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FINAL REPORT

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5.2 Suggestions for further study

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I. INTRODUCTION

- 1.1 The problem of the preparation of a sufficient number of qualified teachers is receiving nowadays priority attention, both in developing and developed countries. It is generally recognized that the expansion of education and its adaptation to the changing needs of man and society cannot be achieved without an adequately prepared teaching force. Consequently, the objectives, the organization and content of teacher education are under close scrutiny in all parts of the world, with a view to revising traditional institutional patterns and to seeking new solutions to the problems of recruitment, programmes and methods for teacher preparation.
- 1.2 In order to meet the concern of its Member States over the widespread shortage of qualified teachers, Unesco undertook, in co-operation with the International Labour Organisation, the preparation of a Recommendation concerning the status of teachers. This international instrument, adopted by a special Intergovernmental Conference in 1966 and endorsed by both Unesco and ILO, proclaims internationally recognized principles and norms aiming at the improvement of the professional, social and economic status of teachers. The Recommendation defines the purpose of teacher education and includes an important set of provisions concerning teacher preparation programmes and institutions.
- 1.3 Parallel with the international studies leading to the adoption of this Recommendation, Unesco carried out programmes in the field of pre-service and in-service education of teachers in a number of developing countries in Asia, Africa, the Arab States and Latin America. With financial assistance from the United Nations Development Programme, Unesco was instrumental in creating teacher education institutions in some 30 countries. Unesco is responsible for the organization, staffing and programmes of these institutions. Moreover, in co-operation with Unicef, Unesco provides technical advice and assistance for the improvement of in-service education of teachers in more than 50 countries. These activities are of a particular importance to Unesco, not only because the Organization devotes a major portion of its education budget to teachers but also, and more importantly, because of the moral responsibility devolving on Unesco to prepare educators for communities which are undergoing far-reaching social and cultural change.
- 1.4 In view of the urgency of the above-mentioned issues for Member States and for Unesco's own operational activities, the General Conference at its fourteenth session (November 1966) invited the Director-General to undertake an international study of current trends and problems in teacher education, in order to assess the present changing situation and to provide some guidance for future planning and action, both by Unesco and Member States. The Expert Committee was convened for this purpose by the Director-General.
- 1.5 The composition of the Committee of 23 experts was intended to reflect the diversity of educational systems and to represent the main geographical and cultural regions of the world (Annex I). The Committee examined the agenda submitted by the Director-General (Annex II), on the basis of the documentation prepared in advance of the meeting, which included two main working papers: a comparative study by Dr. J. Kotasek (Czechoslovakia) "Current Trends and Problems in Teacher Education" (document ED/CS/177/4) and a Secretariat paper "Unesco Field Experience in Teacher Education" (document ED/CS/177/5). In addition, the Committee was provided with the following reference documents: the Recommendation concerning the Status of Teachers, adopted by the special Intergovernmental Conference in 1966; reports on accelerated training of teachers in the United Kingdom, Syria, Algeria and Cuba; case studies on recent developments in teacher preparation in France, the Soviet Union and the United States of America.
- 1.6 In opening the meeting on behalf of the Director-General of Unesco, Mr. Flexa Ribeiro, Assistant Director-General for Education, underlined the key rôle of qualified teachers for the development of education and the importance of new approaches to teacher preparation in order to meet the needs of contemporary man and society. He drew the attention of the experts to the Recommendation on the status of teachers and invited them to advise Unesco and its Member States as to how the principles of this international instrument may be put into effect in varying socioeconomic and cultural contexts. He pointed out that the experts were expected to draw up a statement of principles which, in their opinion, should be observed in the organization of teachereducation institutions and courses; to refer, when necessary, to the variety of patterns justified by national circumstances and finally, to make an inventory of urgent problems which deserve further study.

1.7 The terms of reference of the meeting were further clarified so as to limit the discussions to problems of the education of teachers for general primary and secondary education (thus excluding teachers for pre-primary, technical and special education). It was also agreed that problems of in-service education would be examined mainly in respect of teachers without full pre-service pre-paration. As regards the further education of teachers, the Committee was called upon to examine those aspects of pre-service programmes which are likely to stimulate the personal and professional development of teachers throughout their career.

1.8 The Committee elected the following officers:

Appendiction Chairman: And Said Said Mr. K. Arianayagam,

Out the committee of Malaysia to Unesco

Vice-Chairmen: Dr. Y.S. Kotb, Vice-Rector, Ain Shams University (UAR)

Professor A. Caballero, Ministry of Education, (Mexico)

Professor B. Nikolov, Sofia University (Bulgaria)

Rapporteur: Professor Ben Morris (Director, Institute of Education, Bristol University (United Kingdom)).

1.9 In his opening remarks, the Chairman emphasized the need of many countries for accelerated programmes for teacher education, the importance of scientific subjects and the necessity for developing pilot projects in new methods and techniques of science teaching. He also stressed the universal task of bringing the knowledge and point of view of both natural and social sciences to the aid of teachers everywhere in their efforts to combat racial prejudice and to promote international understanding and co-operation.

- 1.10 The Committee held 16 plenary meetings. A working party was set up with the following terms of reference:
- (a) To study the preliminary draft report of the Committee in relation to both long-term and short-term recommendations concerning all factors of teacher education and to report to the Committee on practical interim measures which might be necessary in certain situations, particularly in the developing countries, in order to achieve the same objectives.
 - (b) To identify the more urgent problems in relation to teacher education in certain situations, especially in developing countries, and to submit to the Committee a list of such problems which require further study.

The working party held 3 sessions under the chairmanship of Professor Y.S. Kotb (UAR). Dr. S.B. Adaval (India) acted as Rapporteur. The other members of the working party were as follows:

Professor L.S. Atanasyan (USSR), Mr. H. Canac (France), Mr. Mulugeta Wodajo (Ethiopia), Mr. J.P. Thystere-Tchicaya (Republic of Congo), Mr. E. Livacic-Gazzano (Chile). The findings of the working party, including some specific suggestions for further study (Section 5.2), were incorporated in the final report.

2. AIMS AND OBJECTIVES OF TEACHER EDUCATION

2.1 The Recommendation concerning the Status of Teachers, adopted by the Intergovernmental Conference on the Status of Teachers (Paris, 1966) states that: "The purpose of a teacher-preparation programme should be to develop in each student his general education and personal culture, his ability to teach and educate others, an awareness of the principles which underlie good human relations, within and across national boundaries, and a sense of responsibility to contribute both by teaching and by example to social, cultural and economic progress." (Article 19).

- 2.2 The Expert Committee has affirmed that these major aims of teacher education are universal and represent the goals and aspirations of the profession in every country irrespective of its present stage of educational, social and economic development.
- 2.3 Moreover, the rapidity of social and technological change throughout the world requires that teachers should be capable of adapting themselves to change, and of interpreting it to the pupils, by continuing their own personal education throughout their professional lives. As leaders in the community, they have to provide both impetus and direction to these changes which make for social betterment and universal human brotherhood.
- 2.4 Programmes of teacher education have therefore to ensure the development of those qualities of mind and heart which will enable them to carry through their work with their pupils in a spirit of co-operative enterprise and with professional competence and judgement. Their education should therefore equip them with an up-to-date understanding of human development and diverse social backgrounds as well as with modern pedagogical skills. It should also enable them to utilize the resources, natural and social, which the local environment as well as technology increasingly places at their disposal.
- 2.5 While being founded on the broad base of general culture, the education of teachers must foster the spirit of disciplined inquiry and an understanding of the methods and achievements of science as a factor of vital importance for human welfare.
- 2.6 Since in all countries the demand for well-educated men and women to fill the professions exceeds the supply (in developing countries the problem is particularly acute), the teaching profession must expect to have to compete for its share of relatively scarce human resources. The productivity of teachers, in the sense of the most effective use of the time and energies of those available, is therefore an issue of great importance. Thus the teacher's education should enable him to utilize the whole range of modern teaching aids and of educational techniques such as team teaching and the flexible size of learning groups, and to welcome the assistance of non-professional auxiliaries. His professional responsibility may then for certain purposes be extended over a larger number of pupils, while at the same time enhancing the quality of his work with individuals, by liberating him from routine duties and permitting him to concentrate on truly professional tasks.

3. ORGANIZATION OF TEACHER EDUCATION

3.1 GENERAL POLICY

- 3.1.1 The provision of teacher education for all teachers in university-level institutions is considered the ideal, long-term objective; post-secondary education for all teachers is deemed an objective to be taken into consideration even in short-term measures.
- 3.1.2 The general model of professional preparation, found in many professions of the same level, is based on a combination of general education and professional preparation of varying degrees: (a) University level, including professional preparation; (b) higher secondary certificate plus one to two years of professional preparation; and (c) lower secondary qualification plus additional professional preparation. The long-term aim is to have all teachers reach qualification in category (a). Short-term measures should be concerned with converting progressively category (b) qualifications to category (a), and category (c) to category (b). However, the latter measures should be part of a comprehensive plan for the development of teacher education which should be phased according to the increasing economic and manpower resources available to each country, taking adequate care of quantitative as well as qualitative aspects of improvement.
- 3.1.3 It was generally felt that the length of preparation alone may not be considered the sole criterion of quality; much will depend upon the level of previous education and upon the quality of human resources available for training.

Control and relationships

3.1.4 Historically, in Europe, universities had responsibility for the education of secondary teachers in the sense that their graduates, through possessing a degree, supplied the main secondary teaching force. The rise of public education and the socio-economic and technological

revolutions of the last century have created conditions in which other solutions have had to be found. In educational systems of fairly recent origin and in the newly-developing countries, other types of specialized institutions for the education of primary and secondary teachers have been created. Some of these are already of university level (e.g. pedagogical institutes in the USSR), while others have reached levels not far below that standard, and others are as yet able to offer only preparation of one or two years beyond secondary school.

- 3.1.5 This tendency to create other types of teacher-education institutions has been facilitated by the increasing professionalization of teacher education, and by the desire of governments to be in direct control of teacher education so far as general policy is concerned. It must also be admitted that in universities there has often been a lack of interest and of professional orientation which has made the universities unsuitable to undertake the task of teacher education. In some countries, however, the two patterns coexist. This may result from the sheer necessity of producing much larger numbers of teachers than could reasonably be accommodated in the universities.
- 3.1.6 It was noted that pedagogical institutes, independent of the universities, are often better able to meet the special needs of developing countries, in particular by adapting teachereducation programmes to the immediate social, economic and technological needs of these societies as they develop and to particular environments.
- 3.1.7 Since different patterns of institutions for the education of teachers exist, universities on the one hand and higher teachers' colleges and pedagogical institutes on the other, both would seem to be necessary at the present time and their particular merits and problems should be given further study. There was a need for separate higher pedagogical institutes to develop broad cultural courses along with professional ones, and in the long run such institutions would become almost indistinguishable from universities.
- 3.1.8 It was agreed that some form of association or integration between teacher-education institutions and the universities is desirable. Whenever appropriate the university should be willing to accept the responsibility and leadership in this relationship, which will depend on the stage of development of the educational system. Adaptation should be, however, a two-way effort: teacher-education institutions must demonstrate that those social sciences and pedagogical studies which are fundamental to education can be and are being pursued to the same high level and with the same rigour as other academic disciplines.
- 3.1.9 It was noted that there is a growing interest among teachers organizations in all matters concerning teacher education and that in a number of countries these organizations are already playing an active rôle by assisting education authorities in arriving at decisions on entry qualifications, standards of certification, and programmes of study in respect of teacher education. This trend is encouraged in the Recommendation concerning the Status of Teachers, which invites authorities to "establish and regularly use recognized means of consultation with teachers' organizations on such matters as educational policy, school organization, and new developments in the educational service". (Article 75)

Organization of primary teacher education

- 3.1.10 The most urgent reform in primary teacher education should be directed toward moving primary teachers out of their present social and educational isolation which has resulted in their being accorded relatively low status. Their integration into a system of teacher education in which the parts are closely related to one another, will contribute to increasing their personal development and professional status as a group and the prestige of the profession as a whole.
- 3.1.11 The problem of obtaining primary teachers of high quality is an urgent one in all countries but is inevitably complicated by a great shortage of teachers in most countries of the world. The need for large numbers of teachers must in the short term have the inevitable effects of keeping entry standards lower than is desirable, of shortening the length of training which can be given, and of limiting the level of professional education which can be achieved.
- 3.1.12 It was agreed that the provision of joint primary and secondary teacher education as a long-term objective, is generally desirable. Among the advantages are the promotion of professional unity and the possibility of sharing common cultural and pedagogical experiences. The problems of organization of such a joint institution would obviously be greater than those of

one devoted to a single level of education and consequently such an arrangement would only be most fruitful when all prospective teachers had a common basis in a completed secondary education.

Organization of secondary teacher education

- 3.1.13 The central problem of the organization of secondary teacher education, whether in universities or in separate specialized institutions, is that of the relation of the academic and cultural parts of the programme to the pedagogical. In the university situation, prospective teachers should ideally have a broad academic and cultural programme in common with students in other faculties. There should be no separation and close co-operation should be maintained between the faculty of education and other faculties.
- 3.1.14 Where secondary teacher education takes place in an institution separate from the university, there is again the problem of obtaining the proper balance of components in the programme. In these circumstances, the professional element may be unduly emphasized and the major problem is to determine what should be the degree of specialization and depth of academic studies in relation to professional courses.

The influence of institutional structure on programmes

- 3.1.15 The organization of the structure of teacher-education institutions influences, both positively and negatively, their programmes. For example, university responsibility for
 teacher education may, on the one hand, encourage pedagogical studies which contribute to the
 personal as well as the professional development of students, and on the other, produce undue academic emphasis on the cultural subjects in the programme of teacher-education institutions, and
 also have an adverse effect on school curricula.
- 3.1.16 It was generally agreed that an interdisciplinary approach was fundamental to teachereducation curricula. Where the professional part of teachers' studies are carried out in separate courses, they should never be the preserve of pedagogues alone. Such courses should involve members of other faculties, and indeed there should be two-way traffic between education and other faculties, particularly in fields such as philosophy, sociology and psychology.
- 3.1.17 It was agreed that since concurrent and consecutive organization of teachers' courses existed, these different patterns represented responses to special needs in different places, that both patterns had their virtues, and that both were necessary and were capable of further development. For example, Unesco and others have found that in certain circumstances, especially in the developing countries, concurrent courses supply greater vocational motivation and tend to minimize losses of qualified teachers to other professions. This could be an important consideration when, for example, there exists, as a matter of urgency, a need to conserve teaching manpower in rural areas and diminish the drift to the towns.
- 3.1.18 Where courses are consecutive and academic courses are given in a university there is a question as to whether the professional courses should be given in the university or in a specialized institution. In the latter case, close co-operation should be established between the two institutions.

Co-operation between teacher education institutions and schools

3.1.19 It is desirable to promote closer collaboration between teacher education institutions and schools, the schools providing practical training for prospective teachers and the teachers education institutions introducing modern ideas on curriculum and methods. **Jamus 10 mg 7.8.8**

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of new techniques and materials for the teneling of science is afready being undertaken in a noifouborint tries and it is considered that the establishment of National Science Centras should be further encourage

- 3.2.1 Article 20 of the Recommendation concerning the Status of Teachers lays down the following: adaption of adaptions and important part of the curriculum of adaption should be adequately propared for it. Health subject matter may be included in various other
- school subjects. It should **should is bloods ammargord noitsragerd redeat a distantiable of l**and its environment and include such matters as natrition, mental health, common diseases and their prevention, child care, health care at cork, etc.

- general studies;
 - (b) study of the main elements of philosophy, psychology, sociology, as applied to education, the theory and history of education, and of comparative education, experimental pedagogy, school administration and methods of teaching the various subjects;
 - (c) studies related to the students' intended field of teaching;
 - (d) practice in teaching and in conducting extra-curricular activities under the guidance of fully-qualified teachers."
- 3.2.2 Such a programme has to be seen against the rapidity of socio-economic and educational changes going on throughout the world. The great advances being made in human knowledge are now being accompanied by attempts to modernize school curricula. Programmes of teacher education must keep abreast of the times, and the curricula of institutions must bridge the gap between advancing knowledge and traditional culture.
- 3.2.3 Increasingly, teachers are expected to play leadership rôles in the community. Teachers should hold fast to the connexion that fundamentally, the needs of children and the needs of society correspond to one another. Consequently, the teacher's primary task consists of arousing and utilizing children's interest in and curiosity about the world, and helping them to interpret their experience so that they may lead personally and socially satisfying lives within their society and contribute to its development.
- 3.2.4 The range of studies involved in teacher-education programmes poses a problem of the optimum balance which should obtain between them. This arises as between general and special academic studies, between academic and professional studies and between theoretical and practical ones. The structuring of teacher-education institutions in terms of their provision of concurrent or consecutive studies is clearly a major factor influencing the general shape and balance of studies. A large variety of different arrangements exists and it is recommended that Unesco promote studies on the composition and balance of various teacher-education programmes.
- 3.2.5 All programmes of teacher education have to face the problem of reconciling the facts that at advanced levels knowledge takes the form of highly specialized subjects in fields of inquiry, whereas children experience the world as a unified whole and make their own selection from it, of the features which interest them most and these by no means necessarily correspond to the adults' logical classifications of knowledge. Children's capacities to think in terms of different subjects and specialized methods of inquiry mature only at a fairly late stage of development, although they often develop verbal skills in handling abstract ideas which may deceive adults into supposing that their minds are genuinely operating at an abstract level.

General studies

- 3.2.6 All teachers require a broad basis of general studies in their education, although the scope, level and emphasis of these studies will vary as between primary and secondary teachers and to some extent also with local circumstances. All require some grounding in the major fields of human inquiry and knowledge, and in the cultural values, social conditions and philosophy and aspirations of their society. Against such universal and national backgrounds, however, there is room for emphasis on and utilization of the special features of the local environment as in the case of rural and urban communities.
- 3.2.7 In all circumstances, however, certain features of the modern world require special emphasis. The importance of scientific knowledge and of scientific ways of thinking are now of overriding importance and it is essential that all teachers are led to understand and appreciate the methods and values of science and its potentialities for human betterment. The introduction of new techniques and materials for the teaching of science is already being undertaken in several countries and it is considered that the establishment of National Science Centres should be further encouraged.
- 3.2.8 Similarly, health education should be an important part of the curriculum of schools and the teacher should be adequately prepared for it. Health subject matter may be included in various other school subjects. It should also form a unit of study in its own right geared to the needs of the child and its environment and include such matters as nutrition, mental health, common diseases and their prevention, child care, health care at work, etc.

- 3.2.9 Teacher education programmes have now also to take into account modern views of the fundamental ways in which human beings experience the world, respond to it and communicate with one another. One of the most significant developments has been the realization of the fundamental rôle of the arts and music in human development and civilization. Nowadays, the visual and plastic arts are regarded as fundamental forms of human expression and communication, as basic for human development as verbal and numerical languages. At all stages of education, not least at the primary stage, it is necessary to emphasize the vital importance of creative experience in the arts. Student teachers therefore need their own powers of spontaneous expression through the arts to be developed as part of their general education. Recognition of these facts by teacher education institutions, particularly at university level, is not always easily obtained and a vitally important objective for the future must be the establishment of the arts as a fundamental part of education at the highest level.
- 3.2.10 In order to prepare pupils for life in a world community made up of increasingly interdependent peoples and nations, it is necessary to bring the knowledge and the point of view of both natural and social sciences to the aid of teachers everywhere in their efforts to combat racial prejudices and to promote international understanding and co-operation.

Major academic studies (teaching subjects)

- 3.2.11 Specialized study of one or more academic subjects is a universal feature in secondary teacher education. These subjects are often studied by intending teachers for their personal and cultural value as well as with a view to teaching them. In some countries intending primary teachers may also engage in such studies. The level at which such studies are taken depends not only on the institution in which they are studied but also on the age range of pupils which the student expects to teach. There will, therefore, always be some diversity of provision in these fields, with the common aim of all teachers having a thorough grasp of the essentials of their special field of knowledge.
- 3.2.12 Such studies may be conceived in a way which fails to make them effective components of the teacher's general education. There are differences of opinion about the remedy for this. Some maintain it is necessary for the subjects to be approached from a point of view which has some kind of direct relevance for the future teachers. Others maintain that what is essential is that student teachers, no less than others, should be introduced to the methods and spirit of inquiry in their special field and that it is the concepts and attitudes which derive from such studies that enable these subjects to be perceived as relevant by the future teachers. These difficulties and differences of viewpoint lie at the roots of the controversies about whether separate professors are needed for teaching the subject and for giving instruction in the methodology of teaching it. The content and methods of teaching these subjects, therefore, need to be kept under regular review in order to maintain and enhance their relevance for student teachers, and ensure their application to teaching at the secondary level.

Professional studies

- 3.2.13 A relatively recent feature of the development of teacher education programmes is the growing importance attached to professional studies in history, philosophy, sociology and psychology as applied to education. Developments in these fields of knowledge are tending to make such courses more and more specialized. Their suitability and relevance are sometimes called in question and it is evident that there is a need to ensure that in level and approach they are suited to their purpose and that their content, especially in psychology and sociology is relevant to the realities of childhood and of family and community life in particular circumstances. This does not mean narrowing their focus of concern but rather broadening it to embrace the realities of human behaviour and interaction as a whole, of which the life of the school and classroom is only one aspect.
- 3.2.14 In particular, it is evident that much that is taught in child development is not directly related to the circumstances of childhood in the country concerned and is presented in the form of factual knowledge which may be of no direct use to the teacher. This is one basic reason for complaints which are frequently made by students about the gap between theory and practice. What is required is rather that the student should actively be involved in procedures of inquiry through which he can develop concepts and skills directly related to his practical needs.

- 3.2.15 The increasing professionalization of teacher education and advances in the social and pedagogical sciences would sometimes seem to suggest that there is a conflict between teaching as an art and teaching as a science. The need to give adequate status to scientific studies in education has tended to obscure the fact that the rôle of science is to bring objectivity to the study of a certain range of educational problems and thereby to give a more informed basis for human judgement. Great as the importance of educational sciences may be, education depends on the subtleties of human relationships and on the making of value judgements, and its practice will always remain an art.
- 3.2.16 The vital importance of professional studies in teacher education is now everywhere acknowledged, but there are significant criticisms to be made of the present state of these studies and of how they are taught. As well as establishing their right to recognition at the same academic level as all other studies, there are specific problems to be solved in ensuring their relevance to the practical problems of education. It is therefore recommended that an urgent review of practices and needs in this field be sponsored by Unesco, as part of its recommended review of teacher-education programmes as a whole.

Practical experience

3.2.17 An essential of teacher-education programmes is the integration of theoretical studies with practical experience of teaching. The problem of articulating periods of practical teaching with the rest of the training course permits of many different solutions. The essentials are that students should be given sufficient opportunities to observe children and teachers in action and to enable them gradually to take responsibility for teaching programmes and to function as members of the staffs of schools. There is much to be said for teacher-education institutions having associated or experimental schools or a series of schools at their disposal to help in providing appropriate solutions to this problem. In attempting to modernize school curricula many countries are setting up centres for curriculum development within or associated with schools. These provide an admirable setting for providing some of the essential experience for students. Also, in some countries, it is now becoming possible to create closer and more intimate relationships between teacher-education institutions and a wide range of co-operating schools. There therefore exists a variety of ways of bringing about an integration of theory and practice. Bringing students into contact with experienced teachers of proven competence is an obvious essential of all schemes. The general aim must be to develop close and continuous collaboration between teacher-education institutions and the co-operating schools, including, where they exist, laboratory and application schools.

The organization of programmes

3.2.18 The problem of organizing teacher-education programmes and of fitting these into timetables is one which also permits of many different solutions. There will always be afeeling on the part of specialists that they are not given enough time for their subject. The solution to such problems must lie in the direction of an active realization that no course of teacher education can produce the finished article and that what is required is that the organization of teaching should be sufficiently flexible to enable individual students to become competent in the different parts of the programme. In practice, this is a fundamentally different approach from one which is mainly concerned that students should put in a certain number of hours and obtain a certain number of credits. Unless programmes are governed by the principles of flexibility and adaptation to the needs of individual students, there is no possibility of reaching a satisfactory solution between conflicting claims which different parts of the programme will always tend to make on students.

Examining and assessing students and programmes

3.2.19 The curricula of teacher-education institutions just as much as school curricula tend to be dominated and shaped by the nature of examinations and assessments which students have to face. It is of the utmost importance that the principles which underlie programmes of teacher education should determine the way in which students are assessed and examined and not the other way round, which is so often the case at present. To this end, further study should be given to newer methods of assessing and examining in which a final and often externally imposed examination does not necessarily play a part, or is seen only as one element in an assessment procedure. In a sample or an individual of the students and that reduce it beringer at tad.

- 3.2.20 It is not only students who have to be assessed. If teacher educators are to practice what they preach they must endeavour wherever possible to introduce procedures for evaluating their own work. These need not be of a formal and rigorously scientific nature, although research undertakings of this kind should be encouraged. Much can be done through critical analysis and discussion of programmes by staff and students in collaboration. Follow-up studies of recently trained teachers, again of an essentially collaborative nature, can also reveal deficiencies in programmes and help to suggest remedies. Some built-in procedure of monitoring or checking up on the working of teacher-education programmes is an ideal toward which all institutions should strive.
- 3.2.21 Finally, in achieving some perspective or overall view of teacher-education programmes and their effectiveness, it must be remembered that curriculum and methods form only the most obvious and easily separable aspects. The life of the institution as a whole, its ethos, and the kind of human relationships it fosters are among the most powerful of influences on the making of teachers.

3.3 INSTITUTIONS FOR THE EDUCATION OF TEACHERS

Staff

- 3.3.1 The problem of staffing institutions for the education of teachers forms a special aspect of the general manpower problems of educational systems both in developed and developing countries. In practice, the problem of staffing teacher-education institutions is governed to a great extent by questions of status and salary vis-a-vis both universities and secondary schools. In some more highly developed countries, teachers in teacher-education institutions have now acquired equality of status (including titles) and salaries with university staffs. This is far from being the case in many countries, however, and these problems together with questions concerning the conditions of work, full-time appointments and security of tenure, represent major developmental tasks within many educational systems.
- 3.3.2 Ideally, staff in teacher-education institutions should constitute a highly selected group equivalent in calibre to university staff. They should have been educated to a high cultural level, should have appropriate understanding or practical experience of problems and conditions within school systems, should have had pursued appropriate specialized studies of pedagogical subjects to an advanced level, and should be capable of carrying out original work in their own field.
- 3.3.3 In practice, and even where manpower problems are less severe than in some of the developing countries, it is often found that some of these criteria are misinterpreted. High academic qualifications without any understanding of, or sympathy with, the problems of pupils and teachers may be a disadvantage, while sole concern with practical problems over long periods in schools may also severely limit teachers' capacities to adjust to change, to embrace new ideas and to provide the necessary leadership and perspective in rapidly changing educational and social situations.
- 3.3.4 In the present condition of shortage in many countries and in the short term, the most effective use of existing well-qualified staff would be to enable them to function as leaders of teams which would include less well qualified staff. There exist similar possibilities for more developed institutions of teacher preparation to help with the work of the less developed. In this connexion, too, every possible use should be made of interchange of staff of teacher-education institutions between developing and more developed countries.
- 3.3.5 The staff of teacher-education institutions require opportunities for professional development and refreshment every bit as much as the staff of schools. It is highly desirable that there should exist in these institutions adequate opportunities for further study and research. The impact of new and different conditions can also act as an important stimulus, and it should be part of the general policy of educational systems to promote interchange of staff between different institutions within the same country and between countries.
- 3.3.6 The nature of the work of teacher-education institutions, as indeed of schools themselves, requires that there should be sufficient stability in staffing to provide continuity of purpose. One of the most difficult problems created by manpower shortages within an educational system

is instability of staffing within institutions. It is essential that within educational systems prospects of promotion and of securing appointments of high responsibility should exist within the separate parts of the system, so although a certain amount of interchange between the different parts of an educational system, schools, colleges and universities, etc., is beneficial and indeed essential, nevertheless career prospects within the different parts of a system should be adequate to ensure that for example staffs of teacher-education institutions are not continually leaving these institutions in search of promotion. Different systems exist for recruiting staff to teacher-education institutions but whatever the methods employed, they should ensure that qualities of leadership and the capacity for making fruitful and collaborative relations with students are among the most important criteria. It goes without saying that, since the rôle of the head in a teacher-education institution is such a crucial one, appointments to such posts require appropriate qualifications both professional and personal.

- 3.3.7 The effective education of future teachers depends not only on the academic and pedagogical competence of the staffs of teacher-education institutions, but very greatly on their capacities for making good human relationships and on the existence of conditions favourable to the exercise of professional guidance. The ratio of staff to students is therefore of the utmost importance. At present, many teacher-education institutions are inadequately staffed, even in some of the more developed countries, and it is recommended that Unesco should initiate inquiries, into the present situation in all countries in this field.
- 3.3.8 Closely connected with staff-student ratios is the problem of offering adequate professional guidance to students in training and in their early years of service. \dequate follow-up services for probationary teachers are regarded as essential. The scope of such guidance both in teacher-education institutions and beyond, is a matter of definition and it is recommended that Unesco should initiate inquiries concerning the aims and scope of such guidance services in different countries.
- 3.3.9 The close connexion which could exist between teacher-education institutions and school systems implies that the heads and staffs of schools, and in many countries, administrators and inspectors, are essential partners in teacher education. Together with different types of staff required in teacher-education institutions, academic pedagogical, etc., the existence of such advisory and administrative personnel with important contributions to make to teacher education may result in some conflicts of rôle and in confusion and difficulties for students. There is no single system throughout the world for sharing the different responsibilities involved, and this is another area in which Unesco could with advantage initiate comparative studies of different systems. It is essential to consider how in the short term, deficiencies in the staffing of teacher-education institutions, arising from the scarcity of human resources, can be at least partly remedied. Efforts must be made to avoid both the dissipation of resources in small and isolated institutions, and the over concentration of high-level work in a single institution.
- 3.3.10 Moreover, in developing countries, the problem of the scarcity of human resources demands new and radical solutions in which the programmes for future teachers and other personnel concerned with the welfare of youth should not be organized in isolation from one another. The educational, social and occupational rôles of responsible adults should be much more interchangeable than they are at the present in most countries.
- 3.3.11 This wider perspective moreover brings with it the opportunity of ensuring that what might be called "the training cycle" within education should not operate as a closed system, in which people pass from being pupils in schools to being students in teacher-education institutions, and thence to being teachers in schools and ultimately teachers in teacher-education institutions, without the opportunity at any point of experiencing other kinds of responsibility. There is therefore a need for bringing into the staff of teacher-education institutions persons who are familiar with the industrial and rural environments within which teachers and young people will have to work.
- 3.3.12 There are within some developing countries situations which pose dramatic problems for the education of teachers. There are cases in which almost half of the primary school teachers have no professional qualifications and of these perhaps not even one-third may have completed their own primary education. The magnitude of the task of providing staff for teacher-education institutions in such situations is obvious. Under these conditions, school administrators, heads of schools, district inspectors, supervisors or counsellors and local regional or national heads of departments, all carry great responsibility for educational policy in the schools and for

educating and guiding teachers. People in such rôles need to be of the highest possible quality and there is an urgent need to develop programmes for continuing education of such leadership personnel. It is recommended that Unesco should encourage Member States in the development of such programmes with particular attention to documentation services, and should give technical assistance to them.

Recruitment

- 3.3.13 The Committee noted that Article 14 of the Recommendation on the Status of Teachers defined the objective for the selection of prospective teachers as the following: "Admission to teacher preparation should be based on the completion of appropriate secondary education, and the evidence of the possession of personal qualities likely to help the persons concerned to become worthy members of the profession".
- 3.3.14 The Committee recognized that certain social and economic factors influence the supply of human resources and the choice of teaching as a profession. In the developing countries, where there is a shortage of trained manpower, teaching is a means of social advancement and the teacher has the rôle of social and community leader, even so there are competing demands for manpower. In the developed countries, too, there is great difficulty in attracting suitable candidates owing to the competition with other professions.
- 3.3.15 It was generally agreed that a wise and flexible recruitment policy would contribute to solving manpower problems and to keeping the profession open to suitably qualified aspirants, at different ages and levels. Such a policy should encourage preparation for re-entry into service at later stages (e.g. married women).

Certification

- 3.3.16 The certification of teachers is carried out through a variety of methods and under a variety of systems of control in different countries. Whatever the system, there is a vital need to secure a flexibility of approach in the evaluation of standards achieved by students. Traditional examination methods are now known often to be markedly lacking in reliability and validity. They are apt to emphasize the importance of narrow objectives in the programmes of teachereducation institutions. What is required are methods of assessing competence in the fundamental concepts and skills which teachers require in their work.
- 3.3.17 A note of caution however must be introduced here, since problems of recruitment for the public services differ very greatly according to the stage of development of a country and its educational system. The methods used must be such as to sustain public confidence in the fairness and integrity of the system and the replacement of traditional systems of examination by more flexible methods is a developmental task which it will not always be possible to achieve rapidly.
- 3.3.18 The need to develop adequate means for assessment of teaching competence is an urgent technical problem and it is recommended that Unesco should promote comparative studies in this field with the objective of ensuring that all countries have adequate opportunities of becoming acquainted with modern developments.

Student life

- 3.3.19 The organization of teacher-education institutions should include means for ensuring the active and responsible participation of the students in the life and work of the institution. Students should be given the opportunity to express their views on the programme and training.
- 3.3.20 Students should be helped to organize their own activities, both in broad fields of interest and expression (e.g. social life, arts), and in areas directly related to their studies (e.g. scientific research groups). International exchanges and contacts should be encouraged and, where possible, included in the training programme.
- 3.3.21 It was considered desirable to link the teacher-preparation programme to the life of the community through direct student participation in social and economic life. Schemes such as the Ethiopian University Service should be studied and included in any international survey which may be undertaken of student activities in teacher-education institutions.

Value of pilot teacher-education institutions

- 3.3.22 It was agreed that the pilot institutions established in different developing countries, whether purely national or under bilateral or international assistance schemes serve to create a standard for the educational systems in different developing countries. Evaluation of these projects by independent experts should continue for the purpose of ensuring that the pilot institutions are geared to the social, economic and educational conditions of the country and therefore offer a realistic and effective model.
- 3.4 SHORT-TERM MEASURES AND IN-SERVICE EDUCATION
- 3.4.1 There is a widespread need for short-term measures making efficient use of accelerated programmes of teacher education. These are needed both to raise the standards of the very large numbers of unqualified teachers in service, and rapidly to prepare recruits for service, direct from the schools and also from other professions.
- 3.4.2 Both similiarities and differences are to be found among accelerated courses in these two different contexts. In some countries priority must be given to expanding the teaching force itself, and in this context short intensive courses should be provided which concentrate on quickly improving students' knowledge of the subjects they will have to teach and on giving them basic pedagogical skills. Experience shows the need for this process of intensive preparation to be followed up with regular programmes for reinforcing and raising the standards of such teachers in the early years of their service. The patterns and methods for such accelerated in-service programmes tend to follow the patterns now being developed for in-service work in general.
- 3.4.3 Patterns of in-service work necessarily vary with conditions but most employ one of, or more commonly a combination of, the following: correspondence courses, evening classes, day or longer periods of release from active service, and vacation work which is often residential in character. These various patterns have each their particular merits and drawbacks, and different countries have much to learn from each other's experience.
- 3.4.4 As regards the requirements for the selection of candidates for short-term in-service courses, it was felt essential to observe the principles set out on this subject in the Recommendation concerning the Status of Teachers, which states that candidates "should be selected in terms of the standards applying to admission to the normal professional programme, or even higher ones, to ensure that they will be capable of subsequently completing the requirements of the full programme". (Article 143.1).
- 3.4.5 It is essential that the best available staff be recruited for the conduct of in-service work, which may be organized under the auspices of teachers' colleges, professional organizations, universities, international exchanges or special centres created for the purpose. The resources to be used for those courses should include adequate documentation and information services and wherever possible specially prepared material and the use of modern teaching aids. While lecture courses have a part to play, these should be supplemented by seminar and group methods and by individual study. It is generally agreed that this form of preparation makes greater demands on students than conventional pre-service methods and hence that adequate tutorial guidance must be available. In particular, the effective use of correspondence courses depends on the development of adequate methods of control and guidance by means of continuous contact between students and the servicing institutions. It was generally agreed that correspondence courses require to be supplemented by other methods.
- 3.4.6 Professional organizations of teachers both in the developed and developing countries are very favourably placed to play an important rôle in in-service work, both on a national and an international level particularly as regards dissemination of information on developments in curriculum and methods, and in bringing together teachers from varying disciplines in pursuit of common professional objectives. There is a distinct trend for these professional organizations to concern themselves with raising the standards of competence of their members through the organization of in-service courses.
- 3.4.7 In-service work with short-term objectives should be conceived as a process of systematic up-grading and hence it should be geared to the attainment of the general standards prevailing, or aimed at, in the country concerned. By this means powerful incentives may be brought

into play, both through offering salary increments for completed stages of work and through the eventual attainment of full qualifications.

- 3.4.8 These forms of intensive in-service work can and should lead on to work with the longer-term objective of continuous study for all teachers. This may variously be concerned with the introduction of new curricula and teaching materials, with the development of the teacher's knowledge of his subject through research, with deeper study of the pedagogical and social sciences and with preparation for playing leadership rôles in the school system. In some of the more developed countries, there is now an increasing emphasis on the need to provide for teachers' first-hand experiences of inquiry and research as the most satisfying and productive form of professional refreshment. This in turn leads to the concept of a new career pattern in teaching, in which periods of service will alternate with periods of refreshment. All the agencies concerned with teacher preparation and status, including the professional organizations have a rôle to play in the development of such new patterns.
- 3.4.9 In view of the importance of in-service work, both of a short-term and long-term character, and in order to increase the scope and efficiency of this work, it was recommended that Unesco promote comparative studies on education of teachers in-service with due regard to the problems of various regions of the world.

4. RESEARCH IN TEACHER EDUCATION

- 4.1 Research has an essential contribution to make toward the solution of some of the problems of teacher education raised earlier in this report. It is needed to assist in the solution of any short-term problems concerning the most effective use of educational manpower, the utilization of new techniques and materials and the interpretation, in terms of curricula and methods, of the expanding volume of human knowledge. It is also vital to long-term planning and in helping to delineate new conceptions of teaching and of the rôle of the teacher. This instrumental use of research through the application of its results requires, however, to be supplemented by a conception of research as an activity in which teachers have to engage in order to develop in themselves more adequate attitudes, concepts and skills.
- 4.2 While teaching and research in education must necessarily be distinguished from one another they are nevertheless subtly interdependent. The modern conception of teaching is one which is infused with the spirit of inquiry, in which there is a sensitivity to and an appreciation of the ways in which new knowledge comes into being because for the child all knowledge is new. An introduction to the methods and spirit of inquiry is therefore an essential part of teacher education. At this level inquiry must grow out of the personal and professional interests of individual teachers, and under skilled guidance they should engage in simple forms of investigation. For some this should lead on to a disciplined apprenticeship in research methods and eventually to independent research.
- 4.3 Problems which are matters of common professional concern should also be the focus or organized work for groups of teachers, either through their professional organizations or teacher-education institutions. Under skilled guidance, group research by teachers can further their own education and contribute directly to the improvement of practice, e.g. through devising new teaching materials and revising textbooks.
- 4.4 An urgent requirement in all countries is the determination of national priorities for research at a mature professional level. Investigations may be required, for example, into school drop-outs and wastage generally within the educational system, into the construction and utilization of standardized tests for use by teachers, into pupil guidance within the educational system, into the identification of pupils with learning difficulties and problems of personal adjustment and into methods of remedial education. At this level also, projects for curriculum change require the application of research techniques in identifying problems and in evaluating progress. The success of such projects is dependent on teacher participation.
- 4.5 If effective use is to be made of new materials, media and methods (e.g. programmed learning) sophisticated research is urgently required into conditions of learning and teaching, including the organization of schools and classes, and into the differentiation of rôles between fully-qualified teachers and auxiliaries of various kinds. Such studies are essential not only for the solution of short-term problems but also in the long term for constructing a new image of the

teacher's rôle including the productivity of teachers and a new perspective of teaching and the function of schools in society.

- 4.6 Research is also required into teacher education itself. Little is known of the details of teacher-pupil interaction and of the effectiveness for learning of different facets of teaching behaviour, and of the conditions which mediate the transmission of attitudes and values. The results of such studies and of the continuous evaluation or monitoring of teacher-education programmes by research methods are vital to the continuous reform of curricula and methods in teacher-education institutions. Much also has to be learnt about the difficulties encountered by beginners in the profession and of the most effective forms of professional help and guidance.
- 4.7 If recent innovations in educational practice which take into account the developments of pupil's attitudes and personalities, their social skills and powers of creative expression and appreciation, are to be firmly established, important advances in research will be required to furnish the profession with techniques adequate for the measurement of these dimensions of learning.
- 4.8 Among more fundamental problems are those concerned with the effects of the behaviour and personalities of teachers on pupil-teacher interaction and on pupils' learning and personal development. Only through the study of such problems will it be possible to reform the teaching of pedagogical subjects and in particular the teaching of psychology, so that it contributes more effectively, to deepening teachers' self-knowledge and insight into the effects of their own behaviour and to increasing their sensitivity to pupils' needs.
- 4.9 One of the barriers to the advance of research in education is the present inadequate supply of personnel to carry it out, and the lack of facilities for systematic training in research methods. This is one facet of the problem of establishing adequate career structures in education which ensure that research experience is a continuing activity and not something that happens only once early in the career of a few teachers. Closely related to this is the need for a clear concept of the disciplines and skills which research in education entails. Educational research is not a single unified activity because education itself is not a self-standing discipline but is supported, and indeed constituted by, a range of separate disciplines, such as psychology, sociology, etc., each with its own concepts and skills.
- 4.10 It was agreed that the use and application of research in the education and further education of teachers has to be seen not only through the dissemination of research information in a form in which it can be appreciated and used by teachers but also in terms of the development of teachers' capacities to formulate problems for themselves and seek solutions to them through a widening of their perspectives.
- 4.11 Developments in international research show promise of adding new dimensions to comparative studies through the establishment of baselines and objectives which are amenable to cross-cultural interpretation, for example, the current international studies into educational achievement.
- 4.12 It was urged that Unesco, in consultation with interested organizations, encourage research in teacher education and contribute to the dissemination of research findings.
- 5. SUMMARY
- 5.1 MAIN CONCLUSIONS AND RECOMMENDATIONS

General policy

5.1.1 The provision of teacher education for all teachers in university-level institutions is considered the ideal, long-term objective for both developed and developing countries. In the countries where short-term emergency measures are introduced to overcome a severe shortage of teachers, a comprehensive plan for development of teacher education should aim at post-secondary level preparation for all teachers. (Rp (1) 3.1.1; Rc (2) 21).

⁽¹⁾ Rp = Final report of the Expert Committee on Teacher Education (Paris 4-15 December 1967)
(2) Rc = Recommendation concerning the Status of Teachers (Paris, 1966)

- 5.1.2 As regards <u>primary-teacher education</u>, it is essential to strive towards raising the level of general and professional studies of this category of teachers, in order to promote their personal development and professional status. Towards this end, organization of joint teachereducation institutions for primary and secondary teachers should be aimed at as a long-term objective (Rp. 3.1.10-12; Rc. 24).
- 5.1.3 The central problem of the organization of the education of secondary school teachers is that of obtaining the proper balance between the academic and the pedagogical parts of the programme. While it is desirable to maintain the traditional high level of academic and cultural studies, it is necessary to develop and maintain the professional component at an equally high level (Rp. 3.1.13-14).
- 5.1.4 Some form of association or integration between teacher-education institutions and the universities is desirable. This relationship should be a two-way effort: the university should accept the responsibility and leadership for teacher education as a whole while teacher-education institutions must demonstrate that pedagogical studies are being pursued at the same high level and with the same rigour as other academic disciplines. This purpose may be achieved by involving teachers from other faculties in the professional part of teachers' studies, particularly in such fields as philosophy, sociology and psychology (Rp. 3.1.8).
- 5.1.5 Where academic courses are given in a university and subsequently professional courses take place in a specialized institution, close co-operation should be established between the university and the institution concerned (Rp. 3.1.18; Rc. 22).
- 5.1.6 It is desirable to promote closer collaboration between teacher-education institutions and schools (Rp. 3.1.19; Rc. 28).
- 5.1.7 Teachers should be encouraged to collaborate with authorities, through their organizations or in other ways, in all measures designed to raise the standards of teacher education (Rp. 3.1.9; Rc. 75, 76).

CURRICULUM AND METHODS

General studies

- 5.1.8 All teachers require a broad basis of general studies in their education, although the scope, level and emphasis of these studies will vary as between primary and secondary teachers and, to some extent, also with local environment, as in the case of rural and urban communities (Rp. 3.2.6; Rc. 20).
- 5.1.9 In all circumstances, however, certain features of the modern world require special emphasis: the methods and values of science and its potentialities for human betterment; health education, geared to the needs of the child and its environment; the arts and music, regarded as fundamental forms of human expression and communication, and as basic for human development as verbal and numerical languages; education for international understanding and co-operation (Rp. 3.2.7; Rc. 3).

Major academic studies

5.1.10 All teachers should have a thorough grasp of the essentials of their special field of know-ledge. Specialized studies of one or more academic subjects should be conceived in such a way as to make them effective components of the teacher's general education. The content and methods of teaching these subjects need to be kept under regular review in order to maintain and enhance their relavance for student teachers and ensure their application to teaching in schools (Rp. 3.2.10-11).

Professional studies

5.1.11 There is a need to ensure that the content of professional studies, especially in psychology and sociology is relevant, in level and approach, to the realities of childhood and of family and community life in particular environments. The student should actively be involved in procedures of inquiry through which he can develop concepts and skills directly related to his practical needs and to the circumstances of childhood in the country concerned (Rp. 3.2.12-13).

Practical experience

5.1.12 An essential of teacher-preparation programmes is the integration of theoretical studies with practical experience of teaching. The general aim must be to develop close and continuous collaboration between teacher-education institutions and the co-operating schools, including where they exist, laboratory and application schools. Centres for curriculum development set up within, or associated with, schools also provide valuable experience to student teachers (Rp. 3.2.16).

The organization of programmes

5.1.13 The programmes should be governed by the principles of flexibility and adaptation to the needs of individual students. They should aim at enabling individual students to become competent in the different parts of the programme, rather than requiring that they put in a certain number of hours and obtain a certain number of credits (Rp. 3.2.17).

Examining and assessing students and programmes

- 5.1.14 It is of the utmost importance that the principles which underlie programmes of teacher education should determine the way in which students are assessed and examined and not the other way round (Rp. 3.2.18).
- 5.1.15 It is desirable to develop in all teacher-education institutions some built-in procedures for evaluating their own programmes and methods of work, including for example, follow-up studies of recently trained teachers (Rp. 3.2.19).
- 5.1.16 The life of the teacher-training institution as a whole, its ethos, the kind of human relationships it fosters, are among the most powerful influences on the development of teachers (Rp. 3.2.20; Rc. 27).

INSTITUTIONS FOR TEACHER EDUCATION

Staff

- 5.1.17 Staff in teacher-education institutions should have been educated to a high cultural level, should have appropriate understanding or practical experience of problems and conditions within school systems, should have had pursued appropriate specialized studies of pedagogical subjects to an advanced level and should be capable of carrying out original work in their own field (Rp. 3.3.2; Rc. 25, 26).
- 5.1.18 In the present condition of shortage in many countries existing well-qualified staff should function as leaders of teams which would include less qualified staff (Rp. 3.3.4).
- 5.1.19 Adequate opportunities should exist in teacher-education institutions for professional development of the staff through further study and research (Rp. 3.3.5; Rc. 26).
- 5.1.20 Every possible use should be made of interchange of staff of teacher-education institutions between different institutions within the same country, between different countries, in particular between developing and more developed countries (Rp. 3.3.4; Rc. 10 j.).
- 5.1.21 The status and prospects for promotion of the staff in teacher-education institutions should be such as to ensure sufficient stability in staffing and to provide continuity of purpose (Rp. 3.3.6).
- 5.1.22 Whatever the methods employed for recruiting staff to teacher-education institutions, they should ensure that qualities of leadership and the capacity for making fruitful and collaborative relations with students are among the most important criteria (Rp. 3.3.6-7).
- 5.1.23 The ratio of staff to students in teacher-education institutions should be such as to allow the exercise of effective professional guidance (Rp. 3.3.7). The exercise of effective professional guidance (Rp. 3.3.7). The exercise of effective professional guidance (Rp. 3.3.7).

provide and community through the can develop concepts and skills directly related to his prac-

- 5.1.24 The preparation of future teachers and of other personnel concerned with the welfare of youth should not be organized in isolation from one another since the educational, social and occupational development of young people needs to be seen as a single problem (Rp. 3.3.10).
- 5.1.25 There is a need for bringing into the staff of teacher-education institutions persons who are familiar with the industrial and rural environments within which teachers and young people will have to work (Rp. 3.3.11; BRc. 15), described in because Tisla to good morelith and B.g. 8. visury and a halfistrative personnel (inspectors, commellors, etc.) sharing re-

Recruitment

5.1.26 In order to attract suitable candidates to the teaching profession, there is a need for a wide and flexible recruitment policy which should allow for entry into teacher-education institutions at different ages and levels and for re-entry into service at later stages (Rp. 3.3.15; Rc. 11, 58).

Student life

5.1.27 The organization of teacher-education should include means for ensuring the active and responsible participation of the students in the life and work of the institution. Students should be given the opportunity to express their views on the curricula and methods used in the training programme (Rp. 3.3.19; Rc. 27); lo somebing lenderslong to soppose but savided and S. 2. 3.

for beginner teachers, including probableners.

Pilot teacher-education institutions

5.1.28 Evaluation of these institutions by independent experts should continue for the purpose of ensuring that they are geared to the social, economic and educational conditions of the country (Rp. 3.3.22). Idea and a control of an analysis and bardener in employed margining standard and Dille. &

SHORT-TERM MEASURES AND IN-SERVICE EDUCATION OF TEACHERS up box about \$11.2.8

- 5.1.29 Requirements for the selection of candidates for short-term in-service courses should be defined in terms of the standards applying to admission to the normal, professional programme (Rp. 3.4.4; Re. 143).
- 5.1.30 It is essential that the best available staff be recruited for the conduct of in-service courses and that adequate tutorial guidance be available to students (Rp. 3.4.5; Rc. 144).
- 5.1.31 Professional organizations of teachers, both in the developed and developing countries, should play an important rôle in in-service education, thus raising the standards of competence of their members (Rp. 3.4.6; Rc. 32). The local hands of competence of their members (Rp. 3.4.6; Rc. 32). The local hands of competence of their members (Rp. 3.4.6; Rc. 32). The local hands of competence of their members of the local hands of competence of their members of the local hands of competence of their members (Rp. 3.4.6; Rc. 32). The local hands of competence of their members (Rp. 3.4.6; Rc. 32) and the local hands of competence of their members (Rp. 3.4.6; Rc. 32). The local hands of the local hands of competence of their members (Rp. 3.4.6; Rc. 32) and the local hands of the local hands of the local hands of their members of the local hands o

- 5.1.32 An introduction to the methods and spirit of inquiry is an essential part of teacher educa-The consequences for eacher education of new value dio)a. (26.28; Rc. 26) noit motions and techniques (antio-visual atar programmed instruction, when itself in
- 5.1.33 Problems which are matters of common professional concern should also be the focus of organized research work for groups of teachers, either through their professional organizations or at teacher-education institutions (Rp. 4.3).
- 5.1.34 An urgent requirement in all countries is the determination of national priorities for educational research at a mature professional level (Rp. 4.4).
- 5.1.35 The use and application of research in the education and further education of teachers has to be seen not only through the dissemination of research information in a form in which it can be appreciated and used by teachers, but also in terms of the development of teachers' capacities to formulate problems for themselves and to seek solution to them (Rp. 4.10).

5.2 SUGGESTIONS FOR FURTHER STUDY

The Expert Committee suggested that Unesco should promote international and/or regional inquiries and studies on the following topics:

- 5.2.1 The structure and content of various types of teacher-education programmes with particular reference to the optimum balance between general and special academic studies; between academic and professional studies; between theoretical courses and practical experience.
- 5.2.2 The content and level of professional studies included in teacher-education programmes.
- 5.2.3 The different types of staff required in teacher-education institutions, including outside advisory and administrative personnel (inspectors, counsellors, etc.) sharing responsibility for teacher education.
- 5.2.4 The selection and admission procedures for students of teacher education institutions.
- 5.2.5 The position regarding admission of women in teacher-education institutions, with reference to the social situation in the countries concerned.
- 5.2.6 The ratio of staff to students in teacher-education institutions.
- 5.2.7 New methods and procedures of assessing and examining students, with special reference at to the rôle of final and external examinations. Shall and to accomplishing additional and external examinations.
- 5.2.8 The objectives and scope of professional guidance of student teachers; follow-up services for beginner teachers, including probationers.
- 5.2.9 The activities of student teachers, both in teacher-education institutions and in relation to to their participation in social and economic life.
- 5.2.10 The basic minimum equipment required for a teacher-education institution.
- 5.2.11 Methods and procedures for evaluating the effectiveness of programmes of work of teacher-education institutions.
- 5.2.12 Modern developments in the field of assessment of teacher competence.
- 5.2.13 The organization and methods of in-service teacher education, both of a short-term and long-term character.
 - 5.2.14 Emergency teacher-education programmes designed to meet the sudden temporary increase in demand for teachers ("bulge").
 - 5.2.15 Programmes of continuing education of administrative personnel (such as heads of school, district inspectors, supervisors, counsellors; local, regional and national heads of education departments), responsible for educational policy in schools and for educating and guiding teachers.
 - 5.2.16 The consequences for teacher education of new educational theories and of new teaching methods and techniques (audio-visual aids, programmed instruction, team teaching).
 - 5.2.17 Identification of urgent research problems in the field of educational theory and teaching methods for various subjects.
 - 5.2.18 Education of a new type of teacher for the intermediary cycle between the primary general education level and the cycle of differentiated secondary education.
 - 5.2.19 The ways and means of disseminating as rapidly as possible the results of educational redollars search to all those concerned and the rôle of Unesco in this respect. Jon uses ad of the results of the search to all those concerned and the rôle of Unesco in this respect. Jon uses ad of the results of the results of educational re-

x specifies to formulate problems for themselves and to seek solution to them (Rp. 4.18).

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ANNEX II

AGENDA

- I. Opening of the Meeting
- II. Election of Chairman, Vice-Chairman and Rapporteur
- III. Discussion of current trends and problems in teacher education (documents ED/CS.177/4 and 5)
 - Aims of teacher education in the light of educational objectives and policies, of the rôle of teachers in the society and of the requirements of education for international understanding.
 - 2. Organization of teacher education: (a) general characterists; (b) specific problems related to different categories of teachers.
 - 3. Curriculum and methods in teacher education: (a) general studies, (b) specialist studies, (c) professional education, (d) practice teaching, (e) impact of new developments in education theory and teaching methods and techniques on teacher education (documents ED/CS.177/INF/3, 4 and 5).
 - 4. Teacher education institutions: (a) staff; (b) students: recruitment, guidance, certification.
 - 5. Specific characteristics of training in service and by accelerated courses (documents ED/CS.177/INF/1 and 2).
 - 6. Further education of teachers.
 - 7. Research and teacher education.
- IV. Adoption of the Report of the Expert Committee.
- V. Closing of the Meeting.