among us observers from several other national and international organizations. To all the representatives of these organizations, who, by accepting our invitation, have shown their interest in the development of teacher education and of education in general in our countries, I would like also to extend a cordial welcome and sincerest thanks.

In my opinion, the need for this Workshop is unquestionable. As you are no doubt aware, in most, if not all of the countries in this region, there has been a great deal of concern over the shortage of teachers due to the upsurge in the school-age population. In our endeavour to cope with this urgent and crucial problem, we have been expending our energies and efforts to provide more schools and more teachers and, because of the urgency of the problem, we have scarcely had time to give careful and adequate thoughts to the qualitative improvement of education.

Speaking of the quality of education, an old adage comes to my mind. It says: "As the teacher is, so is the school." I believe all of us who are assembled here know very well that the quality of education is, to a large extent, dependent upon the quality of teachers. It is needless for me to say that a curriculum may be very well developed to meet all the needs of the country and of the individuals, and a modern school building may be erected and fitted with modern equipment; yet, if the teachers are not competent to do their jobs or not dedicated to their duties, the outcome of education can be tragic.

It is by no means an easy task to prepare a teacher who is expected to go out and effectively educate others. In my view, the responsibility of a teacher is not merely to impart to his or her pupils factual knowledge and teach them simple manual skills; for education connotes the development of potential faculties and powers of the learner. It is also the responsibility of the teacher to provide proper experiences for the development of higher mental skills, attitudes, and values, which will enable the learner to cope with problems and live a full and meaningful life.

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So vital is the role of the teaching profession and those who educate teachers that every possible means should be explored and every measure taken which will ultimately lead to an improvement of their education. I am very much pleased, therefore, that this Workshop on Teacher Education is organized, and I am confident that the resolutions which will be made by this Workshop during the next ten days or so will be of great benefit not only to the countries represented here but also to other countries.

I realize that it requires a great deal of planning and effort to organize a workshop of this nature. I wish, therefore, to congratulate those who have been responsible in bringing together all the distinguished teacher educators from the various countries to share their ideas and experiences. In particular, I congratulate the Asian Institute for Teacher Educators and the College of Education, Prasarnmitr, the organizers of this Workshop.

Finally, I would like to record our gratitude to Unesco for having continuously given us good cooperation and gracious support in the expansion and improvement of education in Thailand. Our thanks are also due to the Asian Institute for Teacher Educators, through whose courtesy and kind considerations a good number of Thai teacher educators have received further training and wider experiences.

Ladies and gentlemen, I have the pleasure now to declare the Workshop open, and wish you all every success.

MESSAGE FROM DR. ALFREDO T. MORALES,
Director, Asian Institute for Teacher Educators

In behalf of the Asian Institute for Teacher Educators (Sponsored by Unesco), University of the Philippines, Quezon City, it is my special privilege and pleasure on the occasion of this Second Sub-Regional Workshop on Teacher Education being held in Bangkok, to declare that all of us in AITE deeply appreciate and gratefully acknowledge the traditional and ever-increasing cooperation and support which AITE has been receiving from the Government of Thailand, through the Government's educational instrumentalities. The Ministry of Education, the National Commission for Unesco, and the College of Education in Bangkok, with their most friendly and magnanimous acceptance and implementation of the role and responsibility of host, have made it possible for AITE, assisted by the Unesco Regional Office for Education in Asia, to carry forward our common task of development in Asian teacher education.

This is an inspiring task to all of us, realizing that it is for mutual benefit to the individual Asian Member States of Unesco and for progressively stronger Asian regional harmony and creative leadership in Unesco's international undertakings. Those who are here in this Workshop represent a high spirit of dedication to this task as educators, as representatives of the participating countries of Indonesia, Malaysia, Pakistan, Singapore and Thailand, and of the countries from which the staffs of AITE and the Unesco Regional Office come, and as fellow-citizens and fellow human beings in the society and the world of man.

I am happy to express heartfelt recognition of their cooperation and assistance, without which this Workshop, its important immediate expectations, and its wider symbolic contribution to Unesco would have been impossible. I am confident that their work here will yield much useful material and continuing stimulation to teacher educators in Asia and elsewhere. I extend to you warmest greetings and best wishes for a most successful workshop.

CLOSING ADDRESS BY MRS. NARTCHALEO SUMAWONG,
Chairman, Second Sub-Regional Workshop on Teacher Education

Honourable Delegates, Ladies and Gentlemen:

First of all, I must say that it has been indeed a great privilege and a profitable experience for me to have shared the responsibilities and to have served in the capacity of the Chairman among my distinguished colleagues at this meeting. It is also, I believe, a great honour for Thailand and the College of Education to have been chosen to host this Sub-Regional Workshop.

Once again the history of regional cooperation is marked with success. The outcome of the past two weeks of our collective efforts has proved not only that we can work together, but also that we can work together productively and as good friends. Our findings and conclusions that we have arrived at will be a fruitful contribution to the systems of teacher education in our respective countries, while our friendship that we have established will also lead to mutual understanding and future cooperation for tomorrow's peace and betterment. For this, I would like to express our appreciation and sincere thanks to Unesco and the Asian Institute for Teacher Educators, whose sponsorship has made this Workshop possible.

As we would all agree, the conclusions and recommendations on the subject of Integration and Modernization of Teacher Education Curriculum, the theme of this Workshop, are very valuable. Besides, we learned a great deal about the field of teacher education from the Country Reports and the vigorous but friendly discussions. This valuable outcome would have been difficult to achieve without the active and sincere participation of the distinguished delegates, the experts, and other participants. Thus, I feel that I owe many grateful thanks to every one of them. I would like to thank specially, Dr. Pillai, Director of the Workshop, for his various excellent contributions; Dr. Sudchai LaoSunthara, President of the College of Education, and Dr. Lamaimas Saradatta, Vice-President of the College of Education and Workshop Coordinator, for having been the major moving forces behind the scene throughout this activity.

My dear colleagues, our mission has been completed. But before we bring this notable meeting to an end, may I ask you to join me in making a noble wish that the successful collective effort in the present Workshop set an example for more regional collaborations in education as well as in other areas of endeavours. Let us all hope that our respective governments, and in fact all the governments on this globe, make more use of regional cooperation for our common goals in economic, social, and political betterments, so that we together make this world a nicer place to live in.

Finally, on behalf of the Thai participants in this Workshop and on behalf of the Thai people, may I wish the participants and experts from other lands a happy time for your stay in Bangkok, pleasant memories and a good journey back home. Let me extend to all of you our standing invitation to visit this country again.

Thank you.