

D DEVELOPMENT OF EDUCATION
IN THE STATE OF
JAMMU AND KASHMIR

REPORT OF THE COMMITTEE
APPOINTED BY THE STATE GOVERNMENT



GOVERNMENT OF JAMMU & KASHMIR

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CONTENTS

| <i>CHAPTER ONE</i> | <i>Paragraphs</i> | <i>Page No.</i> |
|--|-------------------|-----------------|
| I INTRODUCTION | 1-10 | 1-5 |
| The Approach | 3 | 1-2 |
| Main Recommendations | 4-6 | 2-4 |
| Advance Action | 7-8 | 4 |
| Significance and Urgency | 9-10 | 4-5 |
| <i>CHAPTER TWO</i> | | |
| TRANSFORMATION OF THE EDUCATIONAL SYSTEM | 11-85 | 6-42 |
| Basic Postulates | 12 | 6-8 |
| The Weakness of the Existing Educational System | 13 | 8-9 |
| Transformation of the Edu- cational System : A Priority Programme | 14 | 9 |
| Blending the Formal with the Informal System of Education | 15-18 | 10-12 |
| Extending the Coverage of the System to include the Working Population | 19-20 | 12-13 |
| Content of Education | 21-23 | 13-14 |
| The New Educational System | 24 | 14 |
| Primary and Middle School Education | 25-31 | 14-17 |
| Secondary Education | 32 | 17 |
| Planning the Location of Secondary Schools | 33 | 18 |
| Types of Secondary Schools | 34-36 | 18-20 |

(iv)

| | | |
|--|-------|-------|
| Bridges between Different Streams | 37 | 20 |
| Transfer of PUC to Secondary Schools | 38 | 21 |
| Transfer of First Year of TDC to the Secondary Schools | 39 | 21-22 |
| Vocationalisation | 40-43 | 22 |
| Informal Education at the Secondary Stage | 45 | 24 |
| Higher Education | 45-47 | 24-25 |
| Education of the Non-Student Youth (Age-group 15-25) | 48-57 | 25-29 |
| Revision of Curricula at the School Stage | 58-59 | 29-30 |
| Work Experience | 60-69 | 30-35 |
| Community Service and National Development | 70-74 | 35-37 |
| Science, New Mathematics and English | 75-78 | 37-39 |
| Revision of Curricula at the University Stage | 79 | 39 |
| Restructuring of the Undergraduate Courses | 80-83 | 39-41 |
| Restructuring of the Courses at the Postgraduate Stage | 84 | 41-42 |
| Conclusion | 85 | 42 |

CHAPTER THREE

| | | |
|--|---------------|--------------|
| SCHOOL EDUCATION : IMPROVEMENT OF QUALITY | 86-130 | 43-64 |
| Adoption of New Calendar for the School Year | 87-91 | 43-45 |
| Planning and Proper Location of Schools | 92-93 | 45-47 |
| Institutional Planning | 94-96 | 47-49 |
| General Education of Teachers | 97 | 49 |
| Teacher Education | 98-99 | 49-50 |

(v)

| | | |
|---|---------|-------|
| Training of Untrained Primary and Middle School Teachers in Service | 100 | 50-51 |
| Establishment of District Training Colleges for Primary and Middle School Teachers | 101-103 | 51-53 |
| In-service Education of Primary and Middle School Teachers | 104-106 | 53-54 |
| Training of Secondary Teachers : Pre-service and In-service | 107-109 | 54-55 |
| Administrative Machinery | 110-112 | 55-56 |
| Qualitative Upgrading of Schools | 113-114 | 56-57 |
| Supervision | 115-118 | 57-60 |
| Improvement of Textbooks | 119-122 | 60-61 |
| Improvement in Methods of Teaching and Evaluation | 123-127 | 61-62 |
| State Board of School Education | 128-129 | 62-64 |
| Conclusion | 130 | 64 |

CHAPTER FOUR

| | | |
|---|---------|-------|
| OTHER MAJOR PROGRAMMES | 131-192 | 65-87 |
| Provision of Universal Primary and Middle School Education (Age-group 6-14) | 132-134 | 65-66 |
| Universality of School Provision | 135-139 | 66-67 |
| Universal Enrolment | 140 | 67-68 |
| Universal Retention | 141-143 | 68-69 |
| Magnitude of the Problem | 144-145 | 69 |
| Expansion of Secondary and Higher Education | 146-153 | 70-73 |
| Some Problems of Higher Education | 154-159 | 73-75 |

| | | |
|----------------------------------|---------|-------|
| Student Participation | | |
| Amenities and Services | 160-161 | 75-76 |
| Universities | 162-164 | 76 |
| Research | 165 | 76 |
| Medium of Instruction | 166-168 | 77 |
| Examinations | 169 | 77-78 |
| Wider Contacts | 170-171 | 78 |
| Scholarships | 172 | 78-79 |
| Education of Girls and Women | 173-180 | 79-81 |
| Television | 181-183 | 81-82 |
| Educational Administration | 184-186 | 82-85 |
| Private Educational Institutions | 187-188 | 85-86 |
| Education Act and Code | 189 | 86 |
| School Buildings and Equipment | 190 | 86 |
| Some Other Programmes | 191-192 | 87 |

CHAPTER FIVE

SUMMARY OF

| | | |
|---|---------|-------|
| RECOMMENDATIONS | 193-222 | 88-96 |
| Transformation of the Educational System | 193 | 88 |
| The New Educational System | 194 | 88-89 |
| Education of Young Workers | 195 | 89 |
| Revision of Curricula at the School Stage | 196 | 89-90 |
| Revision of Curricula at the University Stage | 197 | 90 |
| Adoption of a New Calendar for the School Year | 198 | 90 |
| Planning the Proper Location | 199 | 90 |
| Institutional Planning | 200 | 91 |
| General Education of Teachers | 201 | 91 |
| Teacher Education | 202-205 | 91 |
| Training of Secondary Teachers | 206-207 | 92 |
| Qualitative Upgrading of Schools | 208 | 92 |

(vii)

| | | |
|--|---------|-------|
| Supervision | 209 | 92 |
| Improvement of Textbooks | 210 | 92 |
| Methods of Teaching and Education | 211 | 93 |
| State Board of School Education | 212 | 93 |
| Universal Primary and Middle School Education | 213 | 93-94 |
| Expansion of Secondary and Higher Education | 214 | 94 |
| Affiliated Colleges | 215 | 94-95 |
| Universities | 216-217 | 95 |
| Scholarships | 218 | 95 |
| Education of Girls and Women | 219 | 95 |
| Television | 220 | 95-96 |
| Educational Administration | 221 | 96 |
| Acknowledgements | 222 | 96 |

APPENDICES

97-147

| | |
|---|---------|
| I. Government Notification Dated 1st April, 1972 Regarding Appointment of the Committee | 99-100 |
| II. Note by Shri T.G.K. Charlu Managing Director J. & K. Industries Ltd. Srinagar | 101-110 |
| III. Introduction of Vocational Subjects in the B.A./B.Sc. (Pass Course) of the Delhi University | 111-112 |
| IV. Villages without Schools, 1971 | 113 |
| V. Informal Education for Women | 114-118 |
| VI. Statistical Tables | 119-147 |

CHAPTER ONE

INTRODUCTION

1. We have great pleasure in submitting to Government this Report on the development of education in the State of Jammu and Kashmir.

2. In accordance with the Government Notification appointing the Committee, we held a quick review of educational developments in the State since Independence and its current educational policies and programmes. We found that there has been a tremendous expansion of educational facilities in the State for which it deserves to be congratulated. The State has also the unique distinction of having made all education tuition-free and has consistently adopted a policy of increasing the facilities for education at all stages and locating educational institutions as widely as possible in all parts of the State and especially in rural areas. The basic foundations for proper educational development in the State have thus been well-laid and it has now become possible to build on them to create an educational structure which will meet the growing and more challenging needs of the people in the years ahead.

3. In formulating our proposals for reform, we have been broadly guided by the following considerations :

The Approach (1) The educational system in the State is essentially the same as that in the country as a whole. It, therefore, shares both its strengths and weaknesses although, due to unique local traditions and situation, some strengths are heightened just as some weaknesses get over-accentuated. The reform of the educational system will, therefore, have to be attempted on the same broad principles as are applicable to the country as a whole. These have been embo-

died in the Report of the Education Commission (1964-66), the National Policy on Education, and the recommendations of the 36th meeting of the Central Advisory Board of Education which has indicated the broad strategy of educational development in the Fifth Five Year Plan (1974-79). We agree with these proposals and have adopted them as the basis of our recommendations.

(2) The adaptation of the basic principles and programmes of the national plans of educational development to the local conditions in the State calls for several significant changes and what is even more important, the creation of an adequate and efficient administrative machinery for implementation. We have paid close attention to both these aspects.

(3) We also found that it is possible to promote certain innovations and experiments in the State educational system which can help, not only in improving the programmes of educational and social development in the State, but also in giving a lead to similar developments in other parts of the country. We have highlighted them in our proposals.

4. Our detailed recommendations are given in Chapters II to IV, and a brief summary is given in Chapters V. These could well become the basis of development of education in the Fifth Five-Year **Main Recommendations** Plan of the State.

5. As Government had desired that we should emphasize the development of a few major programmes, we have made no attempt to be comprehensive and to deal with all aspects of educational reconstruction. Instead, we have concentrated our attention on the identification of those programmes of high priority which can make an impact on the educational situation in the State. These have been briefly summarized below :

(1) Strengthening of secondary education through careful planning of location of secondary schools, lengthening its

duration to four years, transfer of PUC and the first year of TDC to secondary schools, and the development of a large scale programme of diversification and vocationalisation ;

(2) Revision and upgrading of curricula at the school stage with special emphasis on work experience, provision of opportunities for participation in community service and national development and the teaching of science, new mathematics and English ;

(3) Starting of three-year honours courses at the undergraduate stage ;

(4) Improvement of standards of school education through a package programme which will include adoption of a new calendar for the school year, planning the proper location of schools, institutional planning, improvement in general education and training of teachers, qualitative upgrading of schools, improved supervision and improvement in textbooks and methods of teaching and evaluation ;

(5) Provision of universal education in the age group 6-14 in a phased programme by 1980-81 through adoption of a two-point entry system and a large-scale programme of part-time education ;

(6) Development of a programme of informal education for non-student youth in the age group 15-25 ;

(7) Special emphasis on the education of girls and women ;

(8) Intensive use of television ;

(9) Strengthening of educational administration ; and

(10) Enacting of an Education Act and a Code.

6. There are two issues which we would like to emphasize in the implementation of this ten-point programme. The first is the need for trained teachers. The programme cannot be implemented unless there are competent and

properly trained teachers to work it out. The selection and training of teachers, therefore, becomes extremely crucial to the success of the entire scheme. The second, is the urgent need to set up immediately the two agricultural polytechnics we have recommended, one for Jammu and another for Kashmir. It is these polytechnics that will train the teachers to man the schools where work-experience, especially in agriculture, will be introduced. This programme also needs to be developed on a very high priority basis.

7. In order to give effect to our recommendations, we have indicated the needed advance action in the appropriate context. The most important of

Advance Action these relate to the strengthening of the Department. Basically, our proposal is that detailed plans for implementing our recommendations should be prepared by Special Officers of the Department or Committees who should be appointed immediately and who should be expected to submit their reports by the end of February, 1973. After these reports are considered by Government, action to implement them should be initiated with effect from the next financial year. In most cases, 1973-74 would be a preparatory year and full-scale implementation of these recommendations will start from 1974-75.

8. We further recommend that sum of Rs. 5 lakhs should be provided in the supplementary budget estimates for 1972-73 and a sum of Rs. 1 crore in the budget estimates for 1973-74 for giving effect to these proposals of advance action. Their further continuance will, of course, be duly provided for in the Fifth Five-Year Plan of the State.

9. We would like to highlight the significance and urgency of the development of a major programme of educational reconstruction in the State during the

Significance and Urgency Fifth Five-Year Plan.

10. As we observed earlier, the foundations of the needed educational development have been laid in

the last two decades. The State also has a fine tradition of handicrafts and village industries which can promote an excellent programme of work-experience and vocationalisation. The size of the local educational system is still small enough to make a programme of radical reforms both administratively and financially feasible. The pupil-teacher ratios in the State are on the low side and will not be high in view of the typical local settlement patterns. To get the full benefit of these valuable assets, we need a transformation of the educational system, its closer linkage with productivity and national development, and the provision of the needed dynamic leadership through the training of teachers and administrative reorganization. If this can be done over the next few years, we have no doubt that the high native talent of the people will sprout readily and bloom and lead, not only to a new intellectual and cultural atmosphere, but also to a more rapid economic growth which will improve the standards of living of the masses. We regard this as a great and humane challenge and opportunity.

CHAPTER TWO

TRANSFORMATION OF THE EDUCATIONAL SYSTEM

11. We, as a nation, are committed to the creation of a secular, democratic and socialist society which will be based on freedom, justice, equality and the dignity of the individual and which will provide a reasonable and satisfying standard of living for all. The creation of this new society needs the *total* effort of the nation, i.e., of its Government and people. Such an effort will obviously cover all aspects of reconstruction—economic, political, social and educational. We are concerned here only with the programmes of educational reconstruction which can catalyse social change. It is, however, obvious that the best and quickest results of programmes of educational reconstruction can be obtained only if they are simultaneously supported by corresponding programmes of economic, political and social transformation.

12. Education is a double-edged tool and can be a powerful instrument of social progress only if it has the proper character, coverage and quality. It **Basic Postulates** is, therefore, necessary to determine the form of the educational system which will facilitate the creation of the new social order we wish to create and the manner in which the existing educational system can be changed into the desired form. From this point of view, the basic postulates of the new educational system can be stated as follows :

(1) Every individual is worthwhile in himself and has the potential to make his own unique contribution to society. It is, therefore, an obligation on society to create equality of educational opportunity for every individual. This implies a minimum general education provided on a free and compul-

sory basis and adequate opportunities to receive all further education according to one's needs and capacities.

(2) In this new society, there is no place for the traditional dichotomy between a small, cultured and leisured class which receives formal education and leads a parasitic existence and the over-worked masses of people who produce the bulk of social wealth but receive little or no formal education. Instead, every individual is both a worker and a producer of wealth and also an educated and cultured person with adequate leisure. Such a society, therefore, cannot continue the traditional dichotomy between work and education or between a stage of life when one only gets education and does no work and another when one only works and gets no education. It organizes both work and education as concurrent and continuous processes of life so that a good deal of work-experience becomes an integral part of education and opportunities of continuing education, either on a full-time or a part-time basis, are made available throughout one's working life.

(3) The new society will have to be based on science which is the most powerful instrument of modernization. Its educational system will, therefore, have to develop a scientific temper and a rational outlook as basic values and emphasize the proper teaching of science in close relationship with the environment and current problems of life.

(4) The socialist society aims, not at an equality in poverty, but at an equality in a reasonable standard of living for the people as a whole. This implies both increased production and equitable distribution as concurrent and inseparable aspects of social development. From the educational point of view, this implies an emphasis on a science-based technology and the simultaneous training of the brain and the hand, each of which will strengthen the other.

(5) Education is essentially a three-fold process :
 (a) it imparts knowledge and stimulates the desire to pur-

sue it continuously ; (b) it teaches essential skills ; and (c) it inculcates basic values. Therefore, in the new educational system we need to create, there has to be an emphasis, not only on imparting of knowledge, but also on stimulating curiosity and cultivating habits of self-study ; on the teaching of skills, especially productive skills ; on the development of a rational scientific outlook and problem-solving ability ; on promoting creativity and self-reliance. on development of a sense of social awareness and social responsibility; and on cultivation of basic human values, a secular outlook, and a democratic attitude including tolerance and ability to work with others in a spirit of mutual respect and adjustment.

13. Judged on the basis of these criteria, the educational system of Jammu and Kashmir, like that of the Indian Union on which it is broadly modelled, is deficient in several aspects. **The Weakness of the Existing Educational System** it lacks a mass base : only one out of every five adults can read and write ; and the provision of universal primary and middle school education in the age-group 6-14 is still a long way off. The system is largely traditional in the sense that it still continues to create an elite which strives for white-collar jobs while the bulk of the producers of wealth receive little or no formal education. It separates education from work and the training of the brain from that of the hand. It also makes education and work almost water-tight compartments of a person's life so that a student under instruction has hardly any opportunity for participating in work and the working population has equally meagre opportunities of getting education. It emphasizes, almost exclusively the formal system of education for children and a small proportion of the young who grow within the system while the informal system of education for the bulk of the youth and adults is almost completely ignored. Even the formal system of education is largely defective. It is only weakly related either to economic growth or to national development. On the one hand, there is a considerable dearth of persons with necessary and important skills ; and on the

other, there is over-production of certain categories of skills which are not so much in demand. There is too much of an emphasis on mere imparting of knowledge and too little attention to the teaching of essential skills and inculcation of values. The methods of teaching are largely traditional, emphasize memorization and do not use modern technology or powerful media like the film, radio and television. The standards are, by and large, unsatisfactory. And as a consequence of all these weaknesses, there is an increasing general dissatisfaction with the system, considerable discontent among teachers, and growing unrest and unemployment among students

14. These deficiencies have been identified for quite some time, but for some reason or the other, the radical and vigorous steps needed to transform the educational system have not been taken.

Transformation of the Educational System : A Priority Programme

Meanwhile, owing to pressure of public demand, the educational system has grown tremendously in size. While this was necessary and had its own great social advantages, it cannot be denied

that the stresses and strains of the system have also increased in proportion so that the effort required to transform the system has also become more complex, more difficult and more costly. A stage has, therefore, been reached when a transformation of the educational system has become a programme of the highest priority which can be ignored only at great national peril. At the same time, it is neither possible nor desirable to halt further expansion. We, therefore, recommend that the Government should develop, during the next seven or eight years, a programme of the radical transformation of the educational system side by side with its further expansion, especially at the primary and middle school stages. In the State of Jammu & Kashmir, the present time is the most opportune for the purpose because the over-all size of the system is still manageably small.

15. This transformation of the educational system will obviously have to be attempted on three major fronts. The

**Blending the
Formal with the
Informal System
of Education**

first of these would be to blend the formal and the informal system together with a view to meeting the complex needs of modern societies.

16. Even at its best, a formal system of education with its single-point entry (in class I at about the age of 6), its sequential promotions from class to class every year, its exclusively full-time courses, and its professionalized body of teachers has several limitations. It can cover only the non-working population which is the smaller and less effective section of the total population. It offers no help or a second chance to those unfortunate children who miss its narrow doors of admission or who are compelled to step off it for social and economic reasons. It contributes only a small proportion of the total education which an individual receives (the bulk of this comes from the home, the society at large, and the personal and working life of the individual himself). It has also a tendency to become a vested interest and help to perpetuate privilege or conformity rather than to promote equality or healthy dissent. At the same time, its costs continue to mount till a point is reached when even the most affluent nations begin to feel that they are beyond their reach. To overcome all these difficulties, we recommend that we should abandon the traditional obsession with and the almost exclusive use of the formal system of education and blend it fittingly with the informal system.

17. From this point of view we suggest that radical changes should be made in the existing system of education on the following lines :

(1) The concept of the single-point entry in class I at about the age of 6+ should be abandoned, although it will continue to be the normal channel of entry for the majority of children. The system should have, in addition, another point of entry at about 11+ for those children who could

not enter at 6+ or so. The third entry may be provided at about 14+. There should also be a programme of adult education in which it would be possible for an adult to receive education if and when he desires to do so.

(2) The present concept of the system is that a person enters it at the bottom, rises continuously upward from year to year, and having reached the highest point within his capacity, steps off into the world of work, never to return to it again. This rigid system should make room for an elastic one under which a person can enter the system at various points, can step off it if need be, and can join it again, if and when desired, at any stage in his life.

(3) At present, the system adopts full-time institutional instruction as almost the sole channel of education. This has to be supplemented by non-institutional forms of education like correspondence courses or use of mass media. Channels of part-time education should be opened out at every stage so that the educational opportunities for the working population are substantially increased. Private study should receive all encouragement and it should be open to any person to appear for any public examination at the school or university stages.

(4) The right to teach should not be restricted to certificated and full-time teachers only. All teaching resources in the community should be harnessed; and persons with the requisite skills should be fully utilised for purposes of instruction, on a full-time or part-time basis, even if they cannot be equated with duly certificated teachers. The students themselves form a vast and important teaching resource within the system and there is no reason why it should not be systematically utilised for teaching purposes within their competence.

(5) While the significance of literacy is not denied and while every effort should be made to promote it, there is no reason why roads to meaningful education should be barred to those who are illiterate. Experience has shown

that the basic knowledge in science and technology, or techniracy, can be imparted even to illiterate persons. The same thing can be said of knowledge in other areas as well. We should spread such basic knowledge to all persons, without making literacy a condition precedent, through modern media of education like the film, radio or television. The chances are that these persons would soon get interested in acquiring literacy thereafter. On the other hand, an attempt to make literacy the condition precedent for acquiring this useful knowledge is likely to deprive the adult of both literacy and the basic knowledge.

18. Radical as these changes are, it may be pointed out that they reduce, and not increase, the costs of education. They enrich the educational process and make it more meaningful by relating it, not only to the need and capacity, but also to the urge, inclination and convenience of the educand. They make for wider social participation by including persons beyond the usual confines of the teaching profession. And above all, they make work and education concurrently possible and form the only basis on which a system of life-long education can be offered to every individual.

19. The blending of the formal with the informal system of education will pave the way to the second major reform, namely, a revolutionary change in the coverage of the educational system.

Extending the Coverage of the System to include the Working Population

20. At present, the educands in the system consist largely of children of less than 14 years of age. It covers only a small minority of youth in the age-group 15-25 who grow within the system and form about 7% of the total population in the age-group. Even among the children, it does not cover those who are required to work at home or outside. It excludes all working youths and adults because of its exclusive use of full-time education. This approach, however, has two main weaknesses : (1) the system can have only a limited capacity

to bring about social transformation because its educands are the weakest members of the society and the least able to influence it : and (2) its effect on social transformation can only be long-term. Developing countries like ours, which have a long way to go to modernise themselves and are extremely pressed for time, need a far more powerful tool of social transformation which can also yield quick results. Their educational systems will, therefore, have to cover the working population which consists of the bulk of their youth and their adults and which determines the nature of their society. Such direct impact on the working population will also yield immediate dividends. We, therefore, recommend that steps should immediately be taken to develop appropriate programmes of part-time education for as large a part of the working population as possible.

21. The third major programme for the transformation of the educational system is to change the content of education and to revise curricula in keeping with the needs of a rapidly modernising society. This will imply, as suggested by the Education Commission or the Central Advisory Board of Education, an improvement in the teaching of languages ; a great emphasis on the teaching of science and mathematics which would be compulsory in Classes I-X ; the introduction of work-experience and social or national service ; much greater emphasis on the programme of physical education, games and sports ; and the strengthening of the cultural content of education. Above all, education at all stages will have to be related closely to environment so that it becomes meaningful to the educands and immediately useful, not only for personal growth, but also for social development. We, therefore, recommend that immediate steps should be taken to revise curricula on the broad lines recommended by the Education Commission and the Central Advisory Board of Education.

22. The traditional educational system has emphasised the three R's, i.e., Reading, Writing and Arithmetic.

In the new educational system we must speak, not of the three R's, but of the three 'Racys' : Techniracy, Literacy and Numeracy. By 'techniracy', we mean the teaching of science, of technology and of work-experience or productive processes based on them. In the present system techniracy is comparatively neglected and is the weakest element. It should, therefore, receive the highest emphasis in the new system. By 'literacy' we mean, not only the teaching of reading and writing which is emphasised at present, but also the development of essential communication skills, the awakening of curiosity and the cultivation of habits of self-study. By 'numeracy', we mean, not the teaching of arithmetic, but the introduction of new mathematics which is so basic to the teaching of modern science and technology.

23. Needless to say, this programme of changing the content of education and revision of curricula will also have to be accompanied by appropriate programmes for revision of textbooks, preparation of new teaching and learning materials, and adoption of dynamic methods of teaching and evaluation.

24. What are the changes necessary in the existing educational system in the state if it is to be transformed on the principles indicated above? What will be the main features of the new educational system that we visualize? It is to the detailed discussion of these important issues that we shall now turn. We shall first deal with the structural changes needed at the different stages of education and then take up the questions of the informal education of the significant sectors of the working population and the revision of curricula.

The New Educational System

25. The first stage in the school system should cover a period of eight years or the age-group 6-14 or classes

Primary and Middle School Education I-VIII. It may be divided into two sub-stages : (a) the primary stage which would cover classes I-V or the age group 6-11 ; and (b) the middle school stage which will cover classes VI-VIII or the age-group 11-14. At present, the number of primary schools is large while that of the middle schools is comparatively small, there being roughly one middle school for every four primary schools. However, as time passes and education in the age group 6-14 becomes universal, the number of middle schools will tend to increase. Ultimately, we recommend that a primary or middle school should be made available to every child within easy accessible distance from his home.

26. There are two main weaknesses in the present system of primary and middle school education.

(1) *Single-point Entry* : A child can enter the system only in class I at about the age of 6+. There is of course no bar in theory of a child of any age to enter class I. But older children will not like to sit with the six year olds and receive education at their pace. Consequently, a child which misses entry to school at 6+ has to live and die as an illiterate individual.

(2) *Exclusive Full-time Education* : The system is one of exclusive full-time education. Consequently, children who are required to work in or outside their family (and the majority of children start doing so at about the age of 9+) are compelled to drop out, thus leading to a huge wastage. Of every 100 children enrolled in class I, only about 40, reach class V and only about 20 reach class VIII.

27. To overcome these weaknesses, we recommend that the existing system of admitting children in Grade I at the age of 6+ and giving them full-time education should be modified in two ways. (1) The first is to provide for a two-point entry : one at about the age of 6+ and the other at about the age of 11+ ; and (2) the second is to provide a large-scale programme of part-time education for all

children in the age-group 11-14 who cannot attend schools on a whole-time basis. The net implication of these proposals is that we shall have to provide a very large programme of part-time education for children in the age-group 11-14. The general idea should be that those children who can attend schools on a whole-time basis may join them in class I at about the age of 6 and rise successively to class VIII. But those children who drop out from schools prematurely or have not entered the school at all should be under an obligation to attend a separate system of schools organized for them, on a part-time basis, between the age of 11 and 14.

28. These part-time schools will be of two main types :

(1) Schools for those children who join at about the age of 11₊ and have never been to schools earlier. Children who have been to schools but left them after a short-time may also be admitted to these schools.

(2) Schools for children who have completed class V but cannot continue their education further on a full-time basis.

29. The first category of schools will have special curricula of their own, special text-books and special methods of teaching. Their teachers will have to be specially oriented. In some cases, the teachers in the ordinary schools will be able to conduct these classes which usually run for about two hours a day. But wherever necessary, locally available teachers should be appointed and paid an honorarium for the work. They should all be given an orientation to this programme for about 4-6 weeks. The children attending these schools may not know the alphabet ; but their minds are comparatively more mature and they are also better motivated and more eager to learn than young children of 6₊. It should, therefore, be possible, with appropriate teaching methods, to give an education equivalent to that in class IV to these grown-up children in about two years.

30. The schools in the second category also will be different from the ordinary middle schools. They will have a much simpler syllabus because the time available is limited and will consist partly of general education and partly of intensive work-experience so that, after spending two or three years in the school, the children may join some vocation and earn a livelihood. It is true that some of these students may like to study the same syllabus as in the middle schools and appear for the examination at the end of Class VIII. They should be assisted to do so. Ordinarily, they will take a little longer time to complete this course as they will be attending on a part-time basis.

31. If these radical changes are carried out, it will be possible to bring almost every child in the age-group 11-14 (who is not attending the formal system of education on a full-time basis) under part-time instruction for about two years and make him functionally literate (or give him an education which will be substantially equal to that in Classes I-V). Some of these children may also continue their studies further, again on a part-time basis, in the schools of a slightly advanced character which have been described above.

32. The next stage in the educational system, namely, secondary education now consists of three years or Classes IX-XI or the age-group 14-17. The

Secondary Education main weaknesses at this stage are the following :

(1) The number of secondary schools is too large and their location has been very haphazard and unplanned.

(2) There are too many categories of institutions working at the secondary stage. There are lower high schools which teach only Class IX ; there are high schools which teach Classes IX and X ; there are higher secondary schools which teach Classes IX-XI ; and the PUC which is equivalent to Class XI is also taught in Colleges.

(3) The duration of the secondary stage is too short

so that a student completing secondary school is too young to be employed or to enter the University.

(4) The courses provided at the secondary stage are almost exclusively academic and preparatory for higher education so that it would not be far wrong to say that the secondary school probably fits a student for a college and almost unfits him for everything else.

Because of these severe limitations, the secondary stage of education forms the weakest link in the educational system ; and its strengthening and reform becomes a programme of very high priority.

33. It must be emphasised that a secondary school must have a certain minimum size for efficient and economic working and that the proliferation of small secondary schools is a wrong policy, both academically and financially. But unfortunately, the location of secondary schools in the State has been haphazard and unplanned and it is this indiscriminate spread of secondary schools that is largely responsible for the inordinate increase in enrolments and deterioration in standards at the secondary stage. A proper policy of controlling the location of secondary schools may, therefore, be the first major step to limit expansion rates to manageable levels and to improve standards. We, therefore, recommend that a careful survey should be carried out for every secondary school to determine whether and in what form it should be continued. This may be done in such a manner that each secondary school has the necessary catchment area and access to secondary school education is made fairly general in all parts of the State. This should be one of the responsibilities of the Officer on Special Duty who should be required to submit a detailed report on the subject.

34. We are also not in favour of continuing the present variety of nomenclatures of institutions functioning at the

**Types of
Secondary
Schools**

secondary level. We recommend that, in future, all Institutions at the secondary stage should be given only one designation, namely, secondary schools.

This does not mean that they will all reach up to the same standard or that they will offer identical curricula. But these are minor differences ; and in spite of them, it should be desirable to designate all of them with the single appellation of secondary schools.

35. In our opinion the secondary schools in the new educational system would be of three types :

(1) *Full-fledged Secondary Schools Which Will Teach Classes IX-XII.* These will mainly be university preparatory and will be located in such a manner that access to these schools would be fairly equal in all parts of the State. In determining their locations, their catchment area, possible enrolments, etc. would also be taken into consideration to ensure that each of these institutions is of an optimum size which becomes both economical and efficient.

(2) *Secondary Schools Which Teach Only Classes IX and X.* Their curricula will, however, be identical in content to those in the full-fledged secondary schools so that, after passing Class X, the students from these institutions may transfer themselves to Class XI of the full-fledged secondary schools. In determining the location of these institutions also their enrolments and catchment area will have to be taken into consideration to ensure an optimum size.

(3) *Vocational Secondary Schools.* These will provide a two-year course which will prepare the student for some vocation in agriculture or industry. About 50% or more of the time of the students will be devoted to learning the vocation and the rest will be devoted to general education. In addition to these principal courses of two years' duration, these institutions may also provide various shorter courses in specialized vocations in agriculture or industry for persons who have already adopted or are proposing to adopt the vocation.

36. The survey of existing secondary schools which we have recommended above in paragraph 33 will indicate the action to be taken in four directions ; (1) Some schools will become full-fledged secondary schools teaching Classes IX-XII ; (2) some schools will teach Classes IX-X ; (3) some schools will be converted into vocational schools ; and (4) some schools which are not likely to be viable or economic may have to be closed down. As we have indicated above, the detailed report to be submitted by the Officer on Special Duty on this subject will indicate the action to be taken in regard to every secondary school in one or the other of these four categories.

37. We recommend that suitable bridges may be provided for transfer between these different types of institutions.

At the end of Class VIII, a student will have four options : (1) he may step off the education system and join the world of work and may continue to receive part-time education in the programme of informal education for young people in the age-group 15-25 which will be described in a later section ; (2) he may decide to join a vocational course so that he qualifies himself for some useful vocation—the proportion of such students will increase when work-experience is introduced as an integral part of education in classes I-VIII and when the remuneration available in these vocations goes up considerably ; (3) he may decide to enter a secondary school teaching classes IX-X which may be available in or near his locality ; or (4) he may decide to join the full-fledged secondary school which will be largely university preparatory. It will, however, be open for him to change his course whenever he desires. Students who have joined the vocational secondary school may appear at the examination at the end of class X and after passing it, may join the full-fledged secondary schools in Class XI. The same facility will be open to students who enter secondary schools teaching classes IX-X. On the other hand, students who have joined secondary schools may also, at any time, if they so desire, join vocational courses of their choice.

38. We also recommend that the PUC should be transferred from colleges to the secondary schools where it rightly belongs. This will also relieve the colleges of congestion and over crowding. In our opinion, therefore, this programme deserves the highest priority. We suggest that detailed plans for strengthening full-fledged secondary schools should be prepared by February, 1973. The necessary funds to provide buildings, equipment, etc. to all the full-fledged secondary schools should be provided in the budget estimates for 1973-74 and all the necessary facilities to accommodate students now reading in the PUC should be created in them by the end of 1973-74. This will make it possible to transfer the PUC from the colleges to the secondary schools with effect from the academic year 1974-75. In our opinion, this programme is feasible. Should any difficulties arise, it may be phased over a longer period. But under any circumstances, all the PUC in colleges should be transferred to the full-fledged secondary schools within a period of three years at the most.

39. The first year of TDC should continue to remain in the colleges for the time being and until the PUC is fully transferred. But its place is at also the secondary stage. It is, therefore, necessary to transfer this class from the colleges to the full-fledged secondary schools. The main problems involved in this transfer are two: (1) The provision of necessary buildings and facilities in the full-fledged secondary schools ; and (2) the provision of the necessary staff. We do not recommend the transfer of any staff from the colleges to the full-fledged secondary schools (unless it may be at the request of the person concerned). The transfers of the PUC and the first year of TDC from the colleges to the full-fledged secondary schools will create a position of some surplus staff in colleges no doubt. But this will immediately be absorbed by the increase in enrolments that will normally take place in the Fifth Five-Year Plan and by the organisation of honours courses which we are recommending in a sub-

sequent Section. We find that there is a large number of persons with adequate qualifications now available in the State for appointment at this stage. We, therefore, see no difficulty in getting the required staff for the full-fledged secondary schools. In fact, this would incidentally relieve the acute unemployment we now have in this important sector. We, therefore, recommend that, after the PUC is transferred to the full-fledged secondary schools, early steps should be taken to transfer the first year of TDC also to these institutions. The programme should be, under any circumstances, completed before the end of the Fifth Five-Year plan.

40. Secondary education serves two main purposes : it prepares for the university and is also terminal and prepares a student for different walks of life. The **Vocationalisation** existing system of secondary education is almost exclusively university preparatory and it is, therefore, necessary to diversify and vocationalise it so that it also becomes terminal for the majority of students. This is probably the most effective way to reduce pressures on access to higher education.

41. As stated earlier, the vocational secondary schools (which will admit students who have completed class VIII) will necessarily be terminal and provide entry into different vocations. But this attempt at diversification and vocationalisation at the end of Class VIII is not enough. It is further necessary to make another attempt at the end of Class X when the student would be about 16 years of age and in a much better position to decide upon his future career. We, therefore, entirely share the view of Education Commission that an intensive effort for diversification and vocationalisation should be made at the end of Class X, the objective being to divert about half the students completing Class X into vocational courses. This should be an important objective of educational policy to be developed in the years ahead.

42. From this point of view, we recommend that steps should be taken to prepare estimates of man-power needs

for the State for the next 5-10 years. This could give some basis for the proper planning of vocationalisation at the secondary stage. Without anticipating the findings of these estimates, it will not be wrong to suggest that the organization of the following vocational courses may be found useful :

(1) *Courses of Teacher Education* : These will need considerable expansion in view of the rapid expansion of primary education.

(2) *Agricultural Polytechnics* : At least one polytechnic should be started in each province.

(3) *Courses for Secretariat Training* : A two-year course may be designed for preparing students for secretarial or clerical jobs. Posts under government or in the public sector should be filled only by persons trained in these courses

(4) Courses for Health Personnel

(5) Courses in Home-Science (for girls)

(6) Courses in Industries, Trade and Handicrafts for which opportunities are available, either for Employment or Self-employment.

Some of these programmes can be developed in secondary schools, side by side with courses which prepare for the universities. For some others special institutions will have to be established. The programme is so significant that a special section under an officer of appropriate status will have to be created in the Education Department to look after it (including the allied programme of work-experience).

43. Our attention was drawn to the self-employment programme for matriculates which has been recently introduced in the State. The main object of this programme is to train young matriculates in appropriate vocations and to enable them to become self-employed entrepreneurs. We

welcome this scheme and feel that it will give valuable experience which will help in developing this programme of diversification and vocationalisation of secondary education.

44. The essence of the proposals made by us is to restrict the number of secondary schools to be established to carefully selected places so that each **Informal Education at the Secondary Stage** secondary school becomes a viable, economic and efficient unit. This is exactly the opposite of the existing policy of proliferating secondary schools, irrespective of enrolments, and to the detriment of standards. We therefore, anticipate that there will be pressures and demands, from several small places, to establish secondary schools in them. These will have to be resisted and, at the same time, adequate access to secondary education will have to be provided to children from these areas by the development of programmes of informal education at the secondary stage. From this point of view, we make the following recommendations :

(1) Selected secondary schools may be provided with hostels and scholarships should be instituted for children in far away places to enable them to receive secondary education.

(2) The Board of School Education may institute a correspondence course for the Secondary Stage ; and

(3) Any student who so desires may, on satisfying prescribed conditions, be allowed to appear privately at all Board examinations.

45. At the stage of higher education, we recommend that there should be two types of courses : an honours course of three years and a pass course **Higher Education** of two years. Both types of courses should be provided in all colleges. This will be the most important reform to be introduced. Its costs will also be comparatively less because of the transfer of

PUC and first year TDC from the colleges to the Secondary Schools.

46. The post-graduate courses should be provided only in the universities. They should be open only to students who have passed the honours course at the undergraduate stage. However, students who have completed the pass course creditably may also be allowed to appear, after the lapse of one year, for the honours examinations and thus qualify themselves for postgraduate studies as well.

47. As at the secondary stage, facilities for informal and part-time education should also be provided at the university stage. The universities should begin correspondence courses for those who are not under full-time instruction. It should also be open for any private candidate to appear for all university examinations. In addition, the universities should organise a variety of courses which would be of interest and utility to young persons who are employed in different walks of life.

48. The existing educational system looks after the education only of those young persons who grow within the system and who can afford to study on a full-time basis. The proportion of such persons, therefore, is small; in the age-group 15-25, it is estimated at about 7% at present. The vast bulk of this age-group is, therefore, of non-student youth who remain entirely outside the education system. As we have pointed out earlier, the part-time or informal education of this large sector of the working population is extremely important and can have great implications for social transformation and economic growth. We, therefore, recommend that this large group of non-student youth in the age-group 15-25 should be brought under the influence of the education system as early as possible.

**Education of
Non-student
Youth (Age-
Group 15-25)**

49. What are the programmes which can be developed for this group of non-student youth? It has been found,

through some studies and surveys made on the subject, that they are most interested in the following subjects amongst others :

- improvement of vocational skills so as to be able to increase their income ;
- citizenship or an understanding of the problems facing the society and the country ;
- general education ;
- sports and games ;
- hobbies and recreation ;
- health and family planning ; and
- participation in programmes of common utility.

This does not mean that every young person is interested in all these problems. But, by and large, these cover their broad interests. The curriculum for their education will, therefore, have to be a *mix* of these and related matters and the success of the programme will depend essentially upon the 'fit' between the 'mix' of the curriculum offered and the needs, interests, and capacities of the individuals for whom it is meant. In all cases, however, one thing is certain ; the vocational part with its economic implications forms the indispensable core and the other things have a value only if and when the core is fully met.

50. The educational level of this group of non-student youth shows immense variations. In the urban areas, they may include university graduates at one end and illiterate people at the other. In rural areas, only a small microscopic minority will be that of secondary-school leavers ; a small proportion would have received primary or middle school education, and the large bulk will be that of illiterates. It is, therefore, obvious that no single method of instruction can meet the needs of this varied group. For some, formal instruction through talks and discussions and practical participation in work may suffice. Many of

them may not even be interested in literacy although, at some time or the other, they may express a desire to become literate. It is also obvious that, in the education of this group, mass media like the film, radio and television can play a very significant role.

51. The programmes of education of this group will also have to be varied. By and large, it will have to be part-time. But in many cases, short residential courses can also be arranged with great advantage. A good deal of the programme can also be implemented through radio and television.

52. It has also been found that, in this age-group, the young persons learn more from each other than from older groups. In other words, a teacher is not so effective in dealing with this group as a group leader himself can be. The most successful results have, therefore, been obtained in programmes where the education of this group of non-student youth is organised by selecting group leaders from their own midst, training them in brief but intensive courses, and then helping them to put the programme across to their peers.

53. It may not be necessary to start any new institutions for this programme on any large scale because it would be both economical and efficient to put it across with the help of existing institutions. For instance, the buildings of the existing school can always be used for this programme which will mostly be conducted before or after the usual school hours. Their equipment and facilities (e.g. playgrounds, libraries, laboratories, workshops, etc.) can also be used without much difficulty. Even a proportion of the teachers in the existing system can be used on a part-time basis and paid allowances for the extra work that they will do for the programme. It will, however, be necessary to supplement this group of teachers with a fairly large number of young group leaders selected and utilised for the programme on a part-time basis and paid allowances. Obviously most of these will also be the past students

of the existing educational system. The Government of India has, therefore, proposed that, for the running of this programme, we should have only a few nucleus institutions called the youth centres and that, radiating from these centres as focal points, the programme should be implemented through, or in collaboration with, the existing educational institutions (e.g. middle schools, secondary schools and colleges). We recommend that the same policy should be adopted in the State also.

54. It would be an important part of this programme to enable the non-student youth to participate in programmes of community service. For instance, the local work programmes can be implemented through groups of non-student youth in such a manner that they will also make their own contribution in labour as well as earn some wages from it. In doing so, they will be involved in the educational process of planning the programme, understanding its *raison-d'etre*, and policies and finances. This will also make them feel that they are not mere wage-earners and that they are really participating in the development of their local community. The same observations will also apply to other developmental programmes which might be included in the Fifth Five-Year Plan.

55. The situation in the cities of Srinagar and Jammu is very special, partly because of the proportionately large concentration of the young in these areas, and partly because the educated persons form a large proportion of the local youth. Special educational programmes will, therefore, have to be developed for the non-student youth in these cities. These will include (a) special programmes of games and sports, (b) evening or morning classes in a large variety of fields which will be of interest or utility to the young ; (c) cultural programmes ; (d) social service activities ; and (e) provision of opportunities for working and earning.

56. In the rural areas, it may be desirable to begin the programme in one area in each district, the area being a

group of villages with a population of about 25,000. This may be treated as a pilot project. A young and a competent officer may be selected and placed in charge of each of these areas. Some orientation of these officers should be arranged at a central place so that they get a quick idea of the programme and the manner in which it is to be implemented. The selected area should then be surveyed and programmes of educational and local development prepared in consultation with the local non-student youth. As we have stated earlier, these programmes will include three main ingredients : (a) programmes of vocational education which are intended to improve their economic condition ; (b) programmes of participation in local development works or State plans of development ; and (c) educational programmes given on formal and informal basis. In the light of the experience gained, the programme can be extended to other areas.

57. It would be a good idea to make 'literacy' an integral part of the education of the illiterate non-student youth involved in this programme. No one should be compelled to become literate. But in any well-managed programme, the illiterate youth will come forward, sooner rather than later, to learn reading and writing ; and if they do so, facilities for their formal education should be created. There is no doubt that over a period of time, all young persons involved in the programme will be voluntarily literate.

58. Side by side with the structural changes in the present educational system which have been indicated above it will be necessary to revise the existing curricula on the broad lines indicated by the Education Commission and the Central Advisory Board of Education. The task in this State is somewhat simplified in this regard because new curricula for twelve-year schools are being prepared by the NCERT and will soon be available. These could be modified and adopted in the State without much difficulty.

**Revision of
Curricula at the
School Stage**

59. It is not, therefore, necessary for us to discuss in detail all the aspects of the needed curricular revision. Our purpose will be served if we make a few salient recommendations in crucial areas, viz., work-experience, participation in programme of social and national development, science education, the teaching of new mathematics and the study of English and indicate broadly the steps needed to revise the existing curricula in the State.

60. Work-experience was the core of the system of basic education, propounded by Mahatma Gandhi. It has also been recommended by the Education Commission **Work Experience** and the proposal has met with almost universal acceptance. In theory, what is now needed is to devise a feasible programme of translating it into practice on the basis of all our past experiments and what we can learn from the experience of other countries.

61. Our main proposals on this subject are as follows :

(1) Work experience should be an integral part of all general education in classes I-X. About one-fifth to one-sixth of the total time should be devoted to it. It should be a subject of both instruction and examination.

(2) In classes I-V, activities and work-experience of a simple type should be introduced. This may include kitchen gardening, flori-culture, clay modelling, papier mache, paper work, cardboard modelling, simpler forms of weaving with ready-made yarn, elementary needle work, etc. At this stage, the wastage is generally higher and the productivity comparatively lower. Work experience at this stage has, therefore, mainly an educational value and the returns from it, if any, can only be marginal and small.

(3) In Classes VI to X, however, work-experience becomes crucially significant. It is at this age that white-collar attitudes generally develop, and it is, therefore, necessary to counteract them through a strong and effective dose of work-experience.

(4) As large a variety of work-experience programmes as possible should be selected for introduction in classes VI-X. These will include agriculture (including kitchen-gardening), horticulture, carpentry, smithy, poultry, apiculture, silkworm rearing, fruit processing, weaving (both cotton and wool), tailoring, embroidery, gabba-making, carpet and durrie making, wood carving, *papier-mache*, sheep rearing, pisci-culture, all viable local handicrafts, electrical and mechanical trades of local demand or utility, electronics, etc. The main criterion to be adopted is that the work-experience introduced has a living place in a society and good potentialities for local use and/or marketing.

(5) Care should be taken to see that work-experience does not remain an isolated subject in the curriculum. This does not mean that one needs to go the other extreme and try to correlate it with all the subjects of the curriculum or make it the medium of education. What we expect, however, is that the scientific and technological base of the programme should receive adequate attention and be properly taught as part of the curriculum and in relation to the related subjects. Similarly, when any other aspect of the programme has a relationship with some subject of the curriculum, care should be taken to bring it out.

(6) Since agriculture will be a form of work-experience in most rural schools, steps should be taken to provide them with adequate lands, wherever possible, while implementing the Land Ceilings Act.

62. One major improvement to be made in introducing work-experience in schools relates to the teacher. In the past, the general practice has been to train school teachers in the craft through a course of varied duration and then expect them to teach work-experience in their schools. By and large, this programme has not succeeded. A majority of the teachers, having been brought up in the present educational system, have no aptitude for such work. Their technical competence in the craft has generally been poor. A large proportion of these teachers, therefore, has

often been unable to repair the tools or to produce good things by themselves or to teach properly. We, therefore, think that work-experience in schools should be taught, not only by trained teachers who show the necessary competence but also by skilled craftsmen who should be appointed on a full-time or a part-time basis, as the case may be, and given suitable allowances or salaries for the purpose. The over-riding criterion for their selection should be their competence in their craft and it would do no harm if they are even illiterate to begin with. Efforts should be made, after appointment, to give them some education and many of them would not be unwilling to receive it. But, their qualifications in general education or a lack thereof should be no bar to their appointment or continuance in service. We would like the school teachers to be trained in crafts to create the necessary aptitude in them and the proper atmosphere in the schools. They may also teach work-experience of an elementary character in classes I-V. In cases where they are specially competent, they may even teach it in the higher classes. But by and large, we expect, a skilled craftsman to teach work-experience in classes VI-X because, at this stage, a high level of efficiency has necessarily to be maintained, both in the teaching of the craft and its practice by the students.

63. Another major change we would like to introduce relates to the responsibility of the State in relation to work-experience programmes introduced in schools. The State will have to provide the equipment needed for the purpose and also to make adequate arrangements to see that it is properly maintained. It will have to provide the necessary raw materials and also to take over the finished products and market them. Further, it will have to supply the working capital needed for the programmes. It, therefore, follows that there must be an adequate and efficient official machinery in the Education Department to discharge these responsibilities. In the past, these responsibilities have not been squarely assumed by the State. Consequently, the schools found themselves too ill-equipped to

deal with the programmes of work experience which, in result, suffered both economically and qualitatively.

64. The third major change we propose is that profits from the sale of products turned out by the students as a part of their work-experience programme, should be paid to the students themselves in the form of wages. In the past, this aspect of the programme has been sadly neglected. Very often, the programmes were so poorly managed that there were no profits at all to distribute. Even when some profits did accrue, they were generally credited to the Treasury. In our opinion, a liberal policy should be adopted in computing the profits, namely, the profits should be regarded as the difference between the cost of the raw-materials supplied and the price of the finished products and no deductions whatsoever should be made for depreciation of the equipment, or interest on capital, or services provided, etc. Secondly, we also think that it would be a good incentive to the students to pay these profits to them as wages. This will stimulate their interest in the programme. It will build up the values and attitudes essential for creating cost-consciousness and a sense of entrepreneurship. This will also make the parents take interest in the education of their children and will improve both the regularity of attendance on the part of the children and public participation in the education system.

65. The fourth major change we would like to suggest is that the timings for work-experience should be wider than those prescribed for general education. For instance, while it will be obligatory on every student to participate in the programmes of work-experience during school time, it should also be open to him to work at his craft after or before school hours if he so chooses. Similarly, it should also be open to him to come to the school on Sundays and other holidays to pursue his craft. It would be equally open to him to attend the school during the vacations and work at the craft. In short, the programme should be developed on the basis of a production centre whose output receives a limited subsidy as indicated

above. The tendency to work at the crafts longer and outside the school hours, as indicated above, will grow as the student acquires skills and finds that he can earn money through his work ; and we feel confident that, if these suggestions are accepted, quite a proportion of students would be able to earn varying amounts while they are learning. This would be a very desirable development and materially improve the quality of education we provide.

66. Work experience would no longer be compulsory or an integral part of the curriculum beyond class X. However, even at the higher secondary stage and in colleges and universities, it is essential to provide students with an opportunity to earn while learning. This need will become all the greater when students who have participated in work-experience and learned to earn at the secondary stage come up to the higher secondary classes or to the colleges and universities. We, therefore, recommend that production centres in selected forms of work-experience should be established in higher secondary schools, colleges and universities. It should be open to students, who have the necessary skills and interest, to work in these production centres at their convenience. Here also, the State should provide the necessary equipment, teachers and raw-materials, and take over the finished products for sale. The profits accruing through the work should, on the lines recommended earlier, be paid to the students. Some of these centres could also be organized in collaboration with dealers in the products concerned.

67. Ultimately, this programme will have to be extended to all educational Institutions and cover all students. But, this cannot obviously be done immediately. We, therefore, propose that an experimental beginning may be made on a sufficiently large scale, as soon as possible, and preferably in 1973-74 itself, on the lines indicated below :

(1) Work-experience should be introduced in at least two primary and one middle school in the jurisdiction of

each inspecting officer. This will make supervision comparatively easy and the scale of work would remain manageable.

(2) About a dozen different types of work-experience programmes should be selected and these should be introduced in about a hundred selected secondary schools where the local conditions are favourable for that type of work-experience. This will also be quite a manageable programme. The availability of skilled craftsmen to teach difficult types of work-experience would be yet another criterion determining the scale of operation.

(3) When a programme is introduced in a school, it need not be immediately made compulsory for all students attending it. In the beginning, participation may be voluntary, but soon afterwards, or within about three years, it should be made obligatory on all students.

68. We recommend that a suitably selected person should be placed on special duty to prepare detailed plans for the introduction of work-experience in selected schools with effect from the next year and also to organize the programme. Later on, it will be necessary to create within the Education Department an adequate and competent machinery to deal with all programmes of work-experience.

69. What is important, however, is not the scale of the experiment but its quality. If the fundamental principles enunciated above are carefully implemented, we have no doubt that the programmes of work-experience will succeed and mark a turning point in the educational system. They could then be extended to other institutions in the light of the experience gained. By the end of the current decade, it should be an objective of policy to cover all educational institutions with programmes of work-experience and also to involve all students.

70. Yet another programme for the transformation of the educational system is to provide meaningful opportunities to students to participate in programme of community

**Community
Service and
National
Development**

service and national development. This will awaken social awareness and strengthen their sense of social responsibility both of which are fundamental values in socialist education and society.

71. The provision of meaningful participation in programmes of local community service is not very difficult at the primary or even at the middle school stage. The type of services which these young children can provide are comparatively simple and can be found in every community. All that is needed is the proper training of teachers, proper supervision and enlisting the help of the local community.

72. But when it comes to involving grown-up students of the secondary stage or non-student youth in the age group 15-25, a much higher and major effort is called for. This will depend upon two measures. The first is the formulation of an intensive programme for the development of agriculture and industries in the State. The State has a vast potential for the development of agriculture, horticulture, cattle breeding, sheep rearing, poultry development, fruit processing, mushroom cultivation, silk worm rearing, apiculture, pisciculture, agro-based or forest-based industries and a large number of handicrafts. There is also an immense need for a large local works programme including building construction, road building, soil conservation, reclamation and conservation of *karewa* areas, drainage and water management in low-lying water-logged areas, spraying of the area in alpine pastures and seeding such areas with suitable leguminous fodders, etc. We feel that as large a development programme as possible of these and other aspects of the economic life of the State should be formulated and included in the Fifth Five-Year Plan. Here, the feasibility of the programme and the capacity of the administration to implement it should be the criteria; and subject to their satisfaction, all the funds required should be provided.

73. The next step is to make an intensive effort to involve students and youth in implementing these developmental programmes included in the Fifth Five-Year Plan. This will be advantageous from every point of view. On the one hand, we feel that the chances of the successful implementation of these programmes will greatly improve. On the other, we also feel that this would give the rising generation a sense of participation in nation-building and help in a big way to create the necessary atmosphere for accelerated economic growth.

74. As a good example of what we have in view, we may refer to the scheme for the development of sericulture prepared by Shri T.G.K. Charlu, Managing Director, J & K Industries Ltd., Srinagar (Appendix II). Here is a programme which is essentially oriented to increasing the production of silk in the State. But it is so designed that it provides instruction in sericulture progressively in 75 schools and proposes to train 4,500 students who, in their turn, are expected to train the members of their families. On the one hand, this association of the schools with the programme is good for the scheme itself. On the other, it provides valuable work-experience and some opportunities to earn to a number of students. Shri Charlu has also suggested some other categories of production centres which can be established in selected secondary schools. We have no doubt in our mind that similar schemes can be drawn up for several other sectors as well. What we would like, therefore, is that the possibility of involving students and youth in implementing schemes of development included in the Fifth Five-Year Plan should be fully explored.

75. We recognize that the curriculum has to be taken as an integrated whole and that each subject has its own unique place therein. However, we do feel that the teaching of three subjects viz., science, mathematics and English needs to be highlighted in the new curriculum. Science is a powerful tool of modernization

**Science, New
Mathematics
and English**

and a basic cultural value in itself. It must therefore become, as the Education Commission observed, an obligatory and integral part of the curriculum in classes I-X. Its teaching must be closely related to environment and to problems of production in agriculture or industry as well as to those of health. An attempt has to be made to emphasise basic concepts and to teach science with comparatively limited equipment some of which at least should have been fabricated by the students themselves from local materials. It is equally important to abandon our pre-occupation with traditional arithmetic or mathematics (which has now become obsolete) and to introduce the teaching of new mathematics which is so basic to all modern developments in science. As immense harm to future professional growth is done by neglect of mathematics at the school stage, it is essential to make it obligatory in classes IX. Similarly, much greater emphasis has to be laid on the proper teaching of English which is our main window on the world and our main channel of access to the rapidly growing stock of knowledge.

76. The responsibility to prepare the new curricula for classes I-XII shall rest in the State Board of School Education whose composition, responsibilities, etc. will be discussed in detail in the following chapter. We recommend that the State Board of School Education should be immediately constituted and directed to prepare the new curricula for classes I-VIII and for classes IX-XII (on the assumption of the existing curricula for class VIII) before the end of 1973-74. It will not be difficult to do so because of the assistance that will be available from the NCERT. The year 1974-75 should be allowed for the preparation of textbooks, orientation of teachers and inspecting officers, etc. and, in the following year (1975-76), the new curricula should be introduced simultaneously at two points :

(1) The first point should be class I in which the new curricula should be introduced in 1975-76. They should

then be introduced successively in class II, class III, etc., every year till they are introduced in class VIII in 1982-83.

(2) The second point should be class IX where the new curricula (prepared on the basis of the existing curricula for class VIII) should be introduced in 1975-76. They should then be introduced successively in classes X, XI and XII so that the entire programme at the secondary stage would be completed in 1978-79 or the final year of the Fifth Five-Year Plan.

77. Alternative curricula for classes IX-XII, based on the new curriculum for class VIII which will be reached in 1982-83 should also be finalized by 1981-82, and these should be introduced in class IX in 1983-84 and then successively raised each year to classes X, XI and XII, respectively.

78. Needless to say, the introduction of the new curriculum will have to be accompanied by a very large programme of orientation of teachers and inspecting officers. This will be a special responsibility of the State Institute of Education and it should strive to discharge it satisfactorily with the collaboration of the universities and training colleges for school teachers. The programme will also involve revision of textbooks and preparation of new teaching and learning materials. We shall discuss these programmes in the next Chapter.

**Revision of Curricula
at the University
Stage**

79. The problem of the revision of curricula at the university stage is equally significant.

80. A major reform needed at the collegiate stage is to restructure the undergraduate courses after reviewing them on the principles of relevance, flexibility, modernization and diversification. Some of the important ideas that emerged in our discussions on this subject were the following :

**Restructuring of
the Undergraduate
Courses**

(1) The first degree courses should have two main components, the first is that of broad general education which would include training in language (especially English) and communication skills, an understanding of the major national problems and the social and economic struggle around us, our Constitution and our plans of development. This component will be common to all courses and compulsory for every student. The second would include an academically-oriented study of three selected subjects.

(2) It would be desirable to introduce at least some inter-disciplinary and problem-oriented courses so as to reduce the dominance of traditional, discipline-oriented courses.

(3) Honours courses are a great need and should be introduced without delay. Admission to these courses should be selective and restricted to students who have done well. To start with, honours courses may be introduced in all good colleges and in those subjects for which facilities are available. It would also be desirable to introduce the honours courses, at least in one subject, in the most successful colleges. In order to provide access to these honours courses for bright students from areas where provision for them does not exist, adequate provision of scholarships and hostels should be made in the leading colleges providing these courses. Students who have completed the pass course with high proficiency may also be allowed to do the honours course.

81. We recommend that the Jammu and Kashmir universities should immediately take up this problem of reconstructing the undergraduate course broadly on the lines indicated above and complete the work during 1973-74 so that the new courses may be initiated at the beginning of the Fifth Plan. Some leading scholars from outside should also be associated with this programme.

82. A very important question raised in this context was the introduction of some professional courses at the

undergraduate level. It was agreed that, in the present situation, a large number of students will enter the colleges, in the absence of alternative openings, and join the usual academic courses although they may have no real aptitude for them. It was, therefore, suggested that such students should be benefited by the provision of professional courses which would be more purposefully related to their later life or to employment opportunities available. Fortunately, the Delhi University has made a beginning and its experience can be of good use to the State. A short note on this programme is given in Appendix III. We are also of the opinion that this experiment of professionalisation need not be restricted to the B.A. course only. If necessary, there should be no hesitation in designing diploma courses after the B.A. (Pass) degree or even M.A. (Pass) courses which have a large vocational content and which prepare students for specific employment opportunities which are growing in society.

83. We realise that the problem is far from easy and that a good deal of detailed planning on the subject has to be done. But the problem of educated unemployment is so acute and the suggestion is so significant that we would like to see it implemented as early as possible. We, therefore, recommend that a special committee should be appointed to go into this problem in detail and make concrete proposals for adoption. On their basis, the programme should be introduced, with effect from the academic year, 1974-75 in at least one institution in each province and at least in 3 or 4 subjects where the opportunities of employment are available. Courses of special interest to girls have a relevance in the context and may be introduced at least in one institution.

Restructuring of the Courses at the Postgraduate Stage 84. On the broad lines recommended by the Education Commission, it will also be desirable to restructure the course at the postgraduate stage and to explore the desirability of introducing M. Phil. courses

in certain subjects where the universities have the necessary facilities and personnel.

85. We have indicated, in the preceding sections, the major programmes which will transform the existing educational system and make it a powerful instrument for the creation of a secular, democratic and socialist society. We have

Conclusion indicated the various structural changes needed at all stages to create the new educational system and highlighted the significance of three major programmes for its transformation, *viz.*, the blending of the formal and the informal systems of education ; extending the coverage of the system to include the working population ; and revision of curricula. These, in our opinion, deserve immediate attention and highest priority in the programme of educational reconstruction proposed to be implemented in the Fifth Five-Year Plan of the State.

CHAPTER THREE

SCHOOL EDUCATION : IMPROVEMENT OF QUALITY

86. In this Chapter, we shall deal with the programmes for the improvement of standards at the school stage which rank next in importance to the transformation of the educational system. These will have to be treated as a package deal and include :

- Adoption of a New Calendar for the School Year
- Planning the Proper Location of Schools
- Institutional Planning
- General Education and Training of Teachers
- Qualitative Upgrading of Schools
- Supervision
- Improvement in Textbooks and Methods of Teaching and Evaluation.

We shall discuss these programmes seriatim in the paragraphs that follow.

87. The Education Commission pointed out that in the Indian Educational System the utilisation of facilities generally tends to be minimal. This is due to a variety of reasons such as the large number of holidays and the long vacations which reduce substantially the number of working days in a year and the considerable loss, even of the small number of working days, for purposes of instruction due to examinations, school functions,

etc. The Commission found that the number of instructional days (i.e. days on which actual teaching is done) in a year was thus very low—about 100 to 120. The situation in Jammu and Kashmir is perhaps even more unsatisfactory and it has been estimated that the number of instructional days in a year are often as low as 80 to 90. This is due to the long winter vacation necessitated by the climate, the excessive number of holidays provided and the undesirable practice of holding of annual examinations during term-time. We, therefore, recommend that the academic calendar in the State should be reorganised in such a manner that the number of instructional days in a year would be not less than 150. This can be achieved if the duration of vacations is slightly curtailed, a full six-day week is adopted, and the examination work is re-scheduled to coincide with the vacations.

88. Owing to the large variety of climatic conditions in the State, it is necessary to adopt different academic years in different parts of the State in keeping with local needs. In the Kashmir valley, the academic year may begin on the 1st of March and end on 15th December. There will be two vacations ; a long winter vacation of $2\frac{1}{2}$ months from 15th December to the end of February and a short summer vacation of about 15 days given at a suitable mid-year stage. The examinations should begin on or after 15th November. All institutional examinations should be completed and the results declared by the end of November. The new classes should begin in the first week of December and the long winter vacation should begin only after the students have been introduced to the new class studies so that they can profitably use their vacation time for self-advancement. The students who have failed can also use the long vacation for self-advancement if a system of holding re-examinations for them at the opening of the new school year is simultaneously adopted. The refresher courses for teachers can also be conveniently arranged in this long vacation. In the case of the public examinations at the end of classes X and XI/XII, care should be taken to see that they are held and completed between 15th

November and 15th December and that their results are declared by the end of January.

89. Similar reforms should be carried out in Jammu with only such changes as are needed to meet the requirements of the differences in climate. The cold regions of Jammu will follow the time-table given above for Kashmir. But in the hot regions, the academic year should begin on the 15th of July as in the States of North India and close on 30th of April, thus giving a long vacation of $2\frac{1}{2}$ months. In addition, there may be a short winter vacation of two weeks in October-November. The institutional examinations should be completed between 1st and the 15th of April when the students should be promoted to the next class. The public examinations at the end of classes X and XI/XII should be held between 1st April and 30th April and their results declared by the end of June.

90. Suitable different dates will have to be fixed on the same broad principles for the schools in Ladakh. Here the academic year may begin on 1st September and end on 15th June.

91. If these reforms are implemented, the number of instructional days in a year will be almost doubled with a corresponding gain in the utilization of educational facilities and teaching efficiency.

92. Another major weakness in the existing structure is that the location of the different categories of schools has been unplanned and haphazard. The first educational survey of the State carried out in 1957 was not a very efficient affair. But its recommendations were not implemented so that even the limited advantage that could have been obtained from its proposals was lost. The second education survey carried out in 1965 restricted itself to fact-finding operations and did not undertake any planning exercise. This has resulted in an unplanned proliferation of schools and even a casual study of the present situation leads to two conclusions ;

**Planning the
Proper Location
of Schools**

(1) several of the existing schools are totally uneconomic and inefficient and need to be either merged with others or even down-graded or closed down ; and (2) in spite of this proliferation, there is an equally urgent need to establish new schools in several places which have fairly large populations. A statement given to us by the statistical unit showing the villages or towns which are still without any educational facility has been reproduced in Appendix IV. It is probably not very accurate but it implies that about a third of the total number of villages and towns in the State are still without schools. We, therefore, recommend that a quick survey of the entire area of the State should be carried out in the course of the next three to four months to determine the proper location of educational institutions in different categories. It should be the responsibility of the Officer on Special Duty to complete this survey and the subsequent planning and he may be given the necessary subordinate staff for the purpose.

93. The results of this survey should cover the following points amongst others :

(1) The establishment of new primary schools wherever they are needed (a primary school should ordinarily be available in every habitation or group of habitations having a population of about 200-300 and preferably within easy walking distance from the home of every child) and the closure of wrongly located or uneconomic schools ;

(2) The establishment of new middle schools wherever they are needed (a middle school is needed for all habitations or groups of habitations with a population of about 500 and within a distance of about 2-3 miles from the home of every child) and the downgrading (or even closure) of wrongly located middle schools ; and

(3) The establishment of new secondary schools or the reorganisation of existing ones on the basis of likely enrolments and maintenance of standards as discussed earlier in Chapter One.

The survey should be approved by Government and published so that the people also know the broad policies governing the locations of schools and the tentative choice of places where they will be established. It should be strictly adhered to in the expansion programmes of the Fifth Five-Year Plan and steps should be taken to establish all the primary and middle schools needed as early as possible and at any rate within the next three to five years.

94. The third general defect of the existing system (which in a way follows from the second, viz., the haphazard location of schools) is the absence of a State policy to determine the classes which a given school should teach and its staffing pattern. The classes in which instruction is to be provided in a given school will ordinarily be determined by its catchment area and enrolments and these, in turn, should determine its staffing. But weaknesses in this regard are far too common. We made a study of two districts for which fairly accurate and complete data were available and also got prepared a teacher-enrolment chart for about 80 per cent of the schools for which information was readily available. Our main conclusions from these are as follows :

(1) There is no clear policy for upgrading schools ; higher classes have often been opened in institutions where the enrolments are woefully inadequate and are not even likely to be adequate in 3 to 5 years ; and they have not been opened in schools where there is good case for them. No clear time-sequence seems to be followed in upgrading schools so that opening of successive higher classes often tends to be haphazard and unpredictable.

(2) The staffing is often unrelated to classes or enrolments and there have been several instances of schools which tend to be over-staffed while others tend to be under-staffed, On the whole, there is inadequate utilization of available staff.

(3) There are too many categories of schools. The

Official policy recognizes as many as six categories, viz., primary schools with class I-V, Central schools with classes I-II, middle schools with classes I-VIII, lower high schools with classes I-IX, high schools with classes I-X and higher secondary with classes I-XI. But in practice, there are also several other variations and some standardization is obviously called for.

95. What the State needs is not only the planning of the locations of schools but also institutional planning in the sense that the classes to be taught in a school and its staffing pattern should be placed on some rational basis and the different categories of institutions should be cut down to the minimum. We recommended that this work also should be done by the Officer on Special Duty side by side with the planning of the location of schools. There should be only five types of schools : (1) primary schools with classes I-V ; (2) middle schools with classes I-VIII or VI-VIII, in special circumstances where accommodation present problems ; (3) vocational secondary schools with classes X-XI ; and (4) general secondary schools with classes I-X ; and (5) full-fledged secondary schools with classes I-XI. Schools should ordinarily end at terminal points only (i.e. classes V, VIII, X, XI/XII), except in a preparatory stage for reaching the next terminal point. Conditions for up-grading schools should be drawn up on a rational basis and once an up-grading is decided upon, it should ordinarily proceed in a sequence from class to class every year. Similarly, policies for staffing schools in relation to classes and enrolments should also be clearly prescribed and scrupulously observed. Once these broad principles are determined, it will not be difficult to decide the classes to be taught and the staffing pattern for each school and to take action accordingly.

96. We would like to emphasise one important point. Secondary schools should ordinarily begin with class IX. This is essential because we would like the passage from elementary to secondary education to be a conscious and deliberate decision of the student and his parents and to make it clear that while every effort will be made to take a

student to the end of class VIII, his continuance beyond that stage will be dependent on certain factors. All full-fledged secondary schools teaching classes IX-XII should necessarily begin with class IX only. The same policy should also be adopted with regard to the two-class secondary schools. But here, under certain special circumstances, classes VI-VIII may also be attached to them. But in no circumstances should a secondary school have classes I-V.

97. At present, the main qualification for a primary school teacher is a pass at the matriculation examination.

In view of the expansion of educational **General Education** facilities in the State, a time has come **of Teachers** when this general qualification can be upgraded with advantage. We recommend that in future candidates who have passed the higher secondary examination (at the end of class XI at present and at the end of class XII in future) should be given preference in recruitment. Similarly, graduates who are willing to serve in primary or middle schools should be given every encouragement and a definite effort should be made to employ at least one graduate in every middle school and also to place a graduate at the head of every big primary school. Eventually, a pass at the higher secondary stage of twelve years should be the minimum qualification for recruitment as a teacher in a primary or middle school. Apart from improving the standard of education, this will also ensure that very young persons below the age of 18 will not be recruited as primary or middle school teachers.

98. One of the weakest areas in the State is the training of teachers. The percentage of trained teachers is low—
Teacher 63 in primary schools (60 for men and 70
Education for women), 78 in middle schools (74 for men and 90 for women) and 89 for secondary schools (86 for men and 97 for women). The duration of training for primary and middle school teachers (who have passed the matricula-

tion) is only one year against the needed two years. There is hardly any provision for in-service education. The teacher training schools (for primary and secondary teachers) do not have adequate status and high quality staff as they are equated broadly with secondary schools. They are also poorly provided with buildings, lands, hostels, and equipment. The average institution is also too small in size (there are 18 institutions with a total enrolment of 1520) whereas to be efficient, a training institution will need a strength of 200-400. There is, therefore, no doubt that teacher training should be one of the major programmes to be emphasized in the Fifth Plan.

99. We have already made reference to the *emergency training programme*, viz., the training programme for all teachers necessitated by the adoption of new curricula from 1975-76. These are crucial for the success of the entire programme of transforming the educational system and raising standards. They should, therefore, be developed, on a high priority basis, as suggested earlier, by the State Institute of Education in collaboration with the universities and training colleges for primary, middle and secondary teachers.

100. In addition to these, another emergency programme is needed, viz., the training of all untrained teachers now in service. The age-wise break-up of these teachers is now being compiled and will soon be available. But we do find that there is a considerable backlog of untrained teachers in service at the primary and middle school stages; and to clear it up quickly, at any rate within the next three to five years, we recommend that the following emergency programme may be adopted.

Training of Untrained Primary and Middle School Teachers in Service

(1) Teachers above 40 years of age may be exempted from training but given a refresher course for one long vacation—summer or winter. They should be deemed to be trained (for purposes of salary) after the successful completion of this course.

(2) Teachers between 25-40 years of age who have put in more than five years of service should be given a short orientation course of five months. Some of the existing schools should be set aside for this programme and required to do two batches of trainees a year. Alternatively, the course may be spread over two successive long vacations. These teachers also should be deemed trained for purposes of salary.

(3) Teachers below 25 should be required to undergo the full course of one year.*

101. The number of teachers working at the primary and middle school stages is estimated at 18,500. If universal education in the age-group 6-14 is to be provided by 1980-81, this number will have to be a little more than doubled and will rise to about 40,000. In other words, we will have to add about 2,500 teachers every year. To this, we will have to add for teachers who annually retire (about 200 to 400 a year) and for refresher courses (about 800 to 1600 seats on the assumption that every teacher will be given an orientation for two months in every five years of service). If the duration of the training course continues to be one year, this will need a provision of about 3,500-4,500 seats as against 1,500 available at present. But if the duration is to be raised to two years, the provision of seats will have to be increased to about 6,500-7,500. It must be pointed out, however, that once universal education is provided, the further expansion of primary education will be comparatively small and therefore, the need for seats in training institutions will again fall down to about 3,000 seats on the basis of one year course and to about 4,500 seats on the basis of a two year course.

102. The first question to be decided is whether we should increase the duration of the training course to two

* The problem of untrained secondary teachers in service appears to be marginal. But it can also be tackled by similar measures.

years. After examining the problem in all its aspects, we are not in favour of raising the duration of the training course to two years at this juncture. It will slow down the output of trained teachers ; it will imply the raising of training capacity to a level which is not feasible and which will have to be undone again as soon as universal education is provided. The cost of the programme will also increase in proportion. Moreover, we would like to point out that the two-year training course is needed for matriculates only and that it is unnecessary for graduates or even for higher secondary students, especially when the higher secondary stage will be a two-year course. As this is the general qualification we are going to adopt in a few years time, the huge effort involved in increasing the duration of the course to two years seems to be wasteful. Besides, it may also be pointed out that even an initial course of one year followed by regular refresher courses (for two months in every five years of service) is better than an initial course of two years with no provision for periodical refreshing. We, therefore, favour the following arrangements :

(1) The duration of the training course should be continued at one year ; but provision should be made for periodical refresher courses for all teachers.

(2) Greater emphasis should be laid on improving the minimum qualifications of primary and middle school teachers as suggested earlier.

(3) It is highly desirable that a teacher should have some teaching experience before he joins a training institution. A system of apprentice teachers should, therefore, be introduced under which a selected teacher will be required to work for one year in a school under the guidance of a trained senior teacher. He should be given a regular assignment during this period and a set of books to read. If properly designed, this apprenticeship year can easily cover three to four months of full-time training. During this year of apprenticeship, every teacher should be given a suitable stipend. After the year is over, he should be sent in for

full-time training for one year if his work during the period of apprenticeship is found satisfactory. The stipend should continue during the period of full-time training also. At the end of the training period, the teacher should be appointed on a probation for two years ; and on satisfactory completion of his probationary period, he should be confirmed in service.

If this programme is adopted, it will be necessary to provide a training capacity of 3,500-4,500 seats only over the next 10-15 years. This will be both manageable and economical.

103. We, therefore, recommend that good training colleges should be established in all districts for primary and middle school teachers. Their capacity should be a minimum of 200 (except perhaps in small districts like Ladakh) and may, in specific cases rise to 400 (or even more) so that efficiency and specialization can be maintained. The staffing pattern of these institutions should be the same as that of training colleges, i.e., the teachers should have a Master's degree in a subject with M.Ed. and long experience of teaching in primary, middle or secondary schools. The college should have three specific responsibilities—pre-service education of one year, refresher courses for teachers, and provision of extension services to schools in the district. In fact, they should function as local agents for many of the programmes of the State Institute of Education. As these new institutions develop, the existing training institutions may be closed down or merged. The planning and proper development of these district institutions is a programme of the highest priority and significance.

104. The in-service education of primary and middle school teachers is of great significance.

**In-Service
Education of
Primary and
Middle School
Teachers**

This is all the more important in areas like this State where the vast bulk of teachers live and work in isolation in small and remote rural schools. The programme has, therefore, to be developed in a big way.

105. The in-service programmes will be of three types :
 (1) We are recommending elsewhere the adoption of the 'school-complex' programme recommended by the Education Commission under which a secondary school with about 10-15 primary and middle schools in the neighbourhood will function as one academic unit, sharing facilities and providing common services. A programme of continuous refreshing of teachers and their involvement in educational development can be built into the work of these complexes.

(2) Refresher courses based on selected themes, (i.e., a specific aspect of teaching in languages or science or mathematics) should be devised from time to time according to needs and conducted by the State Institute of Education and the training colleges. They could be organized either on a correspondence or direct participation basis.

(3) A two months refresher course should be arranged for every teacher in every five years of service.

106. Radio and television can play a very important role in the refreshing of teachers, especially in rural areas and in combination with correspondence courses. We, therefore, recommend that these facilities should be fully exploited in the development of this programme.

107. There are two colleges for training of secondary teachers—at Jammu and Srinagar. This provision is quite adequate and beyond an improvement of these institutions on the lines recommended by the Education Commission, no major action is called for. We would, however, recommend one change. A University Department of Education becomes weak without a teacher-training programme and a teacher training college remains weak without the aid of a University Department of Education. It would, therefore, be desirable to link the college at Srinagar with the University Department of Education. Similarly, a University Department of Education may be created at Jammu and linked to the Teachers' Training College at Jammu.

108. A programme for the in-service education of secondary teachers will have to be developed broadly on the lines recommended above for primary and middle school teachers with emphasis on specialized theme-oriented courses, both through correspondence and direct participation. This will have to be implemented by the Departments of Education of the Jammu and Srinagar universities and the two training colleges for secondary teachers.

109. One special point needs mention. The existing training course for graduate teachers is meant exclusively for secondary teachers. As the employment of graduates in primary and middle schools will be continually on the increase, a specialized course for graduates working in primary and middle schools is needed and will have to be provided in both the colleges in Srinagar and Jammu.

110. It is obvious that a special administrative machinery is needed to plan and develop this large and significant programme of teacher education. We, therefore, recommend that the post of an officer of adequate status should be created in the Department and a suitable person should be immediately appointed to it. During the next three months, he should plan the detailed programme of development over the next ten years and its implementation should begin in 1973-74 as an important programme of advance action.

111. To guide the policies and programmes of this section, there should be a State Board of Teacher Education. The Director of Education should be the Chairman of the Board and the Officer in charge of teacher education, its Member-Secretary. The Heads of the Departments of Education in Jammu and Srinagar universities, Principals of all district training institutions, and some teachers of primary, middle and secondary schools should be its members. It should be responsible for advising the Department on the planning and implementation of a

proper programme of teacher education, and for its periodical assessment.

112. The teacher education programme developed on the above lines would be a unique experiment. It would not only make a major contribution to the qualitative improvement of school education in the State, but would also assume national significance.

113. It is also essential to improve the standards in individual schools by ensuring that they are properly staffed and have the necessary lands, buildings and equipment. It will not be possible to do this for all schools in view of the financial implications involved. The following modified programme is, therefore, recommended :

Qualitative Upgrading of Schools

(1) For primary, middle, high and higher secondary schools. details of requirements should be worked out at two levels ; minimum and optimum.

(2) In the first stage of the programme, every effort should be made to ensure that the minimum facilities are provided to every school. Wherever possible, the assistance of the local community should be harnessed for this purpose.

(3) A healthy competition for improving standards should be encouraged among the schools and those schools which show initiative and results, should be assisted to improve further and to reach the optimum levels. It would be a fairly good target if about 10 per cent of all schools can be upgraded to optimum levels by the end of the Fifth Plan.

114. It would be a good thing if, in the office of the Deputy Director of Education, in charge of each district, a special record is maintained for each school. This record would contain the necessary information showing the progress of the school from year to year in a prescrib-

ed proforma and also copies of the inspection reports on the school. It should also be a practice to grade every school annually on the basis of information available : schools which fall below the minimum requirements should be classified as "E", schools which fulfil the minimum requirements should be classified as "D", schools which are above the minimum level but which have not yet reached the optimum level may be classified as "C", schools at the optimum level should be classified as "B" and the best schools which rise even above the optimum level, should be classified as "A". This would give a fair idea to the Department about the continuing improvement of standards and would also spur the individual schools to greater efforts.

115. A major weakness of the present educational situation in the State is that supervision is extremely inadequate. An inspecting officer can at best look after 40-50 schools and even this number becomes unmanageable in the difficult conditions of terrain and climate that the State presents. We think that the standards to be adopted in this State should be to allocate one officer for about 35 schools on an average, the actual allocation for officer varying from 20 to 50, depending on the local conditions. And yet, the provision and work of existing supervisory staff is as follows :

(1) There is a Deputy Director of Education in each province. He has to inspect higher secondary schools and training schools. The total number of these institutions being 73, both the officers have their hands full. In fact, they cannot do justice to their ever-all supervisory and administrative responsibilities in view of the heavy load of inspections. In practice both these responsibilities suffer.

(2) There is a District Education Officer in each District who has to inspect high schools. There are ten such officers but the number of schools they have to inspect is more than 500. It is obvious that they can hardly do justice

to the task, especially in view of the fact that they have over-all supervisory and administrative responsibilities for the district.

(3) There are in all 38 Tahsil Education Officers who have to inspect middle and primary schools for boys which number about 4,600. In fact, the number of middle schools alone which they have to inspect is 1,043 and this is a task they can barely manage. But when it comes to primary schools, the sheer magnitude of the problem is so great that they can do little about it and it is no surprise if schools remain uninspected for years and supervision becomes marginal.

(4) There is a Joint Director for Women's Education and 20 inspectoresses of girls schools. They are expected to look after 1,743 primary schools for girls, 363 middle schools for girls and 126 high and higher secondary schools for girls (or 2,232 institutions in all). This is an almost impossible assignment.

116. It will thus be seen that there is hardly any machinery to supervise schools effectively, especially at the primary stage. The results have been disastrous from the qualitative point of view. Even quantitatively, there has been a consistent complaint that there is a large over-reporting of enrolments in all schools, and especially at the primary stage. In view of the tremendous further expansion visualised at the primary and middle school stages, the proper strengthening of the supervisory staff becomes an urgent task of the highest priority. We recommend that this should be attended to immediately as a part of the advance action in 1973-74.

117. Our proposals in this regard are as follows :

(1) The officer in charge of each Province should have the status of Joint Director of Education. His responsibilities will be supervisory and administrative and he shall not be expected to inspect any schools, although he will

visit some institutions of all categories in the course of his tours and work.

(2) Officers of the status of Deputy Directors of Education should be placed in charge of each District. They should be in over-all supervisory and administrative charge of the district and also inspect high/higher secondary schools.

(3) There should be as many additional Tahsil Education Officers as are justified by the number of institutions in the Tahsil. At present, the ratio of Tahsil Education Officers to schools will be about 1 : 160. In future, we recommend that there should be a Tahsil Education Officer for about 60 schools (middle and primary) which can be managed satisfactorily because of the system of school-complexes. Even on this basis, there would be a substantial increase in the inspectorate at this stage.

(4) The system of school complexes recommended by the Education Commission should be adopted, at least in all rural areas. Under this plan, all primary and middle schools in the neighbourhood of a high or higher secondary school and conveniently accessible from it are grouped together into a school complex. They share common facilities like a circulating library or laboratory. A committee of the headmasters (or representatives) of all the schools is constituted under the chairmanship of the headmaster of the Central Secondary School to plan and guide the academic work of the schools. Faculty development for all teachers is arranged as a part of the programme and even the students of the primary and middle schools can visit the secondary school to avail themselves of its facilities. The central secondary school headmasters can be given some administrative powers (e.g. sanction of casual leave to headmasters within the area); and in remote, farflung places where communications are difficult and often disrupted, it would also be an advantage to give even some formal supervisory authority to

him. The advantages of the plan for the typical local conditions in the State are obvious.

118. Apart from this numerical expansion, attention will also have to be given to their proper recruitment and training. Some of this should be arranged by the State Institute of Education. In the case of senior officers' the National Staff College at New Delhi has agreed to arrange special training and orientation programmes.

119. Our proposals for the revision of curricula have already been discussed in the preceding Chapter. They necessarily involve revision and improvement of text-books. The text-books in the State even at present, compare favourably with those in other States. But a little more intensive effort, a wider involvement of talented teachers from the schools and the universities and a better utilisation of the resources made available by national agencies like the NCERT can really help in improving the textbooks substantially with a corresponding gain in efficiency and quality.

120. There is need to develop an autonomous organisation for the production, distribution and sale of text-books. The Bureau set up by the Government of Maharashtra could be a good example. It should function on a commercial but no-profit-no-loss basis. It would be an advantage if the Government of India can place the services of a Textbook Production Adviser at the disposal of the State Government to establish and develop this autonomous body for a period of five years in the first instance.

121. There is a great need for producing teachers' guides, supplementary reading materials, and other teaching and learning aids. This should be one of the responsibilities of the agency to bring out the textbooks.

122. A major and important effort needed in the immediate future is to ensure that every student has an

access to all his textbooks right at the opening of the school year. This will need a substantial programme of free supply of textbooks. Obviously, the programme assumes great significance at the primary stage and the necessary funds for this should be provided in the State budget. Alternatively, the State should try out the experiment of providing all the textbooks needed for primary school children (at least in classes I and II) by keeping them in the school. This will cut down costs by increasing the life of books, save paper and what is even more important, inculcate some good values such as respect for community property. To begin with, the experiment may be tried out in selected primary and middle schools and then generalized in the light of experience gained. At the secondary stage, a vigorous programme of textbook libraries should be developed.

123. The present teaching methods are, by and large, traditional and emphasise mere imparting of knowledge and memorisation. These will have to make room for new and dynamic methods which lay equal emphasis on imparting knowledge, teaching of skills and inculcation of values, encouragement of habits of self-study, awakening of curiosity and promoting problem-solving ability. This is the heart of education and the programme needs the highest emphasis.

Improvement in Methods of Teaching and Evaluation

124. The success of this programme at the school stage basically depends upon the proper selection and training of teachers, good leadership and guidance from the Department, materials and supply of essential equipment and facilities. We would also like to specially emphasize here the important role that radio and television can play in this programme. This will be discussed in a subsequent section.

125. A well-designed progress card should be introduced for all pupils and maintained carefully and regularly,

a student maintaining a single card throughout his career. Evaluation should be continuous and promotion to the next class should depend upon the student's work through the year and not only on his performance in the final examination. Proper training of teachers and vigilance by supervisors are essential for the success of the programme.

126. The examination in all classes from class I to class XI/XII should be internal. In addition, there should be external examinations at the end of class X and class XI/XII*. But, as the Education Commission recommended, the results of both the assessments—internal and external should be kept separate, separate passes being required in each and separate classes being given for each. In course of time, the schools will learn to evaluate properly and there would be greater correlation between internal and external assessments.

127. The State has certain advantages in implementing a programme of reform in methods of teaching and examination. This generally gets handicapped for two major reasons : (1) classes of large size due to an unfavourable pupil-teacher ratio ; and (2) the huge scale of public examinations in which lakhs of students appear at a time. In Jammu and Kashmir the teacher-pupil ratios are small at present and, owing to the peculiar nature of the terrain and population settlements, can never be large. Similarly, the number of students appearing at public examinations at the end of classes X and XII will remain manageably small for years to come. If a determined effort is made, therefore, it is possible to put across a programme of reform in methods of teaching and evaluation in the State which can be of national significance.

128. At present, there is a Jammu and Kashmir Board of Secondary Education whose functions are almost exclu-

* There will be a public examination at the end of Class XI only till the first year of TDC is transferred to secondary schools. Thereafter, this will be an internal examination and the public examination will be held at the end of class XII.

State Board of School Education sively restricted to holding the high school and higher secondary examinations at the end of Classes X and XI respectively. In our opinion, a total re-constitution of this Board is necessary on the lines indicated below.

(1) *Functions* : The scope of the activities of the Board should include, not only the holding of public examinations at the school stage (these will be the examinations at the end of class X and class XI/XII), but also the approval of curricula and textbooks for the entire school stage (classes I-XII). The Board should also develop supervisory functions and carry out a panel inspection of every secondary school at least once in three years through panels of selected teachers approved by it. The recognition of secondary schools for purposes of its examinations should be given only on the basis of such panel inspections.

(2) *Composition* : At present, the Board has only a part-time Chairman. In view of the increase in its functions and responsibilities, we recommend that the Board should have a full-time Chairman. The size of the Board should also be reduced to not more than 15 members to make it an efficient functioning unit. It should meet at least once a quarter and oftener, if necessary, for the transaction of its business. The membership of the Board should include representatives of the Education Department, the universities, training institutions, school teachers and educationists.

(3) *Procedures* : The Board should have as many Committees of courses as are necessary for different subjects or areas. The University teachers should be represented on these committees. The main functions of these committees would be to approve the curricula and textbooks. It should also have a committee to look after the examination at the end of class X and another committee to look after the examination at the end of class XI/XII. In both the committees, university teachers should be represent-

ed. But in the latter committee, they should form about one third of the total membership. In addition, the Board may constitute such other committees as may be necessary to carry out its duties and responsibilities.

(4) *Research and Development* : The Board should have a special cell for research and development of new techniques and procedures, especially those relating to examination reform. It would also be a responsibility of this special cell to organise orientation courses or training programmes for paper setters, moderators and examiners.

129. In view of the broader functions and responsibilities now entrusted to the Board, it may not be possible to meet its entire expenditure through examination fees. Steps should therefore be taken to give a suitable grant-in-aid from the State revenues for its maintenance.

For purposes of coordination, we recommend that the Chairman of the Board should be a member of the relevant university bodies.

130. As compared to the programmes of expansion, the proposals for qualitative improvement of the school stage discussed here are comparatively less costly. But their significance is immense. We, therefore, recommend that the funds required for these programmes should be found on a priority basis and they should be implemented with a sense of urgency.

CHAPTER FOUR

OTHER MAJOR PROGRAMMES

131. In this Chapter, we shall deal with a few other major programmes which need to be developed in a fairly big way in the Fifth Five-Year Plan and also indicate the administrative strengthening and advance action which our proposals for the development of education in the State will necessarily involve.

132. Article 45 of the Constitution directs that free and compulsory education shall be provided for all children till they reach the age of 14 years. The progress of primary and middle school education in the State will, therefore, have to be judged from the point of view of this national objective.

Provision of Universal Primary and Middle School

Education (Age group 6-14)

133. A review of the development of primary and middle school education in the State will show the great advance made since independence. The number of primary schools has increased from 1,145 in 1950 to 5,363 in 1972, the total enrolment at the primary stage from 78,000 (or 16.7 per cent of the age-group) to 4,35,000 (or 64.1 per cent of the age-group). During the same period, the number of middle schools has increased from 189 to 1,408, the total enrolment at the middle school stage from 20,000 (or 10.1 per cent of the age-group 11-14) to 1,21,000 (or 41.8 per cent of the age-group). In spite of this unprecedented progress, the State has still a long way to go if universal education is to be provided for all children as directed in the Constitution. The percentage of literacy also has, as

in the rest of the country. made comparatively slower progress and now stands only at 18.58 (26.75 for men and 9.28 for women). This is not a happy situation and we recommend that every effort should be made to provide universal education for children in the age-group 6-14 by 1980-81.

134. The programme of universal education in the age-group 6-14 can be conveniently discussed under three main aspects : (1) universality of school provision ; (2) universality of enrolment ; and (3) universality of retention.

135. The provision of primary and middle schools within easy walking distance from the home of every child is the first major programme to be developed in this connection. From this point of view, **Universality of School Provision** we have already recommended that a quick survey for the location of all needed primary and middle schools should be conducted and that all the needed schools should be established as early as possible and at any rate within the next three to five years.

136. A special problem in this context is that of single-teacher schools. It is true that in a situation like that in this State, a large proportion of primary schools will always remain single-teacher institutions. But the present situation where about 85 per cent of the primary schools have only one teacher is really abnormal. We, therefore, recommend that every effort should be made to reduce the number of single-teacher schools. The following steps may be taken from this point of view :

(1) As education becomes universal, many schools which now have only one teacher will have two or more teachers. Intensive enrolment drives will thus help to increase the staff of several small institutions.

(2) As discussed in a subsequent section on the education of girls and women, co-education may be adopted as the policy at the primary (and even middle school) stage and intensive propaganda and field-work should

be conducted to make it acceptable, especially in rural areas. This will convert a very large proportion of single-teacher schools into two-teacher institutions.

(3) The tendency of each small habitation to demand a separate school of its own, however small, should be discouraged and people of two or more closely located habitations should be persuaded to have a common large and multi-teacher school which is necessarily more efficient.

137. In spite of all these efforts, a fair proportion of single-teacher schools will still remain. Special efforts to improve them should be made on the broad policies generally recommended for the purpose, e.g., special training for their teachers in multiple-class-teaching, liberal provision of equipment, use of radio and television, etc.*

138. Since single-teacher schools will remain a significant category of primary schools in the State for years to come, a study of their problems should be a special responsibility of the State Institute of Education and the Inspectorate should pay special attention to their needs.

139. Peripatetic schools for the nomadic population is a special feature of Kashmir. The programme will have to be further developed to the extent necessary. Alternatively, Ashram-type schools may also be established for these children.

140. Under the present system, the standard procedure adopted is to enrol children of 6+ in grade I and then to take them up from class to class every year. This is a basically good system (although it has certain severe limitations in a poor society) and should continue.

We, therefore, make the following recommendations :

(1) One of the first steps necessary is to ensure that the

* *Vide*, J.P. Naik : *Single-Teacher School*, published by the Ministry of Education and Social Welfare, New Delhi.

enrolments in primary schools are correctly recorded and reported. There has been a complaint that the enrolments in the State are generally over-reported. A study by the Delhi University estimated the extent of over-reporting of enrolments in this State at 67.47%, the highest in India. Strict instructions on the subject will, therefore, have to be issued to all headmasters of schools and the supervisors will have to be particularly vigilant in this matter.

(2) An annual census of children in the age-group 6-11 or 6-14 should be held in every village and town with the help of teachers and supervisors. It should preferably be organised towards the end of the academic year.

(3) A big enrolment drive should then be organized at the beginning of the school year, again through teachers and supervisors, but with the help of the local community leaders. The object of this drive should be to enrol as many children of the age 6-7 as possible in grade I. Such enrolment drives do have the advantage of widening the base of the educational system in class I.

141. The two great evils of primary and middle school education are the large prevalence of stagnation and wastage. Vigorous steps are needed to combat both these evils.

Universal Retention

142. Stagnation is largely due to irregularity of attendance on the part of the child and poor quality of teachers. The recommendations we have made for improving attendance of children and also for improving quality of primary education will go a long way in reducing the extent of this evil.

143. The principal cause of wastage, on the other hand, is outside the educational system, namely, the poverty of the parents which prevents them from sending their children to school on a whole-time basis. The programme of part-time education and multiple-entry recommended by us will also reduce this evil to negligible proportions.

144. As we pointed out earlier, great progress has been made in extending facilities for primary and middle school education in the last 25 years. We have

Magnitude of the Problem

also modified the proposed targets to some extent and suggested that universal education for all children in the age-group 6-14 be provided by 1980-81. In spite of this, the task continues to be formidable. In 1971-72, the total enrolment in classes I-VIII was 5.56 lakhs. If all children in the age-group 6-14 have to be enrolled by 1980-81, this enrolment will have to be increased to about 12 lakhs. The average annual additional enrolment in classes I-VIII during the next eight years would thus be about 80,000 as against an average increase of about 35,000 at present or an average annual increase of 26,000 registered in the last eight years. It must also be remembered in this context that, as we near the point of full enrolment, the difficulties of enrolling additional children (and the cost thereof) increase very steeply. The problem of enrolling girls becomes, in particular, extremely challenging; at present, the additional enrolment of girls in classes I-VIII is about 21,000 a year. This will have to be stepped up to about 52,000 a year. An intensive effort and a large investment of funds will, therefore, be needed to realise this objective. The task is difficult no doubt. But it is administratively and financially feasible and extremely worthwhile from the social and economic point of view.

145. By 1980-81, therefore, the system of primary and middle school education in the State would have been totally changed. A single-point entry system at 6+ would have been replaced by two entry-points at 6+ and 11+. Programmes of full-time and part-time education would be equally available and children will be able to choose the one that suits their needs. The coverage of the system would have been doubled and reached nearly 100 per cent of the population in the age-group, and standards would have been considerably improved. This would, therefore, be a major achievement in educational advance.

146. At the primary and middle school stages, the lack of adequate expansion was *the* problem. In secondary and higher education, on the other hand, **Expansion of Secondary and Higher Education** problems have arisen because of the inordinately rapid rates of growth in institutions and enrolments. The number of high and higher secondary schools has increased, during the last 22 years, from 55 in 1960 to 557 in 1972, their total enrolment from 5,600 (or 2.7 per cent of the age-group 14-17) to 66,000 (or 22.6 per cent of the age-group). The rate of enrolments in secondary education, it may be pointed out, is higher in the State than the average for the country as a whole. The expansion of higher education during the same period has been even more phenomenal. The State has two universities with 31 teaching departments and an enrolment of 1,780 ; 19 colleges of general education (against 9 in 1950) with an enrolment of 18,436 boys and 6,913 girls (against only 2,527 boys and 252 girls in 1950) ; and 11 colleges of professional education (against 1 in 1950) with an enrolment of 2,400 boys and 415 girls (against only 50 boys and 20 girls in 1950). Between 1950 and 1972, the annual output of B.As has increased from 207 to 1,518, that of B.Sc.s from 42 to 1,035, that of M.A.s, M.Sc.s from nil to 591 and 210, respectively.

147. The basic cause of this expansion lies, not in university, but in secondary education. It is at the secondary stage that the expansion first takes place, due to three main weaknesses and then rises upward in higher education. The first, is the proliferation of secondary schools many of which tend to be small, uneconomic and inefficient. The second is the short duration of the secondary course so that the average student who completes the secondary course is still a minor and cannot seek employment. Thirdly, the secondary course is non-diversified and mainly university preparatory. Most of the students who complete the secondary school, therefore, enter the colleges and this leads to inordinate expansion of higher education. This trend has been further accentuated by

two factors in this State : the abolition of tuition fees and the deliberate adoption of the policy of open-door admissions. The rapid expansion of enrolments in secondary and higher education need not, therefore, cause a surprise. It would indeed have been a surprise if it had not occurred.

148. The consequences of this expansion are both good and bad. It has made a good deal of trained manpower available for development programmes and set in motion certain desirable forces of change in a society which was otherwise stagnant for years. On the other hand, it has created a large band of unemployed educated persons who are feeling frustrated and whose discontent and unrest are causing grave concern to all. Needless to say, this rate of expansion has also adversely affected the standards so that the system seems to be producing more and more of less and less employable persons.

149. A major problem in secondary and higher education, therefore, is to find a solution to this explosion in enrolments at the secondary and university stages. We discussed this issue (and other allied ones as well) with the Vice-Chancellors and principals of colleges. We found that there were no easy solutions or quick remedies. For instance, it was not possible, nor even desirable, to adopt a policy of selective admissions at the end of class VIII, or class X, or even at the undergraduate stage. The introduction of tuition fees is also no solution : it would penalise the poorer sections or, if related to income, only the salaried employees who cannot conceal their earnings. Obviously, this complex and intractable problem will have to be solved, over the years, through sustained efforts on several fronts, some within the educational system and some outside it.

150. Within the educational system, the first steps to control the expansion will have to be taken at the secondary stage. We pointed out earlier that the planning and location of the secondary schools in the State has not always been good and that several small, uneconomic and

inefficient schools have come into existence. We have, therefore, recommended that the whole position should be rationalised after a careful survey. We would like to emphasize once again that a secondary school must have a certain minimum size for efficient and economic working and that the proliferation of small secondary schools is unsound, both academically and financially. A proper policy of controlling the location of secondary schools can, therefore, be the first major step to bring down expansion rates to manageable levels and to improve standards. The second reform that can be made in the same direction is to lengthen the duration of the secondary stage. This has also been discussed. The third and the most effective remedy would be to diversify and vocationalize secondary education as indicated earlier. The process will have to begin as early as class IX. There is no question of selective admissions at this early stage. But as the Education Commission pointed out, proper vocational guidance should be available to all students so that they will tend to opt for vocational courses that suit their aptitudes and capacities rather than to drift blindly into the academic and university preparatory courses. The diversion at this stage can only be limited, but the effort is worth making. A more advantageous point for the attack will be the end of class X when the student will be about 16+ and able to decide his career. If a large programme of diversification and vocationalisation of secondary education is successfully developed at the higher secondary stage and simultaneously more rigorous standards of admission are enforced in the university preparatory courses, it will be possible to steadily divert more and more students into terminal vocational courses and eventually, even to make secondary education terminal for a majority of students.

151. At the university stage itself, we have again suggested a programme of professionalisation which can be of considerable help in easing the situation.

152. Efforts to solve the problem outside the educational system are also equally essential and have to be simulta-

neously pursued. For instance, these efforts within the educational system will succeed better only if the economy also develops and creates more jobs for the middle-level educated persons and the wage differentials between this group of educated persons and those educated at the university level are so reduced that private returns to investment in higher education fall steeply and become unattractive.

153. In the long run, it is in this combined programme that the solution of this problem will have to be found. Meanwhile, emergency schemes for the employment or self-employment of educated persons will have to be formulated and implemented, more or less on the lines of the scheme recently approved by Government.

154. *Affiliated Colleges.* An immediate problem to be dealt with is the unhealthy condition of over-crowding in colleges due to the rapid expansion of enrolments. These have become all the more acute because it has not been possible to provide the necessary facilities like hostels, buildings, libraries, laboratories, etc. Fortunately, the situation will be considerably eased by the proposed transfer of PUC and TDC from the colleges to the secondary schools. Even then funds will have to be provided, in many instances, for land, buildings, hostels, equipment and even staff. We recommend that a list of the basic minimum needs of each college, on an austere basis, should be immediately prepared by the Director of Higher Education and the necessary funds for the programme should be provided in the Fifth Five-Year Plan. It would be both possible and desirable to implement this programme in a period of 3 to 4 years from now.

155. As an interim measure, and until the PUC and first year TDC are transferred, the following emergency steps may be taken to ease the situation :

(1) In the bigger colleges the enrolments should be divided into two shifts. Although the same buildings and

facilities may continue to be used, the staff (Principal or Associate Principal, teachers, etc.) should be separate. This is a very practical measure that will ease the situation greatly and should be implemented with effect from the next academic year. Ordinarily no college (or a shift in a college) should have a strength of more than 1500.

(2) Wherever the total enrolment in a college exceeds 1000, the post of a Vice-Principal should be sanctioned. He should be entrusted with specific responsibilities so that the principal can do justice to his own duties.

156. There is a great shortage of residential accommodation for teachers, especially in the mofussil colleges. Unless some vigorous steps are taken in this matter, it will be next to impossible to get good staff for colleges or to retain it. We, therefore, recommend that where residential accommodation is not provided by Government, suitable house-rent should be given and that Government should immediately take up a programme of construction of teachers' quarters.

157. It is essential to make some arrangements for the training of young college teachers, especially when they are first starting their career. Arrangements should, therefore, be made to develop an appropriate programme of orientation courses for them. For refreshing older teachers, a programme of periodical summer institutions, workshops and conferences should be developed. Such programmes should be a regular activity to be developed by the Directorate of Higher Education in collaboration with the universities in the State and also with some universities and academies from outside. Any expenditure on this programme would return rich dividends as it will lead to better teaching and examination reform.

158. As recommended by the Education Commission, we recommend that a State Council of Affiliated Colleges should be established. The Chancellor of the universities should be the Chairman, the two Vice-Chancellors and all Principals of colleges should be members and the Director

of Higher Education should be the Member-Secretary. It should be an advisory body which meets twice a year (once in Jammu and once in Srinagar) to discuss all problems relating to college education and make suitable recommendations to Government, universities and the colleges themselves.

159. The enrolments in the Law Department of the University of Jammu are very large. We recommend that it would be desirable to establish an independent law college at Jammu, especially because it will help to diversify the courses of legal education and to make them more job-oriented and useful.

160. It is necessary to involve students in the development of programmes for improvement of education and for this, a continuous dialogue with them will have to be maintained. Special emphasis should be laid on provision of student amenities, hostels and essential services, especially in the mofussil colleges. Deans of student welfare should be appointed, at least in all the bigger colleges. It is extremely desirable to involve the universities and colleges in programmes of local and national development. From this point of view, we make the following recommendations :

Student Participation, Amenities and Services

(1) Full advantage should be taken of the scheme of National Service introduced by the Government of India.

(2) The programme of formal and informal education of the non-student youth, discussed earlier, gives a good opportunity to involve the college and university students also as trained leaders. This should be fully explored.

(3) The universities and colleges can assist secondary schools through provision of extension services, training of teachers, provision of facilities for their talented students to pursue higher studies of their choice, etc. University Departments should be encouraged to develop such pro-

grammes and colleges may work with secondary schools in their neighbourhood for the same purpose.

161. It is essential to see that the access of the poorer and under-privileged social groups to higher education is increased. Suitable measures, including scholarships, should be adopted for the purpose.

162. The development of the University of Jammu has been sadly handicapped for want of a campus of its own. Very early steps need to be taken to get the lands and provide the necessary buildings.

Universities

163. We have earlier recommended the opening of the Department of Education in the Jammu University. The desirability of expanding the university programmes in the State by opening departments of earth sciences (e.g. geophysics, agrobotany or geochemistry), biochemistry and forestry should be explored. In view of the growing importance of management as a subject, the opening of a Department of Management may also be considered. This can be done within the existing academic resources of the university.

164. In the Srinagar University, the bus service from the city to the University campus should be run in such a way that it would be possible for students to spend a good deal of time on the campus, say, from 9 AM to 9 PM. In addition, it is extremely urgent to conduct one or two academic centres in the city where university students may have access to well-organized libraries (with good collection of textbooks) early in the morning and again in the evening and at night.

165. Earnest efforts should be made to develop research in the University. In particular, the possibility of establishing social science research centres in the two universities in collaboration with the Indian Council of Social Science Research should be explored.

Research

166. The problem of the medium of instruction is of great significance and affects both the secondary and the university stages. At present, English is used as a medium of instruction in science subjects in classes IX-XI. In the PUC and the first year of the TDC (which are proposed to be transferred to the school stage), the medium of instruction is also English. It continues to be so both at the undergraduate and the postgraduate stages.

167. This problem has two aspects. On the one hand, the understanding of the students of the basic concepts will be deeper and more satisfactory and standards will improve if the regional language is used as a medium of instruction. On the other hand, the student's command over English, as a library language, will have to be strengthened in order to give him direct access to the growing knowledge in the world. We will, therefore, have to make simultaneous efforts to utilise the regional language as medium of instruction and also to strengthen the working knowledge of English.

168. We did not have enough time at our disposal to examine this problem in all its aspects. We, however, recommend that it should receive the attention of the universities. We also feel that at the school stage, at any rate, there should be a progressive elimination of the use of English as a medium of instruction combined with simultaneous measures to strengthen the student's capacity to use it at least as a library language.

169. Equally urgent is the need to bring about a radical reform in the teaching methods and in the outdated system of examinations which obtain at present.

Examinations We must take some immediate and tangible steps to move towards a system under which set syllabii and external examinations based on them should be replaced by internal, and continuous evaluation done by teachers themselves. We suggest the following programme of action :

(1) A cumulative progress record should be maintained for every college student ;

(2) The colleges should evolve and maintain a continuous system of internal evaluation of student and show it on his progress record ;

(3) The universities should continue to hold the final annual examinations, but on improved lines ;

(4) The final result sheet should show both the internal and external assessment ;

(5) The student should be required to pass separately in both internal and external examinations. Classes also should be awarded separately in both.

170. We strongly urge that bilateral arrangements should be made with other universities for teacher exchange so that selected lecturers and professors of **Wider Contacts** State colleges and universities go out on teaching assignments in other colleges and universities and those from other colleges and universities come to the State for at least one semester. Teachers from Kashmir can go out in winter vacation while those from the plains can come over to Kashmir in summer. Such arrangements would obviously be of great advantage to all participating institutions.

171. On a limited scale, similar arrangements for student exchange should also be made. A certain number of students from Kashmir should be sent out every year to study in other universities of the country and a certain number of students from other States should be given scholarships to study in the universities in Jammu and Kashmir.

172. The significance of a good programme of scholarships is obvious, especially in a socialist society which strives to equalize educational opportunity. Unfortunately, the scholarship programme is very weak in the State. The **Scholarships**

total budget provision on scholarships and financial aid to students for 1972-73 is only Rs. 7.86 lakhs or less than one per cent of the total educational expenditure. (The all-India average is about 6 to 7 per cent). We, therefore, strongly recommend a substantial increase in the funds allocated for the purpose and a liberal provision of scholarships at secondary and university stages.

173. The education of girls and women is universally admitted to be far more important than that of boys and men. In Jammu and Kashmir, this is a major problem of great significance and special, earnest and sustained efforts are needed to solve it.

Education of Girls and Women

174. During the last 25 years, the State has shown tremendous progress in this field. The number of primary schools for girls has increased, between 1950 and 1971, from 175 to 1743 and the enrolment of girls at the primary stage from 12,000 (or 5.4% of the age group) to 145,000 (or 44.5% of the age-group). The number of middle schools for girls increased from 37 to 363 and the enrolment of girls at the middle school stage from 2,000 (or 2.2% of the groups) to 37,000 (or 27.8% of the age-group). The number of secondary schools for girls increased from 7 to 126 and the enrolment of girls at the secondary stage from 300 (or 0.3% of the age-group) to 14,000 (or 10.2% of the age-group). In higher education, there are now 525 girls in the universities, 6,913 girls in colleges of general education (against 252 girls in 1950) and 415 girls in colleges of professional education (against only 10 girls in 1950). This is an achievement of which one can feel proud, although the State has still a very long way to go.

175. There is already a trend in favour of co-education in the State and we were happy to find that, even in rural areas, girls are attending schools for boys. We recommend that this trend should be encouraged through the appointment of women teachers in boys schools and provision of special sanitary and other facilities for girls attending these institutions. Where, however, the resis-

tances to sending girls to mixed schools are still strong, separate schools for girls should be established to the extent possible. At the primary stage, however, we believe that a stage has been reached that, in almost all parts of the State, co-education may be adopted as a general policy. This will help in improving standards and especially, as stated earlier, in reducing the number of single-teacher schools.

176. Special efforts should be made to encourage women to become teachers. In rural areas, there is a great shortage of women teachers. To meet this, special encouragement should be given to rural girls to qualify themselves as teachers. Quarters for women teachers should be provided, and special assistance should be made available to women teachers (and, in fact to all working women) through the organization of creches or *Balwadis* for their children when they go to work.

177. In primary and middle school education, special efforts are needed to enrol girls, to make co-education acceptable and popular in the age-group 6-11 to begin with, and later on even in the age-group 11-14. Incentives in the form of free supply of books or clothing should be provided. Programme of work experience specially suited for girls will have to be introduced to enable them to earn while learning and to create incentive for the family to send girls to schools. In several instances, small creches will have to be organised as adjuncts to primary schools because most girls will be bringing their young children with them when they come to schools. Programmes of part-time education will be even more necessary for girls than for boys because they are more often required to work at home and also more intensively.

178. At the secondary and university stages, the main problem is to encourage more girls to continue their studies. But if the record of the past 25 years is any guide, this programme will develop without much difficulty. What is needed really is an attempt to identify those

courses which might be more useful for girls and to provide for their teaching in secondary schools and colleges.

179. What is more difficult, but extremely important, is to organise programmes for young girls in the age-group 15-25 who are not attending schools and for adult women. These will be counterpart programmes to those which will be developed for non-student youth (boys) and adults (men) as indicated earlier. The programme for young girls will obviously be somewhat different from that for young boys. The vocational core leading to economic gain will be common in both. But the girls will show greater interest in child welfare, home management and health and family planning. The programmes for girls and women will also have to be largely informal and their formal part will always remain small and optional. It will also be more difficult to identify young women who can be trained to become group leaders for these educational programmes.

180. It is, however, necessary to make a beginning on a scale however small. From this point of view, we recommend that we should establish one Institute of Women's Education in each province. This Institute would be the counterpart of the Yuvak Centre and should strive to train young women as leaders and use them to develop programmes amongst young girls and women on the lines indicated above. The Department can then develop a number of *Kendras* where the programmes will be operated through trained workers and with the help of locally available associate workers.* If the idea is accepted in principle, we recommend that a social group may be set up to work out the details of the programme so that it can be adopted from the next financial year.

181. The introduction of television in the valley is of very great significance for the future development of education and we recommend that it should be fully
Television utilised.

* In Appendix V we enclose a Note on this work prepared for us by Smt. Vibha Parthasarathi.

182. From the discussions in the preceding sections, it will be seen that television can be of immense use in the following programmes :

(1) For improving instruction in the formal system of education at the primary and secondary stages. Programmes on TV will be of special significance for the teaching of languages, science and mathematics.

(2) For programmes of in-service teacher education, especially the education of teachers in small schools in the far-flung areas.

(3) For programmes of education of the non-student youth (age-group 15-25) and adult education.

(4) For programmes of informal education of young girls and women.

Adequate time on TV will have to be reserved for all these educational programmes.

183. The best results in television can be obtained if there is a special unit for the purpose in the Education Department, which will be working closely and continuously with a technical unit in the TV station in Srinagar. Steps to create this Unit should be taken immediately, the staff selected and trained. In our opinion, this unit will have to be headed by an officer of the status of Joint Director of Education. For the first three years, it may be an advantage if the services of a TV Education Adviser are made available by the Government of India. We also recommend that a special committee may be immediately set up to work out all the details of this programme over the next six years or so.

184. If the large programme of educational transformation, improvement of standards, and expansion of facilities which has been visualised by us is to be implemented satisfactorily, it is necessary to strengthen and reorganise the State Education Department. We welcome the

**Educational
Administration**

appointment by the State Government of an Officer on Special Duty to examine this problem in all its aspects and to advise the State Government on departmental reorganisation. His comprehensive and detailed report on the subject would soon be available to the State Government for its consideration. We, therefore, do not propose to go into the details of the problem and shall merely concern ourselves with the statement of a few broad principles on which the State Department should be reorganised.

185. It will have been seen from the discussion in the preceding chapter that the State Department of Education will have to be reorganised in four ways :

- (1) The strengthening of supervision ;
- (2) The reorganization of the State Institute of Education ;
- (3) Establishment of a Planning & Statistical Unit ; and
- (4) Creation of several new units or sections to look after the new programmes that are proposed to be introduced.

(1) *Strengthening of Supervision* : Our proposals on this subject have already been discussed in Chapter Three.

(2) *State Institute of Education* : The State Institute of Education requires considerable overhaul. As we have recommended, it should be placed in the charge of the Officer-in-charge, Teacher Education. Its functions will mainly be :

- (i) Teacher Education ;
- (ii) Preparation of guides, manuals, etc. for teachers ;
- (iii) Conducting in-service educational programmes for teachers of primary, middle and secondary schools and especially to remain in charge of correspondence courses ; and
- (iv) Orientation and training of supervisory and inspecting officers.

The State Institute of Education will serve both the provinces and be located, as at present, at Srinagar. But in view of the proposed increase in its programmes, it should be a policy to develop them in collaboration with District Training Colleges as far as possible. Only the programmes meant for the State as a whole should be conducted direct by the Institute.

The State Institute of Education should conduct two journals, one in Hindi and the other in Urdu. It would be of considerable help in improving communication within the system. These should be largely in the form of a newsletter in which good work being done by different schools, interesting experiments undertaken by teachers, departmental programmes and activities should be reported or announced. It should be widely circulated to all schools and teachers.

(3) *Planning and Statistical Unit* : The work of the existing Statistical Unit has been greatly handicapped by lack of staff and proper streamlining of procedures. There is also no separate Planning Unit in the Education Department. In our opinion, there should be a combined unit for Planning and Statistics. An officer of adequate status should be placed in charge of this unit. Suitable training for him may be arranged in the National Staff College at New Delhi.

At present, the collection of statistics is mostly decentralised. In a small State, this is hardly necessary. We suggest that, in future, the collection of statistics for primary and middle schools should be centralised at the Tahsil level and the necessary statistical assistance should be provided in each Tahsil office. The statistics of other educational institutions should be collected on a centralised basis by the Central Statistical Unit which will also consolidate the returns of the primary and middle schools received from the Tahsil offices. We believe that such an arrangement will be more economical and efficient.

(4) *New Units* : We have indicated that new units of

an appropriate size would have to be created and placed under officers of an adequate status to look after (a) programmes of (a) teacher education, (b) youth programmes, (c) work-experience and vocationalisation, and (d) television and other programmes of informal education. This is in addition to the State Board of School Education which is proposed to be considerably strengthened.

186. It is obviously necessary to strengthen the Department in advance for the field programmes. We, therefore, recommend that steps to strengthen the Education Department on the lines indicated above should be taken immediately.

187. There are a large number of private denominational institutions in the State. According to the latest information, these number 186 and include muslim institutions (27), Jamait-i-Islam (106), Arya Samaj (7), Sanatan Dharma (6), Khalsa (3), Christian (8) and others (28). The State has promulgated an Act (Act XIX of 1967) for grant of recognition to those institutions. Most of these receive grants-in-aid also.

188. Although the extent of private enterprise in education in the State is small, it would be desirable to regulate it on the broad lines recommended by the Education Commission. The main step in this direction would be to make it obligatory on all non-governmental educational institutions to register themselves with Government and to submit certain prescribed information from time to time about their activities and programmes to the notified authority which in this case, would be the Director of Education. Every registered school would have to comply with certain conditions, such as :

- regular constitution of a managing body approved by the Education Department ;

- approval of the Department for the instruction given in the institution ;
- use of approved books only in the educational institutions ;
- appointment of such teachers only as have the prescribed qualifications ;
- sound financial condition and good administration ; and
- conforming to conditions about religious instruction laid down by the Government.

189. At present the legislation relating to education is scattered. There is a Compulsory Primary Education Act.

Education Act and Code There is an Act for the State Board of Secondary Education. As stated above, there is a legislation relating to non-government schools. Rules of grant-in-aid now exist in the form of executive orders and it would be desirable to give them a statutory basis. All things considered, we think it would be desirable for the State to enact a comprehensive Education Act so that all legislation relating to education is brought together in a compact form for convenience of administration and information of all concerned. The Education Code of the State should also be thoroughly revised to meet the needs of the new educational system.

190. We recommend that the cost on school buildings should be kept as low as possible in order to release resources for the more important program-

School Buildings and Equipment mes of educational reconstruction. This would be possible if local materials are used and innovative designs are adopted.

Similarly, the equipment to be provided should be simple and austere utilitarian and teachers and students should be encouraged to devise as much of it as possible through the use of local materials. Apart from economy, this will be a good programme of work-experience in schools.

191. We consider the provision of pre-school education of considerable significance, although we have not included it in our ten-point programme. Our main consideration has been that of financial constraint. We would, however, suggest that the State Government should pay greater attention in future to the promotion of an integrated programme of services for pre-school children (which should include education, nutrition, health, including immunisation and welfare) on the broad lines recommended by the Working Group under the chairmanship of Smt. Mina Swaminathan and approved by the Central Advisory Board of Education in its 36th meeting held at New Delhi on 18-19 September, 1972. The essential features of the programme are the development of a variety of operational models to suit local conditions, the training of local personnel as teachers and other workers, the use of local materials for provision of equipment and the enlisting of local cooperation in financing the programme. The development of this programme should be properly co-ordinated with the work of the State Social Welfare Board; and, in view of the limited resources available, the State programme should be directed mainly at the most under-privileged groups of children from the urban and rural areas. Besides, encouragement and assistance should be given to voluntary enterprise for providing essential services, including education, to the pre-school child.

192. We would also suggest that the State Education Department should consider the education of the handicapped children as its responsibility and not leave it merely to the welfare agencies. The programme should be extended, to the extent possible, under the auspices of the State and encouragement should be given to the voluntary agencies working in the field.

CHAPTER FIVE

SUMMARY OF RECOMMENDATIONS

193. A programme of high priority is to transform the educational system to make it a powerful instrument of social change. From this point of view, it

Transformation of the Educational System will be necessary to blend the formal with the informal system of education, to extend the coverage of the educational system to include the working population also and to revise the curricula.

194. The new educational system in the State would be as follows :

The New Educational System (1) *A primary and middle-school stage* covering eight years (classes I-VIII or age-groups 6-14). This will be divided into two sub-stages : a primary stage covering classes I-V or age-group 6-11 and a middle-school stage covering classes VI-VIII or age-group 11-14. There will be two points of entry, the first at 6+ and the second at 11⁺. There will be a liberal provision of part-time education for all children who cannot attend on a full-time basis, especially in the age-group 11-14.

(2) *A secondary stage* covering four years (classes VIII-XII or age-group 14-18). The present PUC and first year of the TDC will also be transferred to this stage. The secondary schools will be of three types : (a) vocational schools providing a two-year course and also other subsidiary courses ; (b) two-year secondary schools teaching classes IX-X ; and (c) fullfledged secondary schools teaching classes IX-XII. On completion of class VIII, a student

will have an option to enter any of these three categories of schools according to his aptitudes and capacities. However, the entry to the fullfledged secondary schools will be on the basis of adequate academic attainment as this will be university-preparatory to a great extent. There will be appropriate bridges between these three types of secondary schools. Moreover, there will be a further programme of diversification and vocationalisation at the end of class X. There would also be adequate facilities for self-study or part-time education.

(3) *A university stage* which will cover a two-year pass course and a three-year honours course for the first degree and a two-year postgraduate course followed by appropriate facilities for research. There will also be adequate facilities for self-study or part-time education.

195. It is necessary to develop as large a programme as possible for non-student youth in the age-group 15-25.

From this point of view, pilot programmes should be initiated immediately in the cities of Srinagar and Jammu and in one rural area in each district. The programme may be extended in the light of experience gained.

196. The most important aspects of revision of curricula at the school stage are : (a) relating curricula intimately to environment ; (b) introducing work experi-

Revision of Curricula at the School Stage ence as an integral part of the curricula in classes I-X ; (c) providing for participation in meaningful programmes of community service and national development ; and

(d) improved teaching of science, new mathematics and English. The State Board of School Education should be immediately constituted and made responsible for preparation of curricula at the entire school stage, i.e., a curriculum of classes I-VII and another curriculum (based on the existing curriculum of class VIII) for classes IX-XII before the end of 1973-74. In the following year, the textbooks should be prepared and teachers should be oriented.

The new curricula should be introduced in class I and class IX respectively in 1975-76. In every subsequent year, the curricula should be extended to the next higher class. In due course, alternative new curricula should be prepared for classes IX-XII based on the new curriculum for class VIII which will be reached in 1982-83. These curricula should then be introduced in class IX in 1983-84 and successively extended to the next higher class every year until class XII is reached in 1986-87.

197. The Universities of Jammu and Srinagar should immediately take up the problem of restructuring the undergraduate courses on the broad lines indicated in the Report and also to provide for the introduction of a three-year honours course and a two-year pass course. Professionalised courses in selected fields should also be included in the B.A. Pass Degree. The work of designing courses should be completed during 1973-74 and they should be initiated at the beginning of the academic year 1974-75. The postgraduate courses should also be restructured on the broad lines recommended by the Education Commission and the desirability of introducing M. Phil. course in certain fields where the universities have the necessary facilities and personnel should also be explored.

Revision of Curricula at the University Stage

198. The academic calendar in the State should be reorganised in such a manner that the number of institutional days in a year would be not less than 150.

Adoption of a New Calendar for the School Year

In view of a large variety of climatic conditions in the State, however, it will be necessary to adopt different academic years in different parts of the State in keeping with local needs.

199. A quick survey of the entire area of the State should be carried out in the next 3-4 months to determine the proper location of educational institutions in different categories.

Planning the Proper Location of Schools

200. Depending upon its catchment area, the classes to be taught in a school should be decided on some rational basis. Policies for staffing schools in relation to classes taught and enrolments should be clearly prescribed and scrupulously observed. Conditions for upgrading schools should be drawn up on a rational basis and once an upgrading is decided upon, it should ordinarily proceed in schools from class to class every year.

Institutional Planning

201. In future, candidates who have passed the higher secondary examination (at the end of class XI at present and at the end of class XII in future) should be given preference in recruitment. Eventually, a pass at the higher secondary stage of 12 years should be the minimum qualification for recruitment as a teacher in a primary or middle school. Graduates should be encouraged to serve in primary and middle schools.

General Education of Teachers

202. An emergency programme should be drawn up to train all the untrained primary, middle and secondary school teachers in service in a period of 3 to 5 years.

Teacher Education

203. The duration of the training course for primary and middle school teachers should be continued at one year, but provision should be made for periodical refresher courses for all teachers. A system of apprentice-teachers should be introduced.

204. Good training colleges should be established in all districts for primary and middle school teachers.

205. An intensive programme of in-service education for primary and middle school teachers should be drawn up and implemented.

206. A University Department of Education should be created at Jammu. A programme for the **Training of Secondary Teachers** in-service education of secondary teachers should be developed and a one-year training course for graduates who will be teaching in primary schools, should be specially designed and initiated.

207. An Officer of adequate status should be appointed in the Department of Education to look after the programmes of teachers' education. A State Board of Teacher Education should also be established.

208. A programme should be drawn up and implemented for providing the minimum facilities necessary for primary, middle and secondary schools. A healthy **Qualitative Upgrading of Schools** competition should be encouraged amongst the schools to compete with each other in standards, and the schools which show initiative and results, should be assisted to improve further and reach optimum levels. A system of grading the schools qualitatively should be introduced.

209. Supervision of primary, middle and secondary schools should be improved comprehensively as recommended in the Report and provision should **Supervision** be made for in-service training of supervisory officers.

210. There should be an autonomous organisation for the production, distribution and sale of textbooks. There is a great need for producing teacher **Improvement of Textbooks** guides, supplementary reading materials and other teaching and learning aids. A major effort is also needed to ensure that every student has access to all his textbooks right at the opening of the school year. This implies a programme of distribution of free books at the primary stage and the development of a programme of textbook libraries at the secondary and university stages.

211. The new and dynamic methods of teaching should be adopted. A well designed Progress Card should be introduced for all pupils and maintained carefully and regularly, a student maintaining a single card throughout his career. A system of internal assessment should be universally adopted, but the results of both the assessments—internal and external—should be kept separate, passes being required in each and separate classes being given for each.

Methods of Teaching and Evaluation

212. There should be a State Board of School Education whose responsibility would include not only holding of public examinations at the school stage, but also approving curricula and textbooks for the entire school stage, and conducting panel inspections of secondary schools.

State Board of School Education

213. Every effort should be made to provide universal education for children in the age-group 6-14 by 1980-81. The following measures and Middle School Education may be adopted from this point of view :

Universal Primary and Middle School Education

(1) A universal provision of schools should be made in a period of three to five years. The number of single-teacher schools should be reduced to the minimum, especially by adopting coeducation as a policy. Special attention should be given to single-teacher schools and peripatetic schools.

(2) Enrolments in primary and middle schools should be correctly reported. There should be an annual census of children in the age-group 6-11 or 6-14, and on its basis, enrolment drives should be organised every year and an effort should be made to enrol as many children of the age-group 6-7 as possible in grade I.

(3) Wastage should be reduced to the minimum by adoption of a system of part-time education, and stag-

nation should be reduced through programmes of qualitative improvement.

214. The inordinate expansion of secondary and higher education, although good from some points of view, is creating acute problems of educated un-

Expansion of Secondary and Higher Education employmen; and deterioration of standards. The following measures should be adopted to meet the situation :

(1) The location of secondary schools should be carefully planned ;

(2) The duration of the secondary course should be lengthened to 4 years, the PUC and first year of TDC should be transferred to schools ;

(3) The secondary stage should be diversified and vocationalised so that it becomes terminal for a large majority of students ;

(4) There should be intensive development of economy so that more jobs are created for secondary school-leavers;

(5) The differentials in the income between those who have secondary and university education should be reduced; and

(6) A programme of professionalisation should be introduced at the B.A. Pass Degree also..

215. Some emergency measures should be adopted to reduce the serious congestion and overcrowding in affiliated colleges. But the problem would become fairly easy when the PUC and the first year of TDC are transferred from colleges to secondary schools. Residential accommodation should be provided for teachers, where necessary, and especially in *mofussil* colleges. Arrangements should be made for training of young lecturers. Programmes of student participation and provision of amenities and services

should be emphasised and a State Council of Affiliated Colleges should be established.

216. Early steps should be taken to provide a campus to the Jammu University. In Srinagar University, the bus service should be so arranged as to make

Universities it possible for students to spend a good deal of time in the campus. In addition, academic centres should also be provided in the city for university students. The opening of some new departments, such as earth sciences or management, should be considered and a Department of Teacher Education may be started in Jammu University. The possibility of establishing social science research centres in the two universities in collaboration with the Indian Council of Social Science Research should be explored.

217. A programme of examination reform should be developed at the university stage also, broadly on the same lines recommended at the school stage; and bilateral arrangements should be made with other universities for exchange of teachers and students and collaborative work.

218. A liberal provision of scholarships should be made at the secondary and university stages.

Scholarships

219. Special emphasis should be laid on the education of girls and women. The trend towards adoption of coeducation should be encouraged, and at the primary stage, coeducation may be adopted as a general policy.

Education of Girls and Women Special facilities should be given to women to become teachers, especially in rural areas, and two Women's Institutes should be established, one in Kashmir and one in Jammu.

220. Television should be used intensively for educational programmes. A special cell should be created for it in the Education Department and a committee should be set up

Television

immediately to work out all the details of the programme.

221. The Education Department should be strengthened ; the State Institute of Education should **Educational Administration** be reorganised ; a planning and statistical unit should be established; new units or sections should be created for teacher education, youth programmes, work experience and vocationalisation and television. Private educational institutions should be regulated on the broad lines recommended by the Education Commission. A comprehensive Education Act should be enacted and the Education Code should be revised for the guidance of the Department.

222. We would like to place on record our appreciation of the assistance we received from the **Acknowledgments** officials and non-officials in the State in our deliberations. We also greatly appreciate the valuable help given to us by Shri Teja Singh, the Secretary of the Committee.

Bhagwan Sahay
 G. Parthasarathi
 M. S. Swaminathan
 J. P. Naik
 N. K. Mukarji
 Mahmooda Ahmed Ali Shah
 Agha Ashraf Ali
 Satya Bhushan

APPENDICES I—VI

| | | | |
|--------------|---|---|---------|
| Appendix I | — | J. & K. Government Notification Setting up the Committee | 99-100 |
| Appendix II | — | Note by Shri T.G.K. Charlu Managing Director, J. & K. Industries Ltd., Srinagar | 101-110 |
| Appendix III | — | Introduction of Vocational Subjects in the B.A./B.Sc. (Pass Course) of the University of Delhi | 111-112 |
| Appendix IV | — | Villages Without Schools | 113 |
| Appendix V | — | Informal Education for Women | 114-118 |
| Appendix VI | — | Statistical Tables. | 119-147 |

APPENDIX I

GOVERNMENT OF JAMMU AND KASHMIR

GENERAL DEPARTMENT

NOTIFICATION

Dated 1st April 1972

In the years since Independence, considerable progress has been made by the State in the field of education. The State Government considers, however, that much has still to be done and done urgently, if education is to play its full part in the process of modernisation and development and if the educational system is to be more closely related to employment opportunities. This calls for a quick reappraisal of educational policies. Because of limitations of resources, new initiatives to implement the new policies may have to be confined to a few high priority programmes. The State Government hereby constitutes a Committee to examine the problem and recommend, as early as possible, suitable policies and programmes in this context. Shri Bhagwan Sahay has kindly consented to be the Chairman of the Committee. The other members of the Committee will be as below :

1. Shri G. Parthasarathi
Vice-Chancellor
Jawaharlal Nehru University
New Delhi
2. Dr. M. S. Swaminathan
Director
Indian Council of Agricultural Research
New Delhi
3. Shri J. P. Naik
Adviser
Ministry of Education & Social Welfare
Government of India
New Delhi

4. Shri N. K. Mukarji
Chief Secretary
Jammu & Kashmir Government
5. Mahmooda Ahmed Ali Shah
Principal
Government College for Women
Srinagar
6. Professor Aga Ashraf Ali
Kashmir University
Srinagar
7. Professor Satya Bhushan
Jammu University
Jammu

By order of the Government of Jammu and Kashmir

Sheikh Ghulam Rasool
Secretary to Government
General Department

No. GD (ADM) 71/Misc---iv (Adm) Dated 1-4-1972

Copy to the :

1. Secretary to the Government of India, Ministry of External Affairs, New Delhi
2. All Secretaries to Government
3. Secretary to Governor/Chief Minister
4. All Heads of Departments
5. Registrar, University of Kashmir/Jammu
6. All Members
7. Under Secretary attached to Chief Secretary
8. Director of Information
9. Manager, Government Press, Jammu, for publication in the Government Gazette
10. All Officers/Sections of General Department

Brij Mohan
Under Secretary to Government
General Department

APPENDIX II

NOTE BY SHRI T.G.K. CHARLU, MANAGING DIRECTOR J & K INDUSTRIES LTD., SRINAGAR

1. It is desirable to impart certain skills, some time during the high school stage, to enable the boys and girls of the State to be better fitted to play a positive role in the development of its economy. Knowledge of such skills would also enable them to earn while learning and after the high school stage, they can have gainful employment either in partial or whole-time occupations. The skills to be so imparted must have a ready market and also reflect the needs of the community with particular reference to agro-based activities that could be developed easily in the State. With this in view, the following programmes are suggested for introduction in the high schools in the State. If these prove successful, similar programmes based on the needs of the agro-industrial activity of the community could be introduced progressively.

2. Sericulture is a traditional industry in the State and even today, there are 35,000 persons who practise sericulture to supplement their income from agricultural pursuits. It is true that the silk industry of the State has shrunk as compared to the earlier decade which, among other things, is due to the lack of properly trained personnel. Though knowledge, experience and training is available at the higher levels of the sericulture organisation, the rearer who is the backbone of the industry has not derived much benefit of the training and knowledge available. This being so, the rearers practise, in most cases, techniques which are no

**Introduction of
Sericulture as a
Basic Craft in
the Schools**

longer valid under the changed conditions of economic development.

3. Advanced countries like Japan, USSR and South Korea have improved their sericulture and sustained the farmer's interest in sericulture through increased incomes. They have built up the base of the industry by imparting training to the rearers and this is done right from the schools where sericulture is taught as a subject along with agriculture. This has helped them to train the required personnel for running the industry. The boys and girls who complete high school education, due to the training received, become professional silk-worm rearers and mulberry cultivators. They earn their livelihood partly through sericulture and, to a very large extent, become economically independent.

4. The J&K State has an ambitious programme of development of sericulture industry during the next 5-7 years. This programme has been drawn up in consultation with the Government of India and the F.A.O. It is proposed to raise the present production of 50 tons of silk per annum to 300 tons per annum by the end of the next seven years. The success of this programme would, to a very large extent, depend upon the availability of properly trained rearers. The programme is expected to give additional employment to 20,000 rearers and also raise the income levels of rearing families from Rs. 175 to Rs. 300 for a work which would be completed in 40 days during the year. This does not include other resultant employment in the developmental organisation, in manning of mulberry trees and in the silk industry.

5. It is proposed to give theoretical and practical training in sericulture to boys and girls of sixth to eighth classes.

| | |
|-------------------------------|--|
| Details of the Schemes | The theoretical training will comprise about 200 hours in two years wherein lectures will be given on basic tenets of moriculture (<i>i.e.</i> soil for mulberry; propagation of mulberry; grafting, seed collection; pruning; manuring, etc.); the life-cycle of the silkworm; incubation, |
|-------------------------------|--|

gearing and mounting methods ; harvesting of cocoons ; drying of cocoon-seeds ; information about morphology and embryology ; production and reeling methods.

6. Two rearings, wherein incubation and rearing, etc. will be shown, will be got done by the students.

7. A few schools in some selected areas of high silk-worm rearing density will be taken up and about 100 trees in the adjoining areas of the school will be allotted to the institution for demonstration of sericulture practices. A small area of land will also be made available by the department for bush cultivation.

8. Rearing equipment and grainage equipment will be made available by the department. Two ounces of seed will be got reared through the school boys with the help of the departmental experts. The crop harvested will be about 120 kgs. and the price for this would amount to about Rs. 900 at Rs. 7.5 per kilo which will be paid to the boys attending the sericulture classes as stipend for undergoing the training.

9. Similarly, second rearing will be conducted and the same amount will be earned by the school boys.

10. In all, the income to the students from sericulture per year will be Rs. 1,800. To begin with, 20 boys may be admitted to the class who will, along with education, earn Rs. 90 for each silk season. The course will be spread over a period of two years and, after the course is over, the boys will become trained sericulturists.

11. As a result of the interest that will be generated through the income the boys would get during education, they will take up sericulture as a subsidiary occupation and resort to multiple cropping in sericulture which they will learn during the course of training. Not only will the rearing be beneficial, but they will undertake reeling also on cottage basis (as is the case in Mysore) which will enable them to earn more.

12. The reeling will yield an income of Rs. 2,700 by processing of 180 kgs. of cocoons in two seasons at 1 : 12 renditta at Rs. 150 per kg. for 12 kgs of raw silk produced.

13. The employment opportunities will also increase for the trained students, as, during the Fifth Plan period, the trained students will get preference in recruitment against the posts to become available.

14. To begin with, ten schools will be taken up in Kashmir and five schools in Jammu. In every school, 20 boys will be admitted for the sericulture course.

Operation Procedure For the first year, the departmental experts will undertake the coaching in theory and practical courses and also train a teacher from the respective schools who will afterwards take up the job and will be the team leader. The departmental experts will take up other schools during the second year and leave the first year's work to be carried on by the team leader ; and so on. The number of schools to be taken up and the number of students to be trained under the programme is detailed below :

| <i>Year</i> | <i>No. of Schools</i> | | | <i>No. of Students to be Trained</i> |
|--------------|-----------------------|--------------|--------------|--------------------------------------|
| | <i>Kashmir</i> | <i>Jammu</i> | <i>Total</i> | |
| First | 10 | 5 | 15 | 300 |
| Second | 20 | 10 | 30 | 600 |
| Third | 30 | 15 | 45 | 900 |
| Fourth | 40 | 20 | 60 | 1200 |
| Fifth | 50 | 25 | 75 | 1500 |
| Total | 150 | 55 | 225 | 4500 |

15. During the course of five years, training will be imparted to 4,500 boys who, in turn, can educate their family members. Taking an average of 5 persons per family, the total number of people trained in five years comes to 22,500. This is equal to the present strength of rearers in Kashmir.

16. The 4,500 trained sericulturists can undertake the rearing and reeling as a supplement to their course. From the point of view of production of cocoons, the trained 4,500 sericulturists will give 13,500 mds. of cocoons which is just equal to the present production. The processing of 13,500 mds. or 5,40,000 lbs. of cocoons will yield 40,000 kgs. of raw silk which will generate an income of Rs. 60 lakhs (40,000 kgs. of raw silk at Rs. 150 per kg).

17. The experts would be provided by the department for the first year only. The work will subsequently be conducted by the teaching staff.

18. The department will provide all the necessary equipment etc., as also a house to be taken on rent in the village for conducting operations, if accommodation is not available in the school. The expenditure on this account can also be met from the grants for development of the industry.

19. The expenditure for providing books, charts, etc. can also be provided by the Department of Sericulture from its funds for development purposes.

20. There are various trades such as Carpentry, Weaving, Poultry-farming, Bee-Keeping, **Training-cum- Production Units for Carpentry and Allied Crafts** Mushroom-growing, Wood-carving, Sheep-breeding and Fruit-cases manufacturing which can serve as means for creating opportunities for the employment of educated youth.

21. The survey of the demand and resources available in various regions of the State suggest that the youth may

adopt the following industries after they receive the specific training in the schools :

- (a) Manufacture of fruit cases for fruit industry ;
- (b) Manufacture of bee-hives for bee-keeping industry or for the K.V.I. Board ; and
- (c) Half-wrought and turned walnut wood-carving articles for exporters or for the Handicrafts Boards.

22. The available data reveals that about 75 lakh packing cases, costing about Rs. 2.50 crores are

Manufacture of Fruit Cases manufactured every year and the annual growth rate ranges from 15 to 20%.

To meet the increased demand, the establishment of central or regional large scale plants is not considered economical and possible, because both demand and resources are spread over a vast area. Consequently it is envisaged that production of fruit cases through small independent units established near "Fruit Farm Centres" will prove both economical and beneficial.

23. To render the unit self-sufficient, allied trades like fruit sorting and grading, marking and marketing can also be incorporated, thus enhancing the possibilities of direct sale by fruit growers.

24. As the manufacture of fruit cases is basically a seasonal trade, it becomes necessary to combine it with some other allied trades, so as to engage the plant round the year. Manufacture of bee-hives for bee-keeping industry (or turned walnut half-wroughts for wood carving industry) can be favourably combined as secondary trades with the proposed main trade. Fortunately, the demand and resources for these trades are also amply available.

25. The raw material used in the cases, viz., fir, poplar, willow, kail and walnut, are available in the locality and from the Forest Department.

26. The Khadi and Village Industries Board is developing the bee-keeping industry in villages for increasing the production of honey which is in great demand. The industry provides opportunities to farmers to utilise their idle time in this trade and it is growing fast. The only problem faced is the availability of the modern hives. It, therefore, follows that the manufacture of hives in the proposed units has a ready market. The results of the financial working of the trade are quite favourable and encouraging.

27. The specific raw material required is kail and fir wood and this is available in abundance. Since fruit cases have to be manufactured out of fir timber, the left-overs can easily and conveniently be used in the manufacture of hives, thereby enabling the unit to increase material utilisation.

28. Walnut wood-carving is a traditional handicraft and the trade continues to enjoy a monopoly. **Manufacture of Walnut Wood-Carving and Turned Finished Articles** The demand for the articles of this craft in the foreign markets is increasing greatly. This advantageous situation naturally creates vast opportunities for increasing the export of this commodity to earn foreign exchange.*

29. To boost-up the foreign exchange earnings and also to create more avenues for employment, the production of wood carvings can safely be increased. A study reveals that it is possible to increase the productivity of this craft by resolving the factors responsible for its restricted production. Some of these are quite distinct, such as

- The processes involved are all manual ;
- The processes are of a complex nature and for various processes, the article has to pass through several hands and move through various places for varying operations which are time-consuming ;

- The processes like manufacturing of components, their assembling, carving and finishing are restricted to a few families only which limits production.

30. The above factors can be resolved or eliminated by mechanising as many processes as possible so as to achieve productivity and better surface quality to render the carving processes easy and time-saving.

31. Decentralisation of the craft is equally important. To shift an old handicraft worker to a machine is rather difficult. It is, therefore, necessary to train the youth in this craft so as to encourage the setting up of a large number of units.

32. The raw-material used is walnut timber which is available.

33. The scheme proposes to establish training units called "Training-cum-Production Units" in High Schools selected for the purpose. Along with training, the units will be able to sell the finished products to meet the expenditure, and if possible, to build some reserves.

34. The units will be located in the school buildings. Two rooms measuring about 12' × 15' will be required for the machine and the assembly.

35. To start with, Bejbehara and Shopian in Anantnag district and Sopore and Pattan in Baramulla district are considered as suitable places.

36. The training course is planned for a period of two years only and to be completed in two phases, viz., practice and production. The practice course will be confined to the students of the class IX. It is proposed to run the units in the mornings and evenings for the IX and X class students, respectively, and at least for six hours a day so as to achieve the annual target of production and sales. A group of six students is proposed to be trained in a period of one month and repeated after three months. Each group will consist of—

- One sawyer-cum-grinder ;
- One turner and carver ;

- One fret sawyer ; and
- Three assemblers.

37. The method of imparting the training is based on "Learning by Doing" system, so as to enable a student or a group of students to run such a unit independently after completing the training course.

38. In each of the High Schools, 36 students will remain under training and 18 trained students will be turned out every year.

39. Administration, finance and accounting, purchases and sales will all be managed by the Head Masters of the respective schools.

40. Two trained and experienced instructors will be required, one for sawing, planing, moulding and turning jobs and the other for assembling and carving jobs.

41. The elementary lessons in mensuration and periodical lectures on the techniques of these trades, printed guide books and sample schemes will be produced and made available by the Jammu and Kashmir Industries Limited, Srinagar.

42. Similar arrangements will be made by the Horticulture Department, Khadi and Village Industries Board and the Handicrafts Board. These departments will periodically check the specifications and quality of goods produced in these units and make necessary suggestions. Such measures will establish the importance of the training course and will encourage the trainees and create necessary interest.

43. The scheme has been made simple in form so as to reduce the capital costs to a workable limit. The production targets of finished goods have been laid in a manner so as to make it possible to achieve the recovery of production costs and building up of some reserves. It is presumed that the interest created in the trainees during the training

will induce them to produce more and better quality goods to achieve greater profit and convince them of the viability of the trade which they may adopt after receiving the training.

44. The land and building being available, the fixed capital representing the cost of complete plant for all the three crafts amounts to Rs. 20,000 per annum for each unit.

**Introduction of Vocational Subjects in the B.A./
B. Sc. (Pass Course) of the University of Delhi**

The University of Delhi has decided to introduce certain vocational subjects in B.A./B.Sc. (pass course) studies with effect from the academic year 1972-73.

The programme, as conceived by the University covers a large number of vocational subjects. An illustrative list is given below :

1. Tourism
2. Office Management and Secretarial Assistance
3. Personal Secretary Programming
4. Store-Keeping and Stores Accounting
5. Insurance
6. Retailing and Trade
7. Book Publishing
8. Foreign Trade
9. Child-Care Services and Pre-school Training
10. Hotel Management and Food Services
11. Textile and Clothing Work
12. Polymer Technology
13. Instrument Technology
14. Computer Science

15. Electronics
16. Pharmacy
17. Microbiology
18. Library Science

Every student can select only one of these as optional subject and it is allocated 25% of the total marks.

It has not been possible to introduce all these courses in the first year. But courses in the first seven subjects have been introduced and about 400 students have joined them.

APPENDIX IV : VILLAGES WITHOUT SCHOOLS (1971)

| Population of the Villages | Srinagar | Baramulla | Anantnag | Ladakah | Jammu | Doda | Kathua | Poonch | Udhampur | Total Kashmir Province | Total Jammu Province | Total J & K State |
|----------------------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------------------|----------------------|-------------------|
| Below 50 | 18 | 20 | 14 | 3 | 63 | 22 | 64 | 17 | 31 | 55 | 197 | 252 |
| 50-100 | 38 | 39 | 44 | 4 | 69 | 54 | 44 | 25 | 49 | 125 | 241 | 366 |
| 100-150 | 57 | 48 | 76 | 9 | 75 | 58 | 33 | 25 | 50 | 190 | 241 | 431 |
| 150-200 | 46 | 30 | 37 | 7 | 77 | 40 | 38 | 28 | 33 | 120 | 216 | 336 |
| 200-250 | 43 | 23 | 57 | 7 | 60 | 32 | 29 | 21 | 20 | 130 | 162 | 292 |
| 250-300 | 32 | 25 | 57 | 2 | 44 | 25 | 18 | 14 | 30 | 116 | 131 | 247 |
| 300-350 | 23 | 22 | 34 | 5 | 51 | 18 | 19 | 15 | 22 | 84 | 125 | 209 |
| 350-400 | 21 | 9 | 33 | 2 | 25 | 15 | 9 | 14 | 16 | 65 | 79 | 144 |
| 400-450 | 23 | 16 | 21 | 3 | 32 | 8 | 11 | 12 | 7 | 63 | 70 | 133 |
| 450-500 | 24 | 11 | 11 | 2 | 17 | 8 | 8 | 6 | 14 | 48 | 53 | 101 |
| 500-600 | 32 | 14 | 24 | 3 | 28 | 13 | 13 | 12 | 15 | 73 | 81 | 154 |
| 600-700 | 23 | 14 | 14 | — | 23 | 7 | 7 | 16 | 7 | 51 | 60 | 111 |
| 700-800 | 25 | 9 | 10 | 1 | 13 | 6 | 6 | 10 | 12 | 45 | 47 | 92 |
| 800-900 | 19 | 7 | 6 | — | 12 | 2 | 4 | 9 | 2 | 32 | 29 | 61 |
| 900-1000 | 13 | 1 | 3 | 1 | 6 | 2 | 1 | 5 | 6 | 18 | 20 | 38 |
| 1000 and above | 79 | 15 | 18 | 1 | 23 | 11 | 12 | 24 | 11 | 113 | 81 | 194 |
| Total | 516 | 303 | 459 | 50 | 618 | 321 | 316 | 253 | 325 | 1328 | 1833 | 3161 |

INFORMAL EDUCATION OF WOMEN

1. There is a good deal of scope in the State for the provision of informal and semi-formal education for grown-up women and young girls by less obviously instructional agencies. One possible way in which this can be done is to establish women's Clubs or *Mahila Kendras*. Educational goals such as social education, health education and literacy might be achieved by operating "*Mahila Kendra*". Such centres for women's hobbies/activities might offer courses in areas of inherent interest and innate needs of grown up women. Their lives pivot largely around their homes and families. Their interests are naturally focused on their children, husbands, food, clothing, economics of house-keeping, dangerous illnesses, problems posed by in-laws, etc.

2. Since it is imperative that enrolment in such a "Kendra" is not "pushed" initially in an obvious way (for that in itself might act as a deterrent, even before a start is made), several precautions would have to be borne in mind. Membership should not be made compulsory at any time. That is, if a "Kendra" is set up in a girls' school, functioning in the after-school hours, the teachers of the school ought not to be compulsorily led into participation of its programmes, nor should even persuasion be used in the initial period. A major way of attracting the women then would be the types of activities/hobbies that might be offered by each "Kendra". Each of them can have two or three (or more, if there are facilities, as there would be in bigger towns and cities) of the following units :

Child Care—emphasis to be on healthy babies,

Household Medicines—prevention and treatment of common health complaints, diseases carried by worms, etc.

Literacy and Story-telling

Music and Folk singing—traditional favourites and new songs, secular, patriotic, etc.

Sewing—for the use of the family and for sale

Knitting—by hand and machine

Embroidery—new trends in what is customarily a man's monopoly activity in the State

Textile Dying and Printing

Croatia Work and Lace-making

Drawing and Painting especially on Fabrics and Papier-machie Items

Dehydrating and Canning Foodstuffs

Poultry Farming

Cooking—emphasis to be on simple, nutritive, economic menus

Cane-weaving—toys, baskets, trays—for daily use

Candle-making—thousands of homes in the State are still without electricity

Flower Arrangement and Growing of Indoor Plants
(for winter)

3. Success of such centres would depend on an interaction of several factors. Most important of all being—as stated above—the content and nature of activities. In addition to this, the following would jointly contribute to the success of the operation :

(1) Attractive incentives might be offered to the members. Stipends are but one form of it. Exhibition of work done at a centre, formally inaugurated by a local VIP and attended by the residents of the neighbourhood would boost up the morale of the members. Regular reporting of the successes of the activities of the "Kendra" by the vernacular press might help in the popularising process of the operations.

(2) Relevant agencies could brief men—fathers and husbands of prospective and actual members about the practical skills that the women will be taught, and their advantages, e.g., healthier children, beautiful homes, cleaner surroundings, economical house-keeping, possibilities of extra income, etc.

(3) Proximity of the "Kendra" from the home of a woman would be a major factor in favour of good attendance ; for women who might have to travel a long way, perhaps carrying their youngest babe with them, might easily opt out of such hobby centres.

(4) Suitable timings of meetings would be an important motivating factor. These clubs should meet only twice, or may be even once a week. Afternoons might be best suited for the gathering, for then husbands/fathers might still be away at work. Older children, returned from school and fed, could take over the tasks of baby-sitting and looking after the home.

(5) Creative activities, arts, crafts, etc. taught at the "Kendra" should be so designed that the newly acquired skills could be practised by the enthusiastic members without having to procure extraordinary resources.

(6) "Teachers" or cadres for manning the "Kendra" would have to be carefully chosen and specially trained. They ought to be very tactful at handling the members. Involvement of the young educated girls in such programmes should be encouraged. They will have to be inducted through unorthodox channels. Certificates and

diplomas lauding their abilities should not be given too high a premium. What is more important is a sympathetic approach, a faith in the mission and a will to make the new programme a success.

(7) The use of local dress and dialect by the "teacher" would go a long way in making the members feel at ease and establish a ready rapport with them.

(8) Lady "teachers" and others involved in the management of the "Kendra" will have to assure the guardians of the members about their safety and well-being while attending the meetings.

(9) "Once a member always a member". Even after a woman discontinues attending the "Kendra" meetings on a regular basis, she should be welcome to the kendra for advice at any time. She could participate in the exhibition and display of work and be encouraged to keep in touch with the "teacher" and other members.

4. Once the idea of the "Kendra" has caught on, and centres and membership proliferate, the "teachers" could tactfully choose the right opportunity to introduce non-practical, more formal education. Occasionally, a talk on out-moded customs, irrational practices, superstitions, age-old values ill-suited to modernising societies, could be thrown into the programme of a meeting. This should be done in a friendly, informal manner, as far removed from pedantic style as possible. Slowly, carefully programmed literacy campaign could be initiated. For the literates and semi-literates a programme of continuing education should be started. All this should be based, as far as possible, on the activity-oriented hobby programmes of each "Kendra". So that, for example, neo-literates in the child care unit could read simple stories to be later narrated to their own children ; or members of the sewing units could stitch a new garment without consulting the "teacher", but by following the instructions on a chart. This literacy would be functional. It would be directly relevant to their

interests, skills and needs. As such their motivation to learn more could be fired and maintained.

5. Unless there is a specific demand for a literacy unit it should not be included in the pilot programme of new "Kendra". The concept of having to learn to read and write may unnecessarily frighten away the potential recruits. Literacy is so very important for the general/social education of the women of the country, that unless the right climate has been created for its introduction, it should not be "pushed" lest it lose a chance for ever.

APPENDIX VI

SATATISTICAL TABLES

| <i>Table No.</i> | | <i>Page</i> |
|------------------|--|-------------|
| I | Population in J. & K. State | 120 |
| II | Population in J. & K. State (1971 Census) According to Districts | 121 |
| III | Population Projections (1971-85) for Specified Age-groups | 122 |
| IV | Primary Education | 124 |
| V | Middle School Education | 126 |
| VI | Secondary Education | 128 |
| VII | Number of Institutions for Higher Education | 130 |
| VIII | Enrolment at the Higher Stage of General Education | 132 |
| IX | Enrolment at the Higher Stage of Professional and Special Education | 134 |
| X | Number of Teachers in Schools | 136 |
| XI | Number of Teachers in Institutions of Higher Education | 138 |
| XII | Teacher-Pupil Ratios in Schools | 140 |
| XIII | Teacher-Pupil Ratios in Institutions for Higher Education | 141 |
| XIV | Direct Expenditure on Education | 143 |
| XV | Indirect and Total Expenditure on Education | 144 |
| XVI | Budget Expenditure on Education by all Departments (Charged to Revenue— Plan and Non-Plan) | 146 |

Table No. I : Population in J. & K. State*(In lakhs)*

| <i>Year</i> | <i>Males</i> | <i>Females</i> | <i>Total</i> |
|-------------|--------------|----------------|--------------|
| 1901 | 15.42 | 13.64 | 29.06 |
| 1911 | 16.74 | 14.84 | 31.58 |
| 1921 | 17.57 | 15.63 | 33.20 |
| 1931 | 19.38 | 17.08 | 36.46 |
| 1941 | 21.30 | 18.92 | 40.22 |
| 1951* | 17.37 | 15.17 | 32.54 |
| 1961 | 18.97 | 16.64 | 35.61 |
| 1971 | 24.58 | 21.59 | 46.17 |

***Note** : As no census was conducted in 1951, population has been estimated for that year.

**Table No. II : Population in J & K State (1971 Census)
According to Districts**

| <i>District</i> | <i>Males</i> | <i>Females</i> | <i>Total</i> |
|--------------------------------|------------------|------------------|------------------|
| Anantnag | 450,353 | 381,927 | 832,280 |
| Srinagar | 447,508 | 380,189 | 827,697 |
| Baramulla | 419,862 | 355,862 | 775,724 |
| Ladakh | 53,315 | 51,976 | 105,291 |
| Doda | 181,424 | 160,796 | 342,220 |
| Udhampur | 177,596 | 161,250 | 338,846 |
| Jammu | 381,138 | 350,605 | 731,743 |
| Kathua | 142,989 | 131,682 | 274,671 |
| Rajouri | 114,380 | 102,993 | 217,373 |
| Poonch | 89,750 | 81,037 | 170,787 |
| Total (J & K State) | 2,458,315 | 2,158,317 | 4,616,632 |

Table No. III :

| <i>POPULATION IN AGE-GROUPS OF</i> | | | | | | |
|------------------------------------|--------------|----------------|--------------|--------------|----------------|--------------|
| | <i>6-11</i> | | | <i>11-14</i> | | |
| <i>Year</i> | <i>Males</i> | <i>Females</i> | <i>Total</i> | <i>Males</i> | <i>Females</i> | <i>Total</i> |
| 1971 | 3.19 | 2.96 | 6.15 | 1.78 | 1.55 | 3.33 |
| 1972 | 3.27 | 3.04 | 6.31 | 1.83 | 1.59 | 3.42 |
| 1973 | 3.36 | 3.12 | 6.48 | 1.87 | 1.63 | 3.50 |
| 1974 | 3.44 | 3.20 | 6.64 | 1.92 | 1.68 | 3.60 |
| 1975 | 3.53 | 3.28 | 6.81 | 1.97 | 1.72 | 3.69 |
| 1976 | 3.63 | 3.37 | 7.00 | 2.02 | 1.77 | 3.79 |
| 1977 | 3.72 | 3.46 | 7.18 | 2.08 | 1.81 | 3.89 |
| 1978 | 3.82 | 3.55 | 7.37 | 2.13 | 1.86 | 3.99 |
| 1979 | 3.92 | 3.65 | 7.57 | 2.19 | 1.91 | 4.10 |
| 1980 | 4.02 | 3.75 | 7.77 | 2.24 | 1.96 | 4.20 |
| 1981 | 4.12 | 3.85 | 7.97 | 2.30 | 2.01 | 4.31 |
| 1982 | 4.23 | 3.95 | 8.18 | 2.36 | 2.07 | 4.43 |
| 1983 | 4.34 | 4.05 | 8.39 | 2.42 | 2.12 | 4.54 |
| 1984 | 4.46 | 4.16 | 8.62 | 2.49 | 2.18 | 4.67 |
| 1985 | 4.57 | 4.27 | 8.84 | 2.55 | 2.24 | 4.79 |

Basis and Methods of Calculation

- (i) Age-group totals released by the State Census Department for 1971 Census have been taken as the basis.
- (ii) 0-14 and 30-39 age-groups have been bifurcated in five year totals on the basis of 1961 Census adjusted ratio.

Population Projections (1971-85) for Specified Age-groups
(in lakhs)

| <i>POPULATION IN AGE-GROUPS OF</i> | | | | | |
|------------------------------------|----------------|--------------|--------------|----------------|--------------|
| <i>14-18</i> | | | <i>18-23</i> | | |
| <i>Males</i> | <i>Females</i> | <i>Total</i> | <i>Males</i> | <i>Females</i> | <i>Total</i> |
| 1.88 | 1.58 | 3.46 | 1.95 | 1.67 | 3.62 |
| 1.93 | 1.62 | 3.55 | 2.00 | 1.71 | 3.71 |
| 1.98 | 1.66 | 3.64 | 2.05 | 1.75 | 3.80 |
| 2.03 | 1.70 | 3.73 | 2.10 | 1.80 | 3.90 |
| 2.08 | 1.74 | 3.82 | 2.16 | 1.85 | 4.01 |
| 2.13 | 1.79 | 3.92 | 2.22 | 1.90 | 4.12 |
| 2.18 | 1.84 | 3.02 | 2.28 | 1.95 | 4.23 |
| 2.24 | 1.89 | 3.13 | 2.34 | 2.00 | 4.34 |
| 2.30 | 1.94 | 3.24 | 2.40 | 2.05 | 4.45 |
| 2.37 | 1.99 | 3.36 | 2.46 | 2.10 | 4.56 |
| 2.43 | 2.04 | 4.47 | 2.52 | 2.15 | 4.67 |
| 2.49 | 2.10 | 4.59 | 2.59 | 2.21 | 4.80 |
| 2.56 | 2.16 | 4.72 | 2.66 | 2.27 | 4.93 |
| 2.63 | 2.22 | 4.85 | 2.73 | 2.33 | 5.06 |
| 2.69 | 2.28 | 4.97 | 2.80 | 2.39 | 5.19 |

(iii) Rate of growth separately for males and females from 1961 to 1971 Census have been assumed for projections up to 1985.

Table No. IV :

| <i>Year</i> | <i>Number of Primary Schools</i> | | |
|-------------|----------------------------------|------------------|--------------|
| | <i>For Boys</i> | <i>For Girls</i> | <i>Total</i> |
| 1950-51 | 940 | 175 | 1115 |
| 1955-56 | 1612 | 270 | 1882 |
| 1960-61 | 2314 | 545 | 2859 |
| 1965-66 | 3272 | 1232 | 4504 |
| 1966-67 | 3484 | 1367 | 4851 |
| 1967-68 | 3509 | 1408 | 4917 |
| *1968-69 | 3524 | 1431 | 4955 |
| *1969-70 | 3534 | 1520 | 5054 |
| **1970-71 | 3540 | 1593 | 5133 |
| **1971-72 | 3620 | 1743 | 5363 |

* Provisional

** Estimated

Note : Enrolment ratios (in percentages) have been given in brackets.

Primary Education

| <i>Enrolment in Primary Schools (in lakhs)</i> | | | <i>Enrolment at Primary Stage (I-V Classes) (in lakhs)</i> | | |
|--|--------------|--------------|--|-----------------|-----------------|
| <i>Boys</i> | <i>Girls</i> | <i>Total</i> | <i>Boys</i> | <i>Girls</i> | <i>Total</i> |
| 0.57 | 0.07 | 0.64 | 0.66 (27.05) | 0.12 (5.38) | 0.78 (16.70) |
| 0.74 | 0.13 | 0.87 | 1.02 (40.48) | 0.24 (10.39) | 1.26 (26.09) |
| 1.11 | 0.37 | 1.48 | 1.65 (62.03) | 0.45 (18.37) | 2.10 (41.10) |
| 1.25 | 0.46 | 1.71 | 2.22 (73.51) | 0.75 (26.88) | 2.97 (51.12) |
| 1.28 | 0.51 | 0.79 | 2.33 (75.16) | 0.86 (29.62) | 3.19 (53.27) |
| 1.37 | 0.57 | 1.94 | 2.46 (77.36) | 0.95 (32.31) | 3.41 (55.72) |
| 1.44 | 0.66 | 2.10 | 2.56 (78.29) | 1.05 (34.77) | 3.61 (57.39) |
| 1.50 | 0.72 | 2.22 | 2.67 (79.70) | 1.15 (37.10) | 3.82 (59.22) |
| 1.57 | 0.79 | 2.36 | 2.79 (81.10) | 1.26 (39.62) | 4.05 (61.18) |
| 1.63 | 0.90 | 2.53 | 2.90 (82.39) | 1.45 (44.48) | 4.35 (64.16) |

Table No. V :

| <i>Year</i> | <i>Number of Middle Schools</i> | | |
|-------------|---------------------------------|------------------|--------------|
| | <i>For Boys</i> | <i>For Girls</i> | <i>Total</i> |
| 1950-51 | 102 | 37 | 139 |
| 1955-56 | 212 | 43 | 255 |
| 1960-61 | 461 | 72 | 533 |
| 1965-66 | 892 | 241 | 1133 |
| 1966-67 | 999 | 290 | 1289 |
| 1967-68 | 1027 | 293 | 1320 |
| *1968-69 | 1017 | 292 | 1309 |
| *1969-70 | 1025 | 304 | 1329 |
| **1970-71 | 1033 | 321 | 1354 |
| **1971-72 | 1043 | 363 | 1406 |

* Provisional

** Estimates

Note : Enrolment ratios (in percentages) have been given in brackets.

Middle School Education

| <i>Enrolment in Middle Schools (in lakhs)</i> | | | <i>Enrolment at Middle stage (VI-VIII Classes) (in lakhs)</i> | | |
|---|--------------|--------------|---|-----------------|-----------------|
| <i>Boys</i> | <i>Girls</i> | <i>Total</i> | <i>Boys</i> | <i>Girls</i> | <i>Total</i> |
| 0.14 | 0.05 | 0.19 | 0.18 (16.82) | 0.02 (2.20) | 0.20 (10.10) |
| 0.35 | 0.07 | 0.42 | 0.28 (25.23) | 0.05 (5.32) | 0.33 (16.10) |
| 0.52 | 0.13 | 0.65 | 0.48 (41.03) | 0.12 (12.20) | 0.60 (27.65) |
| 0.96 | 0.27 | 1.23 | 0.63 (47.37) | 0.24 (21.05) | 0.87 (35.22) |
| 1.02 | 0.31 | 1.33 | 0.69 (50.36) | 0.25 (21.37) | 0.94 (37.01) |
| 1.04 | 0.31 | 1.35 | 0.73 (52.14) | 0.27 (22.50) | 1.00 (38.46) |
| 1.06 | 0.35 | 1.41 | 0.75 (52.45) | 0.30 (24.39) | 1.05 (39.47) |
| 1.11 | 0.38 | 1.49 | 0.78 (53.06) | 0.32 (25.40) | 1.10 (40.29) |
| 1.16 | 0.41 | 1.57 | 0.81 (53.64) | 0.35 (26.92) | 1.16 (41.28) |
| 1.20 | 0.46 | 1.66 | 0.84 (53.90) | 0.37 (27.82) | 1.21 (41.81) |

Table No. VI:

| <i>Number of Secondary Schools</i> | | | |
|------------------------------------|-----------------|------------------|--------------|
| <i>Year</i> | <i>For Boys</i> | <i>For Girls</i> | <i>Total</i> |
| 1950-51 | 48 | 7 | 55 |
| 1955-56 | 87 | 26 | 113 |
| 1960-61 | 204 | 46 | 250 |
| 1965-66 | 337 | 87 | 424 |
| 1966-67 | 378 | 101 | 479 |
| 1967-68 | 383 | 103 | 486 |
| *1968-69 | 423 | 108 | 531 |
| *1969-70 | 435 | 108 | 543 |
| **1970-71 | 441 | 118 | 559 |
| **1971-72 | 451 | 126 | 577 |

* Provisional

** Estimated

Note: Enrolment ratios (in percentages) have been given in brackets.

Secondary Education

| <i>Enrolment in Secondary Schools</i> (in lakhs) | | | <i>Enrolment at Secondary Stage (IX-XI Classes)</i> (in lakhs) | | |
|---|--------------|--------------|---|-----------------|-----------------|
| <i>Boys</i> | <i>Girls</i> | <i>Total</i> | <i>Boys</i> | <i>Girls</i> | <i>Total</i> |
| 0.19 | 0.02 | 0.21 | 0.053 (4.82) | 0.003 (0.32) | 0.056 (2.74) |
| 0.35 | 0.11 | 0.46 | 0.11 (9.65) | 0.02 (1.96) | 0.13 (6.10) |
| 0.70 | 0.21 | 0.91 | 0.17 (14.17) | 0.05 (4.85) | 0.22 (9.87) |
| 1.00 | 0.39 | 1.39 | 0.33 (24.26) | 0.08 (6.78) | 0.41 (16.14) |
| 1.09 | 0.42 | 1.51 | 0.34 (24.29) | 0.08 (6.61) | 0.42 (16.09) |
| 1.18 | 0.49 | 1.67 | 0.38 (26.39) | 0.09 (7.26) | 0.47 (17.54) |
| 1.23 | 0.50 | 1.73 | 0.41 (27.89) | 0.10 (7.87) | 0.51 (18.61) |
| 1.32 | 0.54 | 1.86 | 0.46 (30.46) | 0.11 (8.40) | 0.57 (20.21) |
| 1.39 | 0.60 | 1.99 | 0.49 (32.26) | 0.13 (9.70) | 0.62 (21.80) |
| 1.45 | 0.66 | 2.11 | 0.52 (33.33) | 0.14 (10.22) | 0.66 (22.64) |

Table No. VII :

| Year | Universities | University Teaching Departments | Colleges for General Education | | |
|-----------|--------------|---------------------------------|--------------------------------|-----------|-------|
| | | | For Boys | For Girls | Total |
| 1950-51 | 1 | — | 7 | 2 | 9 |
| 1955-56 | 1 | — | 10 | 2 | 12 |
| 1960-61 | 1 | 6 | 10 | 2 | 12 |
| 1965-66 | 1 | 21 | 13 | 4 | 17 |
| 1966-67 | 1 | 25 | 13 | 4 | 17 |
| 1967-68 | 1 | 28 | 13 | 4 | 17 |
| *1968-69 | 1 | 28 | 13 | 4 | 17 |
| *1969-70 | 2 | 29 | 13 | 5 | 18 |
| **1970-71 | 2 | 30 | 13 | 6 | 19 |
| **1971-72 | 2 | 31 | 13 | 6 | 19 |

*Provisional

**Estimated

Number of Institutions for Higher Education

| <i>Colleges for Professional Education</i> | | | <i>Colleges for Special Education</i> | | |
|--|------------------|--------------|---------------------------------------|------------------|--------------|
| <i>For Boys</i> | <i>For Girls</i> | <i>Total</i> | <i>For Boys</i> | <i>For Girls</i> | <i>Total</i> |
| | — | 1 | 3 | 1 | 4 |
| 3 | — | 3 | 4 | 5 | 9 |
| 6 | — | 6 | 4 | 6 | 10 |
| 11 | — | 11 | 7 | 3 | 10 |
| 12 | — | 12 | 6 | 2 | 8 |
| 13 | — | 13 | 6 | 2 | 8 |
| 13 | — | 13 | 6 | 2 | 8 |
| 13 | — | 13 | 6 | 2 | 8 |
| 11 | — | 11 | 6 | 2 | 8 |
| 11 | — | 11 | 6 | 2 | 8 |

Table No. VIII :

| ARTS | | | | | | | | | |
|-----------|-----------------------|-------|---------|-------|---------------------------|-------|-------|-------|-------|
| Year | PUC/Inter- mediate | | Grduate | | Postgraduate/ Research | | Total | | |
| | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls | Total |
| 1950-51 | 898 | 145 | 292 | 72 | 7 | — | 1197 | 217 | 1414 |
| 1955-56 | 1271 | 368 | 639 | 172 | 47 | 12 | 1957 | 552 | 2509 |
| 1960-61 | 1736 | 943 | 536 | 359 | 85 | 58 | 2357 | 1360 | 3717 |
| 1965-66 | 1079 | 1084 | 964 | 1567 | 219 | 223 | 2262 | 2874 | 5136 |
| 1966-67 | 1130 | 1296 | 1271 | 1563 | 307 | 230 | 2708 | 3089 | 5797 |
| 1967-68 | 1251 | 1200 | 1529 | 1885 | 285 | 333 | 3065 | 3418 | 6483 |
| *1968-69 | 1910 | 1528 | 2102 | 2181 | 327 | 400 | 4339 | 4109 | 8448 |
| *1969-70 | 2294 | 1841 | 2821 | 2595 | 340 | 362 | 5455 | 4798 | 10253 |
| **1970-71 | 2686 | 1837 | 4937 | 2877 | 320 | 405 | 7943 | 5119 | 13062 |
| **1971-72 | 2933 | 2118 | 5477 | 3208 | 345 | 417 | 8755 | 5743 | 14498 |

*Provisional

**Estimated

Enrolment at the Higher Stage of General Education

| <i>SCIENCE</i> | | | | | | | | |
|-------------------------------|--------------|-----------------|--------------|-----------------------------------|--------------|-------------|--------------|--------------|
| <i>PUC/Inter- mediate</i> | | <i>Graduate</i> | | <i>Postgraduate/ Research</i> | | | <i>Total</i> | |
| <i>Boys</i> | <i>Girls</i> | <i>Boys</i> | <i>Girls</i> | <i>Boys</i> | <i>Girls</i> | <i>Boys</i> | <i>Girls</i> | <i>Total</i> |
| 915 | 26 | 313 | 9 | — | — | 1228 | 35 | 1263 |
| 1937 | 117 | 409 | 20 | 13 | — | 2359 | 137 | 2496 |
| 3290 | 315 | 745 | 66 | 31 | — | 4066 | 381 | 4447 |
| 1848 | 313 | 3123 | 533 | 194 | 53 | 5165 | 899 | 6064 |
| 2102 | 313 | 3622 | 577 | 270 | 82 | 5994 | 972 | 6966 |
| 2118 | 384 | 4234 | 678 | 343 | 63 | 6695 | 1125 | 7820 |
| 2385 | 430 | 4834 | 790 | 376 | 90 | 7595 | 1310 | 8905 |
| 2369 | 415 | 5900 | 843 | 367 | 81 | 8336 | 1339 | 9675 |
| 2301 | 389 | 5870 | 972 | 456 | 69 | 8627 | 1430 | 10057 |
| 2689 | 455 | 6750 | 1122 | 476 | 73 | 9915 | 1650 | 11565 |

Table No. IX :

| Year | Commerce | | | Education | | | Engineering and Technology | | |
|-----------|----------|-------|-------|-----------|-------|-------|----------------------------------|-------|-------|
| | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| 1950-51 | — | — | — | 50 | 10 | 60 | — | — | — |
| 1955-56 | 32 | — | 32 | 123 | 34 | 157 | — | — | — |
| 1960-61 | 157 | — | 157 | 135 | 104 | 239 | — | — | — |
| 1965-66 | 263 | — | 263 | 360 | 171 | 531 | 1779 | 7 | 1786 |
| 1966-67 | 322 | — | 322 | 486 | 209 | 695 | 1763 | 11 | 1774 |
| 1967-68 | 331 | — | 331 | 643 | 240 | 883 | 1540 | 9 | 1549 |
| *1968-69 | 490 | — | 490 | 605 | 144 | 749 | 1275 | 5 | 1280 |
| *1969-70 | 624 | — | 624 | 320 | 220 | 540 | 944 | 4 | 948 |
| *1970-71 | 926 | — | 926 | 442 | 184 | 626 | 1064 | 4 | 1068 |
| **1971-72 | 930 | — | 930 | 436 | 186 | 622 | 1010 | 4 | 1014 |

*Provisional

**Estimated

Note : Faculty of Law has not been shown.

**Enrolment at the Higher Stage of
Professional and Special Education**

| <i>Medicine</i> | | | <i>Agriculture</i> | | | <i>Fine Arts</i> | | | <i>Oriental Education</i> | | |
|-----------------|--------------|--------------|--------------------|--------------|--------------|------------------|--------------|--------------|---------------------------|--------------|--------------|
| <i>Boys</i> | <i>Girls</i> | <i>Total</i> | <i>Boys</i> | <i>Girls</i> | <i>Total</i> | <i>Boys</i> | <i>Girls</i> | <i>Total</i> | <i>Boys</i> | <i>Girls</i> | <i>Total</i> |
| — | — | — | — | — | — | — | — | — | 109 | 55 | 164 |
| — | — | — | — | — | — | — | — | — | 148 | 216 | 364 |
| 131 | 51 | 182 | — | — | — | — | — | — | 140 | 184 | 324 |
| 707 | 222 | 929 | 236 | — | 236 | — | — | — | 323 | 139 | 462 |
| 762 | 242 | 1004 | 195 | — | 195 | 13 | 12 | 25 | 126 | 74 | 200 |
| 665 | 170 | 835 | 104 | — | 104 | 107 | 118 | 225 | 171 | 25 | 196 |
| 677 | 171 | 848 | 80 | — | 80 | 107 | 124 | 231 | 201 | 33 | 234 |
| 522 | 131 | 653 | 66 | — | 66 | 109 | 117 | 226 | 413 | 30 | 443 |
| 553 | 127 | 680 | 61 | — | 61 | 108 | 107 | 215 | 442 | 39 | 481 |
| 570 | 140 | 710 | 58 | — | 58 | 110 | 108 | 218 | 460 | 45 | 505 |

Table No. X:

| <i>Year</i> | <i>Primary Schools</i> | | | <i>Middle Schools</i> | | |
|-------------|------------------------|----------------|--------------|-----------------------|----------------|--------------|
| | <i>Males</i> | <i>Females</i> | <i>Total</i> | <i>Males</i> | <i>Females</i> | <i>Total</i> |
| 1950-51 | 1948 (37) | 214 (44) | 2162 (38) | 869 (36) | 309 (52) | 1178 (40) |
| 1955-56 | 1882 (48) | 309 (57) | 2191 (49) | 1249 (47) | 256 (67) | 1505 (50) |
| 1960-61 | 3654 (51) | 750 (70) | 4404 (54) | 2139 (55) | 273 (73) | 2412 (57) |
| 1965-66 | 4003 (45) | 1474 (54) | 5477 (47) | 3934 (50) | 851 (64) | 4785 (53) |
| 1966-67 | 4473 (45) | 1625 (48) | 6098 (46) | 4457 (54) | 1099 (59) | 5556 (55) |
| 1967-68 | 4537 (46) | 1713 (53) | 6250 (48) | 4646 (56) | 1166 (59) | 5812 (57) |
| *1968-69 | 4596 (50) | 1744 (57) | 6340 (52) | 4765 (61) | 1199 (68) | 5964 (62) |
| *1969-70 | 4635 (53) | 1850 (61) | 6485 (55) | 4834 (65) | 1263 (76) | 6097 (68) |
| **1970-71 | 4670 (56) | 1955 (66) | 6625 (59) | 4925 (70) | 1353 (84) | 6278 (73) |
| **1971-72 | 4785 (60) | 2160 (70) | 6945 (63) | 5015 (74) | 1468 (90) | 6483 (78) |

*Provisional

**Estimated

Note : Percentage of trained teachers has been given in brackets.

Number of Teachers in Schools

| <i>Secondary Schools</i> | | | <i>All Schools</i> | | |
|--------------------------|----------------|--------------|--------------------|----------------|---------------|
| <i>Males</i> | <i>Females</i> | <i>Total</i> | <i>Males</i> | <i>Females</i> | <i>Total</i> |
| 835 (44) | 86 (41) | 921 (44) | 3652 (39) | 609 (48) | 4261 (40) |
| 1834 (53) | 408 (76) | 2242 (57) | 4965 (50) | 973 (67) | 5938 (53) |
| 2760 (64) | 754 (80) | 3514 (67) | 8553 (56) | 1777 (75) | 10330 (59) |
| 4600 (61) | 1497 (77) | 6097 (65) | 12537 (53) | 3822 (65) | 16359 (56) |
| 5281 (61) | 1857 (73) | 7138 (64) | 14211 (54) | 4581 (61) | 18792 (55) |
| 5664 (62) | 1957 (78) | 7621 (66) | 14847 (55) | 4836 (65) | 19683 (58) |
| 5925 (68) | 1995 (88) | 7920 (73) | 15286 (60) | 4938 (72) | 20224 (63) |
| 6001 (74) | 2045 (95) | 8046 (79) | 15470 (65) | 5158 (78) | 20628 (63) |
| 6084 (80) | 2121 (96) | 8205 (84) | 15679 (70) | 5429 (82) | 21108 (73) |
| 6194 (86) | 2187 (97) | 8381 (89) | 15994 (74) | 5815 (85) | 21809 (77) |

Table No. XI :

| Year | Universities | | | Colleges for General Education | | |
|-----------|--------------|---------|-------|--------------------------------|---------|-------|
| | Males | Females | Total | Males | Females | Total |
| 1950-51 | — | — | — | 143 | 15 | 158 |
| 1955-56 | — | — | — | 237 | 28 | 265 |
| 1960-61 | 2:2 | 1 | 23 | 293 | 44 | 337 |
| 1965-66 | 7:3 | 5 | 78 | 520 | 109 | 629 |
| 1966-67 | 8:8 | 5 | 93 | 533 | 127 | 660 |
| 1967-68 | 10:3 | 6 | 109 | 551 | 132 | 683 |
| *1968-69 | 11:0 | 7 | 117 | 584 | 142 | 726 |
| *1969-70 | 12:6 | 6 | 132 | 658 | 183 | 841 |
| **1970-71 | 13:3 | 7 | 140 | 737 | 201 | 938 |
| **1971-72 | 13:9 | 7 | 146 | 838 | 215 | 1053 |

*Provisional

**Estimated

Number of Teachers in Institutions of Higher Education

| <i>Colleges for Professional Education</i> | | | <i>Colleges for Special Education</i> | | | <i>All Institutions</i> | | |
|--|----------------|--------------|---------------------------------------|----------------|--------------|-------------------------|----------------|--------------|
| <i>Males</i> | <i>Females</i> | <i>Total</i> | <i>Males</i> | <i>Females</i> | <i>Total</i> | <i>Males</i> | <i>Females</i> | <i>Total</i> |
| 22 | 1 | 23 | 22 | 7 | 29 | 187 | 23 | 210 |
| 30 | 2 | 32 | 48 | 19 | 67 | 315 | 49 | 364 |
| 54 | 9 | 63 | 82 | 55 | 137 | 451 | 109 | 560 |
| 387 | 33 | 420 | 73 | 14 | 87 | 1053 | 161 | 1214 |
| 403 | 38 | 441 | 59 | 11 | 70 | 1083 | 181 | 1264 |
| 413 | 39 | 452 | 66 | 8 | 74 | 1133 | 185 | 1318 |
| 389 | 34 | 423 | 67 | 7 | 74 | 1150 | 190 | 1340 |
| 359 | 42 | 401 | 66 | 7 | 73 | 1209 | 238 | 1447 |
| 340 | 43 | 383 | 66 | 7 | 73 | 1276 | 258 | 1534 |
| 330 | 40 | 370 | 67 | 8 | 75 | 1374 | 270 | 1644 |

Table No. XII : Teacher-Pupil Ratios in Schools

| <i>Year</i> | <i>Primary Schools</i> | <i>Middle Schools</i> | <i>Secondary Schools</i> | <i>All Schools</i> |
|-------------|----------------------------|---------------------------|------------------------------|------------------------|
| 1950-51 | 29 | 17 | 23 | 24 |
| 1955-56 | 40 | 28 | 21 | 30 |
| 1960-61 | 34 | 27 | 26 | 29 |
| 1965-66 | 32 | 26 | 23 | 26 |
| 1966-67 | 29 | 24 | 21 | 25 |
| 1967-68 | 31 | 23 | 22 | 25 |
| *1968-69 | 33 | 24 | 22 | 26 |
| *1969-70 | 34 | 24 | 23 | 27 |
| **1970-71 | 35 | 25 | 24 | 28 |
| **1971-72 | 36 | 26 | 25 | 29 |

* Provisional

** Estimated

Table No. XIII : Teacher-Pupil Ratios in Institutions for Higher Education

| <i>Year</i> | <i>Universities</i> | <i>Colleges for General Education</i> | <i>Colleges for Professional Education</i> | <i>Colleges for Special Education</i> | <i>All Institutions</i> |
|-------------|---------------------|---------------------------------------|--|---------------------------------------|-------------------------|
| 1950-51 | — | 18 | 3 | 6 | 14 |
| 1955-56 | — | 19 | 6 | 12 | 17 |
| 1960-61 | 8 | 24 | 9 | 14 | 19 |
| 1965-66 | 9 | 17 | 8 | 10 | 13 |
| 1966-67 | 10 | 19 | 8 | 8 | 14 |
| 1967-68 | 10 | 20 | 7 | 7 | 14 |
| *1968-69 | 11 | 23 | 7 | 8 | 16 |
| *1969-70 | 10 | 23 | 6 | 8 | 17 |
| **1970-71 | 12 | 24 | 7 | 9 | 18 |
| **1971-72 | 12 | 24 | 8 | 9 | 19 |

*Provisional

**Estimated

Table No. XIV :

| <i>Year</i> | <i>Universities</i> | <i>Colleges for general education</i> | <i>Colleges for Professional Education</i> |
|-------------|---------------------|---|--|
| 1950-51 | 0.33 | 4.95 | 0.91 |
| 1955-56 | 3.60 | 11.07 | 1.80 |
| 1960-61 | 8.63 | 16.38 | 7.59 |
| 1961-62 | 11.32 | 24.26 | 17.94 |
| 1962-63 | 14.83 | 29.29 | 19.13 |
| 1963-64 | 17.85 | 30.06 | 22.57 |
| 1964-65 | 21.78 | 36.38 | 41.02 |
| 1965-66 | 30.85 | 39.27 | 58.09 |
| 1966-67 | 41.04 | 47.85 | 73.38 |
| 1967-68 | 43.13 | 53.34 | 81.43 |

Direct Expenditure on Education*(Rupees in lakhs)*

| <i>Colleges for Special Education</i> | <i>Schools for General Education</i> | <i>Schools for Professional Education</i> | <i>Schools for Special Education</i> | <i>Total Direct Expendi- ture</i> |
|---|--|---|--|---|
| — | 28.34 | 0.08 | 0.30 | 34.91 |
| 0.96 | 57.53 | 1.50 | — | 76.46 |
| 2.56 | 133.07 | 6.89 | 0.06 | 175.18 |
| 2.10 | 162.60 | 15.27 | 0.22 | 233.71 |
| 1.94 | 181.42 | 22.19 | 0.26 | 269.06 |
| 2.46 | 211.48 | 21.44 | 0.36 | 306.22 |
| 2.48 | 255.75 | 14.42 | 0.41 | 372.24 |
| 2.02 | 281.61 | 4.37 | 0.33 | 416.54 |
| 1.94 | 339.31 | 3.59 | 0.28 | 507.39 |
| 1.83 | 410.79 | 4.67 | 0.44 | 595.63 |

Table No. XV :

| <i>Year</i> | <i>Direction and Inspection</i> | <i>Buildings</i> | <i>Scholarships and Financial Assistance</i> |
|-------------|---|------------------|--|
| 1950-51 | 1.98 | — | — |
| 1955-56 | 2.91 | 12.48 | 1.75 |
| 1960-61 | 8.63 | 9.71 | 3.46 |
| 1961-62 | 11.09 | 43.54 | 4.42 |
| 1962-63 | 12.20 | 51.79 | 5.65 |
| 1963-64 | 12.51 | 53.21 | 10.13 |
| 1964-65 | 13.53 | 44.91 | 6.16 |
| 1965-66 | 15.31 | 39.89 | 14.59 |
| 1966-67 | 14.33 | 61.46 | 18.65 |
| 1967-68 | 18.40 | 48.75 | 19.28 |

Indirect and Total Expenditure on Education*(Rupees in lakhs)*

| <i>Hostel Charges</i> | <i>Miscellaneous Items</i> | <i>Total Indirect Expenditure</i> | <i>Total Direct (Table XIV) and Indirect Expenditure</i> |
|-----------------------|----------------------------|-----------------------------------|--|
| — | — | 1.98 | 36.89 |
| 0.02 | 2.28 | 19.44 | 95.90 |
| 0.63 | 6.81 | 29.24 | 204.42 |
| 0.78 | 7.69 | 67.52 | 301.23 |
| 0.86 | 9.22 | 79.72 | 348.78 |
| 1.21 | 9.18 | 86.24 | 392.46 |
| 5.91 | 31.65 | 102.16 | 474.40 |
| 2.95 | 52.21 | 124.95 | 541.49 |
| 3.04 | 58.00 | 155.48 | 662.87 |
| 2.39 | 45.76 | 134.58 | 730.21 |

Table No. XVI :

| <i>Sectors</i> | <i>1968-69 (Actual)</i> |
|---|-----------------------------|
| 1. Primary Education | 180.41 |
| 2. Secondary Education | 370.16 |
| 3. College and University Education | 107.55 |
| 4. Teacher Education | 22.00 |
| 5. Technical Education | 34.01 |
| 6. Medical and Agricultural Education | 31.63 |
| 7. Direction and Inspection | 20.63 |
| 8. Scholarships | 14.26 |
| 9. Miscellaneous | 55.07 |
| (a) Total (all sectors) | 835.72 |
| (b) Total (State Budget charged to Revenue) | 5146.05 |
| (c) Percentage of Education Budget to Total State Budget | 16.24 |

(Charged to Revenue) Budget Expenditure on Education by All Departments (Plan and Non-Plan)*(Rupees in lakhs)*

| <i>1969-70 (Actual)</i> | <i>1970-71 (Actual)</i> | <i>1971-72 (Revised Estimates)</i> | <i>1972-73 (Estimates)</i> |
|-----------------------------|-----------------------------|--|--------------------------------|
| 175.69 | 186.21 | 204.11 | 243.45 |
| 406.13 | 440.91 | 436.62 | 508.72 |
| 125.91 | 142.62 | 160.17 | 186.79 |
| 23.24 | 45.93 | 27.30 | 48.91 |
| 31.37 | 47.04 | 17.66 | 38.09 |
| 35.93 | 35.96 | 40.17 | 49.86 |
| 21.59 | 22.63 | 27.76 | 34.68 |
| 15.36 | 21.59 | 9.50 | 7.00 |
| 56.89 | 43.91 | 73.64 | 85.26 |
| 892.11 | 986.80 | 996.93 | 1202.76 |
| 7122.39 | 6932.48 | 9033.35 | 10752.07 |
| 12.53 | 14.23 | 11.04 | 11.19 |

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 DOC. No.....329.....
 Date.....30/7/82