

EC/8-10/65
For Restricted Circulation

EIGHTH, NINTH AND TENTH MEETINGS
of the
EDUCATION COMMISSION

MINUTES
&
AGENDA PAPERS

EDUCATION COMMISSION
GOVERNMENT OF INDIA
NEW DELHI
1965

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GOVERNMENT OF INDIA

NEW DELHI

1965

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MINUTES

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No. EC/MIN/8

MINUTES OF THE EIGHTH MEETING
OF THE EDUCATION COMMISSION
HELD AT NEW DELHI ON THE
3RD AND 5TH APRIL, 1965

EDUCATION COMMISSION
GOVERNMENT OF INDIA
NEW DELHI

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EC/MIN/8.

MINUTES OF THE EIGHTH MEETING OF THE EDUCATION COMMISSION
HELD ON THE 3RD & 5TH APRIL, 1965 IN THE CONFERENCE ROOM
OF THE UNIVERSITY GRANTS COMMISSION, NEW DELHI

I. Present

- | | |
|-----------------------|---------------------|
| 1. Dr. D.S. Kothari | (Chairman) |
| 2. Dr. K.G. Saiyidain | Member |
| 3. Shri A.R. Dawood | " |
| 4. Miss S. Panandikar | " |
| 5. Prof. M.V. Mathur | " |
| 6. Dr. B.P. Pal | " |
| 7. Shri J.P. Naik | Member-Secretary |
| 8. Mr. J.F. McDougall | Associate Secretary |
| 9. Dr. J.G. Fowlkes | Consultant |
| 10. Prof. C.A. Moser | Consultant |

1. Shri K.L. Joshi, Secretary, University Grants Commission and Shri L.S. Chandrakant, Joint Director, National Council of Educational Research & Training were present by special invitation.

II Agenda

2. The Commission had before it the following Agenda:
1. Minutes of the 6th and 7th meetings of the Education Commission held on 26th February as well as on 1st March 1965 and 5th March, 1965.
 2. Paper on Pattern of School and College Education- Shri A.R. Dawood.
 3. Textbook Publication in the USSR- Note by Prof. S. Shumovsky (circulated for the 7th meeting)
 4. New Instructional Methods- A note by Prof. Sadatoshi Ihara
 5. Enrolment Policies in Indian Education - A paper prepared by Member-Secretary.
 6. Teaching of Foreign Languages in some selected European countries- A paper prepared by Associate Secretary.

Supplementary Items:

7. A Note on "The Need for Junior College in India" by Shri K.L. Joshi.

8. A Note on "An All India Educational Improvement Programme" by Dr. John Guy Fowlkes.

The contents of the supporting papers to items 3,4,6 and Supplementary item 7 were noted. It was decided that these would be taken up at a later meeting and that discussion would be confined to items 2 and 5 and Supplementary item 8.

III. Minutes of the 6th and 7th Meetings:

3. The minutes of the sixth and seventh meetings of the Education Commission held on the 26th February and 1st March, 1965, and the 5th March, 1965, respectively were confirmed.

IV. Pattern of School and College Education:

4. There was general agreement that the total duration of school and college education up to the end of the first degree course should be 15 years and it should be distributed as 7 plus 3 plus 2 plus 3 over the different stages. The first 12 years should be considered school education. There was also general agreement that as far as possible the first seven years should form an integrated course. It was pointed out that while there could be an integrated course of 7 years, it might not be possible in all cases to have full-fledged primary schools of seven classes, specially in sparsely populated areas and it may even be desirable to have the three higher classes of primary schools attached to the secondary schools. A fear was expressed that there might be some discrimination in the salary and allowances of teachers working in primary schools and those working in primary departments of secondary schools. It was pointed out that the Commission had already agreed that the salary scales of teachers working in primary schools and primary departments of secondary schools should be related to their qualifications. Grants-in-aid rules could also be examined from this point of view.

5. As regards the last 2 classes in a 12-year secondary course, the Commission was in favour of adopting a flexible policy and to let them be (i) either attached to a college, or (ii) part of good secondary schools, or (iii) separate institutions of Junior College type.

6. As regards the age of admission, the Commission was of the view that it should be generally 6 plus, but students of 5 plus may also be admitted in school if they offer themselves of their own accord. The Commission was, however, not in favour of laying down a minimum age limit for admission to universities.

7. The Commission then considered the question of diversification of courses and diversion of students. It was agreed that post-primary education should have a built in system of diversion of students to institutions for vocational and technical education as well as diversification of courses. It was also pointed out that various educators in their evidence tendered before the Commission had cautioned against diversion at too early a stage. The Commission was of the view that the first ten years of school education should largely aim at general education and specialisation should begin only in the 11th and 12th years.

V. Enrolment policies in Indian education

8. The Commission then considered Shri J.P. Naik's paper on "Enrolment Policies in Indian Education". Prof. M.V. Mathur suggested that the "objectives" of enrolment policies should also take note of the limited financial and manpower resources and should see that the financial and manpower resources available for education are made use of to optimum advantage at different stages of education. It was felt that while this would more appropriately concern the strategy of educational development, it could also be incorporated in the objectives of an enrolment policy.

9. Enrolment at first level: It was emphasised that primary education would be an integrated course of 7 years but it would not be possible to have 7 classes in all primary schools, especially in sparsely populated areas. Such schools may have only 4 or 5 classes but could be attached to a full-fledged primary school of 7 classes to form a 'complex'.

10. Elaborating his idea of a 'complex' of schools further, Shri Naik observed that the Headmaster in such a 'complex' would be a trained graduate and would be responsible for supervising the work of all the schools forming the 'complex' and providing

guidance to the teachers working in the 'complex'.

11. Dr. John Guy Fowlkes emphasised the need for giving due attention to improvement of the quality of education. Teaching, he observed, should be much more than merely passing on certain information or knowledge - comprehension, application, analysis, synthesis and generalisation are essential components of learning and it was, therefore, necessary to have the right type of teachers in primary schools and the salaries of primary and secondary teachers should be identical. The word 'inspector' should be replaced by 'consultant' and there should be professional partnership between teachers and inspectors

12. Shri K.L. Joshi, raised the question of targets proposed in the paper and expressed his feeling that they were on the high side. It was felt that some adjustments may be made in the targets but that it was necessary and desirable to have some targets to guide efforts.

13. The question of large number of drop-outs in class-I was also considered and it was felt that it would be desirable to treat the first 3 classes as one unit, with automatic promotions.

14. The Commission agreed that it would be necessary to provide some system of part-time education to those who were unable to attend schools on a whole-time basis.

15. As regards the Constitutional directive regarding provision of compulsory education "up to the age of 14" it was felt that this should be interpreted to mean education up to the age 14 plus.

16. The Commission agreed that part-time education in middle classes would be provided only at those places where there were middle schools and the teachers undertaking this work would be given suitable remuneration.

Enrolment policies at the Second Level:

17. Shri Naik briefly described the proposals made in the paper.

18. Dr. Moser suggested that it might be better to state clearly the assumptions and work on the basis of 2 or 3 sets of targets. In this connection he quoted one result of the Robbins Report in U.K. where fundamental decisions were taken by Government on the basis

of the assumptions used and the targets set by the Committee had already been exceeded. The Robbins' targets were based on the assumption that by 1973 10.8% of the age group would secure two or more 'A' levels. The most recent statistics indicate that the percentage is likely to be 13 and not 10.8%. He, therefore, felt that it would be better for the Commission to state clearly the assumptions and their implications, thus focussing discussion on the assumptions rather than the targets which would certainly need adjustment in the light of experience.

19. As regards part-time education at the second level, it was clarified that while part-time education would be compulsory at the first level, it would be optional at the second level, and it may take different forms, e.g. correspondence courses, night schools, etc. It was also felt that part-time education at second level would be predominately vocational in character.

20. It was also felt that it would be necessary to revise the projections of enrolment at the second level of education in view of the massive programme of setting up about 3,000 agricultural schools and an equal number of other vocational schools.

21. Shri L.S. Chandrakant informed the Commission that the Apprenticeship Act is being revised to reduce the minimum age of apprentices from 18 to 16.

22. Enrolment policies at the Third Level: The Commission broadly agreed with the views mentioned in the paper. Dr. K.G. Saiyidain, however, suggested the need for having a more flexible approach in the matter of admission of students to colleges. Besides percentage of marks, he suggested that there may be provision for an entrance examination, interviews, etc. for those who do not have the requisite percentage of marks. The Commission was inclined to the view that there should be a multiple approach to requirements for admissions.

23. The Commission felt that the question of enrolment policies at the third level should be further considered by the Task Force on Higher Education.

(The Commission then adjourned till 5.3.65, when Dr. J.G. Fowlkes's paper was taken up).

VI. Note by Dr. John Guy Fowlkes on "An All India Educational Development Programme"

23. Dr. Fowlkes explained the salient points in the note.

The following points were emphasised in the discussion that followed.

(a) There should be similar qualifications for primary and secondary school teachers. Some of the Members were of the opinion that it is not necessary for primary school teachers to be trained graduates. Other were of the opinion that if the teachers are to 'guide' and 'help' the students to learn and not merely to teach them, they would require a higher degree of scholarship. It was agreed that this may be accepted in principle, as an objective to be achieved in the course of time.

(b) A single teacher cannot do justice to all the students in his charge. Some sort of programme of urbanising the rural areas through better means of communication may be necessary to make multi-teacher schools an economic feasibility.

(c) The staff of practice teaching schools should be trained through summer institutes so that they could provide suitable internship experience to pupil-teachers in co-operation with training institutions.

(d) The creation of an I.E.S. is necessary so that professional matters are attended to by professionals.

(e) The In-service training programme for Educational Officers of the Directorates should preferably begin with DPIS/DEs. themselves.

(f) As regards Summer Institutes, it was suggested that some of these should be open throughout the year.

(g) It was suggested that good science graduates could be interested in the teaching profession through the Summer Institutes, and attendance at 2 or 3 such courses should be accepted as equivalent to the teacher training certificate. It was pointed out that in such an event it would be necessary to widen the scope

of work of the Summer Institutes.

The meeting passed votes of thanks to Dr. Meser and Dr. Fowlkes for their valuable contributions to the discussions.

J.F. McDougall
Associate Secretary

EDUCATION COMMISSION

GOVERNMENT OF INDIA

make multi-teacher schools an economic feasibility.

(c) The staff of practice teaching schools should be trained through summer institutes so that they could provide suitable internship experience to pupil-teachers in co-operation with training institutions.

(d) The creation of an I.E.S. is necessary so that professional matters are attended to by professionals.

(e) The In-service training programme for Educational Officers of the Directorates should preferably begin with DPIS/DEs. themselves.

(f) As regards Summer Institutes, it was suggested that some of these should be open throughout the year.

(g) It was suggested that good science graduates could be interested in the teaching profession through the Summer Institutes, and attendance at 2 or 3 such courses should be accepted as equivalent to the teacher training certificate. It was pointed out that in such an event it would be necessary to widen the scope

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EC/MIN/9

MINUTES OF THE NINTH
MEETING OF THE EDUCATION
COMMISSION HELD ON THE
24TH APRIL, 1965.

EDUCATION COMMISSION
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EC/MIN/9

Minutes of the 9th Meeting of the Education Commission held in the Conference Room of the U.G.C. Building at 10.00 A.M. on the 24th April, 1965.

I- Present

1. The following were present:-

Members

- | | |
|-----------------------|---------------------|
| 1. Dr. D.S. Kothari | Chairman |
| 2. Dr. K.G. Saiyidain | Member |
| 3. Dr. V.S. Jha | " |
| 4. Shri A.R. Dawood | " |
| 5. Miss S. Panandikar | " |
| 6. Prof. M.V. Mathur | " |
| 7. Shri J.P. Naik | Member-Secretary |
| 8. Mr. J.F. McDougall | Associate Secretary |

Dr. B.P. Pal and Dr. T. Sen regretted their inability to attend.

2. The following officers of the Commission were also present:-

- | | |
|-----------------------|----------------------------|
| 1. Dr. S.M.S. Chari | Deputy Educational Adviser |
| 2. Dr. M.D. Paul | Deputy Educational Adviser |
| 3. Mrs. S. Doraiswami | A.E.A. |
| 4. Shri Gurbax Singh | A.E.A. |
| 5. Miss S. Rajan | A.E.A. |
| 6. Miss S. Rehman | A.E.A. |
| 7. Shri S.S. Dudani | Research Associate |
| 8. Shri S.N. Lal | Asstt. Education Officer. |

3. Shri K.L. Joshi, Secretary, U.G.C., was present by special invitation.

II - Agenda

4. The Commission had before it the following provisional agenda:

1. Adoption of the agenda.
2. Confirmation of the Minutes of the 8th Meeting of the Commission held on the 3rd and 5th April, 1965.
3. Educational Development in Rajasthan (1950-80)

4. Education of Scheduled Castes and Scheduled Tribes by Shri J.P. Naik.
5. Letter from Dr. V.K.R.V. Rao dated 5th April, 1965 regarding Dr. Fowlkes's paper on "An All India Educational Improvement Programme."
6. A Note by Dr. John Guy Fowlkes on Development on Teacher Internship.
7. A Note by Dr. Benjamin S. Bloom entitled 'Stability and change in Human Characteristics.'
8. Letter from Shri G.D. Sondhi regarding investigation into causes of student indiscipline.
9. Interviews with prominent persons.
10. Educational Planning in the Developing Nations (An Address by Dr. P.H. Coombs).
11. Letter from the Govt. of Maharashtra regarding suitable pattern of academic year for all types of educational institutions.
12. Any other business
 - (i) Deciding the dates of the next meeting of the Commission.

The following Papers/Notes were also circulated for information of the Members:-

PFI/1/9/65- Youth Hostel Movement in India

PFI/2/9/65- Education in Nagaland

PFI/3/9/65- Teaching of English in Secondary Schools

PFI/4/9/65- Report of the Conference on Shortage of Science Applicants to Universities-held at Edinburgh University on 12th December, 1964.

5. The Commission formally adopted the agenda and proceeded to discuss it item by item.

Item 2 of the agenda: Confirmation of the minutes of 5th Meeting of the Commission held on the 3rd and 5th April, 1965.

6. The minutes were confirmed subject to the following observations:

(a) Para 6 of the minutes: The question of minimum age of admission to universities should be further considered and a note should be prepared on the present position in this connection in different universities.

(b) Para 9 of the minutes: It was suggested and the Commission agreed that the three higher classes of a 7 year

elementary course (i.e. classes 5,6 and 7) may be attached to secondary schools, or, in some cases, may function as separate institutions.

(c) Para 15 of the minutes: A question was raised as to how a 7 year course of elementary education, with 6 plus as the age of admission, could be tied up with the Constitutional requirement of education upto the age of 14 plus. Shri J.P. Naik clarified that in all legislation on compulsory education, there was a provision that compulsion would apply upto the completion of a course or the attainment of a particular age, whichever was earlier. There would, therefore, be no legal difficulty if a child completed his course of elementary education before the age of 14 plus.

Item 3 of the agenda:- Educational Developments in Rajasthan (1950-80)

7. Shri J.P. Naik, who prepared the Report on Educational Developments in Rajasthan, informed the Commission that he did not want the Commission to consider the Report at length at this stage but he would like the Commission to take a decision on two basic issues: (a) desirability of such reports, and (b) approach to their preparation for other States.

8. A number of issues were raised in the general discussion that followed. The Commission finally agreed on the following procedure to be adopted:-

(i) The Commission would make general recommendations for the country as a whole so as to avoid fragmentation of education. This was also necessary in view of the fact that the perspective plan by the Planning Commission was for the country as a whole and was not based on microplanning at the State level. The State reports should give relevant statistical data and financial implications for implementing the Commission's main recommendations. The State Reports should not make any suggestions for priorities to be adopted by the States in different sectors. Priorities would be governed more by immediate

considerations whereas the Commission's recommendations would aim at long term educational development of the country. Such reports may form appendices to the main Report but they would not be a substitute for it. They should supplement the main report, and may form a "private dictionary" to each State.

(ii) The Commission will, in its Kashmir meeting, try to formulate recommendations as far as possible to serve as a tentative set of conclusions for working purposes.

(iii) The State reports should then be prepared in the light of the tentative recommendations of the Commission to see how they would work out in the context of actual conditions prevailing in different States, and what their financial implications would be. The State reports should emphasize differences between different regions within a State rather than differences between various State.

(iv) The Commission would then have a second round of discussions with the representatives of the State Governments on the basis of these State Reports.

(v) The Commission should then finalise its recommendations in the light of its discussions with the State Governments. The State reports may also be modified and revised to the extent necessary.

(vi) The State Reports may be published along with the main report or as soon as possible thereafter.

9. At the instance of Shri J.P. Naik, the Commission took up for consideration the recommendations made in the Report on Educational Development in Rajasthan under the heading "Administrative Reforms" (pp.68-75) of the Report and discussed the following issues:-

(i) Reorganisation of Directorate: The Directorate needed to be reorganised and strengthened suitably in relation to requirements of expansion. There was also a feeling that there need not be separate Directors for primary and secondary education and collegiate or Sanskrit education through there may be a separate Director for Technical Education.

(ii) Coordination:- Dr. K.G. Saiyidain emphasized the need for the having as few bodies as possible and the Commission accepted the suggestion that representatives of various other Departments could be associated with the State Council of Education obviating the need for a separate coordinating Committee of Secretaries of Departments. The Commission also agreed that techniques of coordination would differ in different circumstances.

(iii) The Commission broadly discussed the question of pay scales prevailing for different posts in different institutions and their correspondence with posts in the Directorate. The question of interchangeability of posts in the Directorates, Universities, Training Colleges, etc. was also considered. It was felt that the Task Force on Educational Administration should discuss the various implications of this in detail and its views would be considered by the Commission.

(iv) The Commission next considered the question of separation of administration work from that of inspection. A view was expressed that if inspectors were to be completely divested of administrative powers, their reports would cease to have any value. There was general agreement that the Inspectors should be relieved of the heavy load of administrative work which they assumed at present though there was a clear need to give them some administrative powers. The Chairman suggested that a Committee consisting of Shri A.R. Dawood, Miss. S. Panandikar, Shri J.P. Naik and Mr. J.F. McDougall should be formed to go into this question. A paper should be prepared to list (a) the various duties performed by the Inspectors at present; (b) duties which may be transferred to others so as to reduce the load of administrative work on inspectors, and (c) powers which are necessary to secure the proper implementation of their recommendations.

10. The Commission also agreed to a suggestion that it would be desirable to preface the section on administrative reforms with a general discussion of principles of good administration. It should also seek to identify and analyse various administrative

functions at different levels, and the skills and experience these required.

11. Two other decisions were also taken by the Commission during the course of discussion on this item:

(a) After visiting all States, the Commission should hold discussions with some of the Members of the Union Cabinet and senior officers of Ministries concerned,

(b) An informal meeting of the Commission should be held immediately after a visit to a State to enable the Members to exchange their ideas and impressions.

Item 4 of the Agenda:- Education of Scheduled Caste and Scheduled Tribes- Paper by Shri J.P. Naik

12. Shri J.P. Naik gave a short resume of the paper and briefly explained its main recommendations. He informed the Commission that the paper had also been discussed in the Working Group on the Education of Backward Classes and the Working Group had generally endorsed it.

13. During the course of the discussion, Chairman suggested that a distinction must be drawn between the economic handicaps suffered by scheduled caste and scheduled tribes (which would be common to all economically backward class communities) and the social handicaps experienced by them, such as untouchability, etc. Special attention will have to be paid to latter.

14. The following were some of the other suggestions made:

(a) Special coaching arrangements should be made for Scheduled Caste and Scheduled Tribe students after they are admitted in schools.

(b) Special coaching centres, on the lines of the one at Allahabad, should be organised to prepare S.C. and S.T. candidates for competitions in All-India and P.C.S. examinations

Item 5 of the Agenda: Letter from Dr. V.K.R.V. Rao dated 5th April, 1965, regarding Dr. Fowlkes's paper on

"An All India Educational Improvement Programme."

15. The letter from Dr. V.K.R.V. Rao was noted.

Item 6 of the Agenda:- A Note by Dr. John Guy Fowlkes on Development of Teacher Internable.

16. The idea of involving practicing schools with programme of teacher internship was generally accepted. Miss Panandikar informed the Commission that she had discussed this question with people during her visits to the States. Dr. Jha informed the Commission that this was the usual practice in Anglo-Indian schools. Miss Panandikar also informed the Commission that the question was considered by the Task Force on Teacher Education and it was the opinion of the Task Force that this should first be tried out in some good secondary schools.

Item 7 of the Agenda: A Note by Dr. Benjamin S. Bloom entitled 'Stability and Change in Human Characteristics.'

17. Miss S. Panandikar gave a brief resume of the book and the thesis developed therein. The author, she pointed out, had made a case for greater attention to preprimary education. While recognising the importance of pre-primary education, the Commission was of the opinion that the home was perhaps better than ill-equipped nursery schools. The Commission, however, decided that Dr. Dave of BEPSE, who had worked with Dr. Bloom, should be invited for a further discussion on the subject.

18. Item 8 of the Agenda: Letter from Shri G.D. Sondhi regarding investigation into causes of students indiscipline.

Shri J.P. Naik informed the Commission that he had asked Shri G.D. Sondhi to send a paper on the subject. The Commission was of the opinion that there was no need to set up another Sub-Group. The question of student indiscipline was already under consideration in the Task Force on Student Welfare, The Chairman informed the Commission at this stage that the U.C.C. would be convening a Conference of students' representatives sometimes in September-October, 1965 and the Education Commission could utilise this opportunity to have talks with the students.

Item 9 of the Agenda: Interviews with prominent persons

19. The Commission was of the view that the list of persons to be invited should be reviewed and the number kept to the minimum as far possible. The Chairman suggested that after the State visits were over, the Commission might be in a position to devote more time to local interviews. In this connection, Dr. V.S. Jha requested the Chairman to fix up an appointment with the President.

Item 10 of the Agenda: Education Planning in the Developing Nation (An Address by Dr. P.H. Coombs.)

20. The item was noted by the Commission.

Item 11 of the Agenda: Letter from the Govt. of Maharashtra regarding suitable pattern of academic year for all types of educational institutions.

21. The item was generally discussed but no decision was taken.

Item 12 of the Agenda:- Any other business

22. As regards the next meeting of the Commission, it was decided that the Member-Secretary would consult the Chairman about the dates convenient to him.

23. The Commission also decided to extend its Kashmir meeting by a week upto the 13th June, 1965.

24. The Commission noted the four papers circulated for the information of the Commission.

25. The meeting of the Commission came to a close with a vote of thanks to the Chair.

J.F. McDougall
Associate-Secretary.

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EC/MIN/10

MINUTES OF THE TENTH
MEETING OF THE EDUCATION
COMMISSION HELD ON THE
17TH MAY, 1965.

EDUCATION COMMISSION
GOVERNMENT OF INDIA

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EC/MIN/10

Minutes of the 10th Meeting of the Education Commission held at 10 a.m. on the 17th May, 1965 in the Conference Room of the U.G.C. Building.

1. Members present:

1. Dr. D.S. Kothari	Chairman
2. Dr. T. Sen	Member
3. Dr. K.G. Saiyidain	Member
4. Miss S. Panandikar	Member
5. Shri A.R. Dawood	Member
6. Shri J.P. Naik	Member-Secretary
7. Mr. J.F. McDougall	Associate-Secretary

2. Provisional agenda:

The Commission had the following provisional agenda before it:

- (1) Adoption of the agenda.
- (2) Confirmation of the minutes of the 9th Meeting of Education Commission held on the 24th April, 1965.
- (3) Education in the States-Monograph No. III-Education in Bihar- Some Important Problems.
- (4) Educational Growth and Improvement in India - An Attempt at a policies document - Note by Mr. J.F. McDougall, Associate Secretary.
- (5) Memorandum by Shri Achyut Patwardhan on Education as Instrument of Social Change.
- (6) Education in Delhi - A memorandum submitted by the Delhi Administration.
- (7) Any other item with the permission of the Chair.

3. Item 1 of the Agenda - Adoption of the agenda:

The Commission adopted the agenda and proceeded to discuss it item by item.

4. Confirmation of the Minutes of the 9th Meeting of the Education Commission held on the 24th April, 1965.

The minutes were confirmed.

5. Education in the States - Monograph No. III - Education in Bihar - Some Important Problems:

Shri J.P. Naik briefly explained the Monograph and the approach to its preparation. The following points emerged in the discussion:

- (i) Paragraph 1 - General Background - page 2: The Chairman suggested that the reference to domination by Bengalis should be deleted. Instead the positive role that

Biharis had played in the post-independence period, should be emphasized.

(ii) Paragraph 2 - Teachers - page 3: It was suggested that it be made explicitly clear that the reference to a peon in Govt. service getting a higher remuneration than a primary teacher related to primary teachers in private schools only.

(iii) Paragraph 5 - Private enterprise - page 5: The Chairman suggested that although there was a tendency among State Governments to refer to the taking over of primary schools by Government as 'nationalisation of schools', this was not a proper use of the term. There could be no nationalisation in education. It should, therefore, be properly referred to as 'taking over of schools by the Government'.

(iv) Paragraph 8 (c) (5) Results of High School Examination- page 9: Shri J.P. Naik explained that normally the results of High School examinations in Bihar were between 40-45 per cent, which sometimes dropped to as low as 36 per cent. The Commission felt that this was a serious matter. Even for the whole country the pass percentage was about 50. Shri Naik explained that two issues were involved: (a) reforming the examination system, and (b) improving the teaching programmes. The Chairman suggested that Shri A.R. Dawood should prepare a paper on this subject for consideration in the Kashmir meeting of the Commission.

(v) Paragraph 8 (d) - University stage - Pages 11-15: The Commission felt that the universities in Bihar were greatly handicapped. The State Universities Commission and the University Services Commission were making in-roads on the autonomy of universities and affiliated colleges respectively. Shri Naik further pointed out that the Universities in Bihar were also required to send their annual budget to the State Government for approval. The Chairman felt that the position was rather unsatisfactory. He suggested that a Sub-Committee should be set up with Prof. Mathur and some other members to go into the question of grants-in-aid system to the universities. The Chairman also suggested that a paper be prepared giving a summary of the main recommendations of the Sapru Committee and Model Act regarding

regarding
Committee/the autonomy of universities and recruitment of teaching
staff in universities and affiliated colleges.

(vi) Paragraph (e) (2) - Technical Education - page 16:

The Commission felt that at present a major portion of the financial
outlay was spent on buildings, and that more simple structures should
be built with less costly materials.

(vii) Paragraph 12 - Textbooks - pages 18: The Commission
was of the view that the whole purpose of nationalised textbooks
should be to make available the best books at the lowest price.
There should be no question of profit. Regarding the quality
of nationalised textbooks, it was decided that the Commission
should appoint a small Committee (consisting of even one man) to examine
nationalised textbooks in a few subjects. It was also decided
that a short paper on the question of textbooks should be prepared
for consideration in the Kashmir meeting of the Commission.

(viii) Annexure I - Netarhat School - Pages 22-27: Shri
J.P. Naik drew the attention of the Commission to the fact that
there has recently been a tendency on the part of the State Governments
to open public schools and the Central Govt. has established some
Sainik Schools. Admissions to these institutions were generally
on the basis of merit. Some members were of the view that the State
Government should not open special schools exclusively for children
with high I.Q. since such schools would be few and far between and
could lead to some form of discrimination. Other members were of
the view that there was nothing wrong in the establishment of such
schools so long as admissions were purely on merit and were not
influenced by economic or social considerations. The Commission
was 'in addition' of the view that there should be provision for
identification of talent in every school and there should be provision
for enriched curriculum for talented students. Special schools
for gifted children, organised on the lines of the Netarhat school,
should be supplementary to the general programme of identification
of talent and providing special facilities for its growth.

6. Item 4 of the agenda - Educational Growth and Improvement in
India. An Attempt at a policies document-Note by Shri J.F.
McDougall:

It was decided that the consideration of this item should be postponed to the Kashmir meeting of the Commission.

7. Item 5 of the agenda - Memorandum by Shri Achyut Patwardhan on Education as Instrument of Social Change:

The memorandum was noted by the Commission.

8. Item 6 of the agenda - Education in Delhi - A Memorandum submitted by the Delhi Administration:

The Commission noted the memorandum.

9. Other business

The Members had an exchange of views regarding their visit to Punjab. There was a consensus of opinion that Shri J.P. Naik had correctly summarised the feelings and observations of the Commission about its visit to Punjab at the last press conference - though the Press on its part had failed in some cases to report them accurately. The following points were made in the subsequent discussion:

(a) Punjab had a large measure of centralised administration. There was a need for some decentralisation.

(b) Punjab was the only State which had legal provision for taking over privately-managed schools if they were not working satisfactorily. It was pointed out in this connection that even conditions of the Government schools left much to be desired. There was a consensus of opinion that there should be an autonomous organisation which should grant recognition to schools both Government and non-Government - after satisfying itself on the minimum essential conditions. No school should be given recognition simply by virtue of the fact that it was a Government institution. The Chairman suggested that a study should be made of the constitutions of the Delhi Board and Central Board to find out the relevant provisions.

(c) Shri J.P. Naik pointed out that with the present and future large-scale expansion of primary education it would be desirable to consider the question of setting up an independent autonomous authority at the district level for its administration. It was pointed out that the results of experiments in handing over administration of primary education to local bodies were not encouraging. The composition and functions of education bodies to be set up at the District level should, therefore, be carefully

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considered. The question of their relationship to the Zilla Parishads and other organisations at the District level should also be carefully defined.

(d) Reference was also made to the grants-in-aid system prevalent in Punjab. There was an old rule, framed in 1885, under which the maximum amount of grant-in-aid to any institution was limited to Rs 6,000. In view of the tremendous changes in the cost structure since this date, the grants-in-aid rules need to be liberalised in the light of the present day considerations.

10. The Commission considered the arrangements to be made for its Kashmir meeting. The Chairman suggested that a note should be circulated to all Members about the arrangements made for their stay, board and lodging, etc.

11. The meeting closed with a vote of thanks to the Chair,

AGENDA PAPERS

EDUCATION COMMISSION
PATTERN OF SCHOOL AND COLLEGE EDUCATION

The question relating to the pattern of school and college education was considered by the Education Commission at one of its early meetings; but the discussion was inconclusive. We should now discuss the problem once again, examine in detail its major implications and arrive at some tentative conclusions. This has become necessary for the following, among other, reasons:

a) The concept of educational reconstruction is associated in the public mind with the idea of the reorganisation of school and college classes, particularly in view of the confusing variety of educational patterns existing in the country.

b) The subject of the future pattern of school and college education has been highlighted in many of the memoranda received and the discussions held by the Commission in different States.

c) Several important issues on which the Commission will have to take early decisions, such as the school curriculum at different stages, the programme of vocationalisation, the financing of education, etc., are related directly or indirectly to the question of educational pattern.

2. The pattern of school and college classes is partly determined by the total duration of the period leading to the first degree. This is 14 years in seven States (Jammu & Kashmir, Madhya Pradesh, Mysore, Punjab, Rajasthan, Uttar Pradesh and West Bengal) and 15 years in seven other States (Andhra Pradesh, Bihar, Gujarat, Kerala, Madras, Maharashtra and Orissa), while Assam has a 16-year course up to the first degree. It is generally admitted that our standards of education, particularly at the university stage, do not compare

favourably with educational standards in advanced countries and that most of the high school leavers here who proceed to the university are comparatively immature and inadequately prepared for higher education. It is also realised that in advanced countries, and even in some developing countries, the time required to take the first degree is at least fifteen years. Therefore it has been proposed that, if we wish to raise the standards of education in this country effectively, we should provide at least a fifteen-year course for the first degree. This proposal for the lengthening of school and college education by one year has certain financial, administrative and even social implications for the seven States in the first group mentioned above. If the proposal is accepted, these implications will have to be carefully worked out by the Commission.

3. Three alternative methods have been suggested for lengthening the total period of the school and college course in the seven States. These are discussed below:

a) The existing duration of 14 years up to the B.A. or B.Sc. degree should not be disturbed, but the additional year necessary for upgrading standards should be added to the post-graduate stage at the university so that the total number of years required to take the Masters' Degree would be 17 years. This measure, it is argued, will be the least expensive, will cause the least disturbance to existing educational patterns, and will be the easiest to carry out administratively. But as the resulting qualitative improvement at the post-graduate level will take considerable time to filter down to the schools, the procedure does not seem to find widespread support.

b) One more year should be added to the present three-year university course for the first degree for all students;

or, in the alternative, selected students should be provided with a special B.A. or B.Sc. Honours course of four years to be run side by side with the ordinary B.A. or B.Sc. Pass course. This method, it is stated, will make the Honours degree (or the degree obtained after four years study at the university) comparable with the first degree of a good foreign university, and will gradually lead to qualitative improvement at the secondary education stage. It is argued in support of this procedure that the much-needed upgrading of standards can be effected much more easily at the college stage than at the school stage, because of the smaller number of students involved and the better existing facilities in the colleges. Though this argument has been advanced with considerable force in certain quarters, the traditional view seems to be that qualitative improvement at the secondary school stage is a condition precedent to the raising of standards at the higher education level.

c) One more year should be added to the school stage so that we have a 12-year school course followed by a three-year course for the first degree. It is clear that the extension of the school course to 12 years would necessitate the lengthening of the total duration of school and college education only in those States which have at present a 14-year duration; in other States the "additional year" would in effect mean the transfer of a year from the college to the school except in Kerala where the 12+3 pattern already exists.

The consensus of opinion among educational experts would seem to favour a school duration of twelve years. The Conference of State Education Ministers held in New Delhi in April, 1964, recommended, "a twelve-year course of schooling before admission to the degree course is the goal towards which the country must work, even though considerations of finance and

manpower may not make it possible to implement such a scheme for all States in the immediate future."

4. If this recommendation, which has been echoed in several other quarters, is accepted, the following related issues will have to be considered.

(a) How many distinct stages should there be in this 12-year course, and what should be the duration of each of these stages?

(b) Should the first seven or eight years of education be divided, as it is at present in most States, into primary and middle school stages, or should there be a continuous course of elementary education of 7 or 8 years?

(c) If the first 7 or 8 years of education are to form a continuous course, what difficulties, if any, would be faced by secondary schools having middle school classes?

(d) At what stage should children be admitted to Class I of the course?

(e) Should Classes XI and XII be located in (i) the school, (ii) the college, or (iii) a separate institution of the junior college type?

(f) What should be the minimum age limit for admission to the university course?

(g) What kind of curriculum should be provided at the different stages of education indicated under (a) above? At what point should differentiation of the curriculum begin? At what point should diversification of courses be provided?

(h) At what stage of the 12-year school course should vocationalisation begin? What kinds of vocational courses should be provided at different stages of the course? What are the possibilities of providing part-time vocational courses? Should there be separate vocational institutions for the various vocational courses?

5. If we are not to insist on a uniform pattern, is it possible to lay down certain basic essential elements which will ensure that standard and quality which are the goals of the uniform pattern?

- (a) If so, what are these essential basic elements?
- (b) How are these essential elements to be ensured?
- (c) What should be the approximate time within which these common elements are to be achieved in the States?
- (d) What techniques and machinery should be devised for attaining these standards and for evaluating the progress of the different States towards these standards from time to time?

56. There is another very important issue related to this whole question of educational pattern. Even if the 12-year school course followed by a three-year degree course is regarded as educationally sound, should this be prescribed as a uniform national pattern of school and college classes throughout the country? Would it be possible for the different States to reorganise their educational pattern easily so that they correspond to the prescribed national pattern? Or is it not more desirable to lay down only the total duration of school and college education leading to the first degree and the basic elements of a common pattern which will ensure that certain national standards will be maintained at different stages of the educational course in spite of the differences in the educational patterns of different States. These are matters to which the Commission will have to apply its mind immediately and come to certain tentative decisions.

ENROLMENT POLICIES IN INDIAN EDUCATION
(1965-66 to 1980-81)

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ENROLMENT POLICIES IN INDIAN EDUCATION

The Objectives of a good enrolment policy are:-

(1) to provide the widest opportunity possible for each individual to develop his capacities to the full;

(2) identify talent, which is the most precious asset of the nation, and to assist it to grow to the full by exposing it to the influence of good teachers and good schools and to ensure that poverty shall be no bar to such development;

(3) to see that the requirements of man-power for the economic, social, political and cultural development of the nation are met, both quantitatively and qualitatively; and

(4) within the life-time of a generation at the most, to so raise the educational level of the average citizen and to create an elite of such magnitude and quality as will enable India to modernise its social order and to participate with the advanced nations, on the basis of equal partnership, in the furtherance of the scientific and technological revolution.

To achieve these objectives, it is necessary to define national enrolment policies, separately for the three levels of education and to implement them with vigour and efficiency.

2. Enrolment Policies at the First Level: At the first level of education, it is essential to provide good elementary education of not less than seven years' duration to every child and to substantially fulfil the directive of Article 45 of the Constitution by the end of the Sixth Plan (1981). For this purpose, the following enrolment policies should be adopted:-

Primary Stage:

(1) The Educational Survey of the country should be revised as on 31st March 1964 and a primary school should be established, before the end of the Fourth Plan, within easy walking distance of the home of every child;

(2) Every year, an intensive enrolment drive should be carried out to enrol children in the age-group 6-7 in Class I, special attention being paid to the enrolment of girls and of the children of scheduled castes and scheduled tribes. These efforts should be intensified in areas where the enrolments are comparatively poorer so that educational opportunity is equalised between urban and rural areas, between different States, between different districts in the same State, and between different parts of the same district; and

(3) Once a child is enrolled in school, intensive efforts should be made to see that he proceeds from class to class in an orderly manner (i.e., there is no stagnation) and that he does not leave school before the age of 11 or before completing class IV or class V as the case may be (i.e., there is no wastage).

Middle School Stage:

(4) There should be a large expansion of middle schools on the basis of the revised educational survey* so that full-time middle school education is available, within easy walking distance from home, for every child that desires to have it.

(5) No admission should be refused to any child who who desires to have middle school education on a full-time basis; and every facility and assistance should be offered to girls and to children of the scheduled castes, scheduled tribes and other weaker sections of the community (such as landless Labourers) to receive such education; and

(6) Every child who cannot attend middle school on a full-time basis, for some reason or the other, shall be required to receive part-time middle school education.** It should be provided

* At present, there is one middle school to about nine primary schools. This ratio should be increased to one to five by the end of the fourth Plan and to one to three by the end of the fifth Plan.

** Such part-time education should be provided in the same middle schools which provide full-time school education or even in primary schools.

in a very elastic manner to meet the needs of children receiving it. For instance, it may be provided for 1-2 hours for three days a week, or for one whole day in a week or on a full-time basis for a limited part of the year, such as in the slack agricultural seasons.

It is expected that, if the above policies are adopted, it will be possible to provide, by 1981, (a) full-time primary education for all children in the age-group 6-11; (b) full-time middle school education for about 60 % of the children in the age-group 6-14; and (c) part-time middle school education to 40 % of the age-group 11-14. These targets may be broken down as follows for the end of the third, fourth and fifth Plans:-

Time	Enrolment Targets for the Primary Stage	Enrolment Targets for the Middle School Stage
End of the Third Plan (1965-66)	Full-time Primary education for 75% of the children in the age-group 6-11	Full-time Middle School education for 28% of the age-group 11-14
End of the Fourth Plan (1970-71)	Full-time Primary Education for 85 % of the children in the age-group 6-11	Full-time Middle School education for 36% of the children in the age-group 11-14 Part-time Middle School education for 14% of the children in the age-group 11-14.
End of the Fifth Plan (1975-76)	Full-time Primary Education for 95% of the children in the age-group 6-11	Full-time Middle School education for 46% of the age-group 11-14 Part-time Middle School education for 24% of the age-group 11-14
End of the Sixth Plan (1980-81)	Full-time Primary education for all children in the age-group 6-11	Full-time Middle School education for 60% of the children in the age-group 11-14. Part-time Middle School education for 40% of the children in the age-group 11-14

The above targets are for the country as a whole. These will vary from one State to another and even in the same State, from one district to another.

3. Enrolment Policies at the Second Level: At the second level of education, the enrolment policies naturally become more complex and may be stated as follows:-

(1) The existing situation with regard to the location and development of secondary schools leaves much to be desired. There are large parts of the country where access to secondary education is difficult if not impossible; in others, there is a proliferation of small uneconomic and inefficient institutions which constantly engage in uneducational competition with one another. The educational survey should, therefore, be revised as on 31.3.1966 and a comprehensive development plan of secondary education should be prepared for each district with three objectives:-

- (a) to avoid overlapping in educational institutions;
- (b) to ensure that the secondary schools proposed to be established shall be of an optimum size which will lead to economy and efficiency; and
- (c) to provide fairly easy access to secondary education to children in all parts of the country.*

(2) Since it is not possible qualitatively to improve all secondary schools at once, a phased programme of selective improvement should be immediately undertaken, the target to be reached by the end of the Fifth Plan at the latest, being to create a good secondary school in every Community Development Block. Apart from other facilities, this school should provide adequate hostel facilities and also scholarships to enable talented students from all parts of the Community Development Block to avail themselves of the education it provides.

* Although this has been referred to only in relation to secondary schools, it is obvious that these comprehensive plans of development to be prepared for each district should advantageously cover, not only second level of education, but also all first level and third level of education. A good analogy in this respect is provided by the Education Act of England 1944.

(3) There should be a qualifying test at the end of the middle school stage and a pass at this test should be regarded as essential for admission to general secondary education on a full-time basis. Adequate scholarships should also be available to the students topping in this examination, the target to be reached being to provide scholarships, by the end of the Sixth Five Year Plan, to top five per cent of the students passing this test in each Community Development Block.*

(4) Facilities for secondary education on a part-time basis, general or vocational, should be made available for all students who desire to have it. This may be of two categories: (a) those who have qualified for admission to general second level education and have not been able, for some reason or the other, to get a seat in an institution providing such education; and (b) those who have failed to qualify for second level education but desire to have it. The provision of part-time education may be on an institutional basis, as at the middle school stage, or through correspondence.

(5) It is necessary to vocationalise the content of second level education to the extent possible; and, from this point of view, to adopt three measures: (a) to establish a system of apprenticeship training, on as ^{large} a scale as possible, to which children who have completed 14 years of age could be admitted as a preparation for entrance into different vocations as skilled workers; (b) to establish as large a number as possible of agricultural, technical and vocational schools which, in a period varying from 2-4 years, shall prepare their students for specific skilled jobs in agriculture, industry and other professions; and (c) to provide education in agriculture, commerce, industrial arts, etc., even in schools of general secondary

* As a transitional measure, some of these scholarships should be reserved for the children of the backward communities and girls.

education, with a view to providing a vocational bias which would assist the students to opt for specific vocational careers at a later stage. If these policies are to succeed and if traditions which denigrate manual labour and over-emphasise academic education or white-collared jobs are to be overcome, it is necessary to provide incentives (in the form of scholarships or better wages) which would attract students more largely to vocational courses.

(6) To assist students who have entered life after completing the age of 14 years (and who do not desire to proceed further to second level education) to improve their vocational competence and to enrich their personal life through part-time courses of vocational and general education combined with, where necessary, ancillary programmes of financial and other assistance to create enlarged avenues of self-employment.

If these policies are adopted, it is felt that, by the end of the Sixth Plan (1980-81), the enrolments in the second level of education would be about 40% of the corresponding age-group on a full-time basis; and provision for an additional 10% would have to be made on a full-time basis. The remaining 50% of the age-group would have entered life - about 20 % at the age of 14 and an additional 30 % at the age of 16. In this regard, the targets to be reached at the end of the Third, Fourth and Fifth Plans also may be broken down as follows:-

Time	:In full-time: :general :secondary :education	:In full-time: :vocational :& technical :education	:In part-time: :education	: Total
At the end of the Third Plan (1965-66)	18%	2%	Nil	20%
At the end of the Fourth Plan (1970-71)	24%	3%	1%	28%
At the end of the Fifth Plan (1975-76)	30%	5%	3%	38%
At the end of the Sixth Plan(1980-81)	36%	9%	5%	50%

N.B. The expansion in the Fifth and the Sixth Plans has been estimated to be fairly more rapid than in the Fourth Plan for two reasons: (a) during this period, the duration of second level of education would be increased to 4/5 years (so as to make a total of 12 years of school education) in all parts of the country; and (b) the pressures of the expansion that would have occurred in the middle school stage in the Fourth and Fifth Plans will climb upto the second level of education in the Fifth and the Sixth Plans.

It must also be pointed out that the targets suggested above are for India as a whole. The position in this regard also will vary from State to State.

4. Enrolment Policies at the Third Level of Education: The enrolment policies at the third level of education will be a continuation of those adopted at the second level, mutatis mutandis. These may be stated as follows:-

(1) There has been, in recent years, a proliferation of sub-standard colleges, several of which are too small to be either economical or efficient. This is due mainly to the failure to plan their location and to enforce the essential conditions for granting affiliation. It is, therefore, necessary to adopt three measures to improve the situation: (a) to prepare a well-conceived programme for the location of colleges in each district; (b) to streamline the existing procedures for granting affiliation in such a way that no new sub-standard institutions would be allowed to come into existence; and (c) to prepare a phased programme, spread over a given time, through which all existing institutions would be raised to a minimum prescribed level at least. In other words, a greater reliance will be placed, for the purpose of controlling indiscriminate expansion at this stage, on the qualitative control of institutions of higher education (which will mean an indirect control of expansion also because of the inherent limitations on funds and teachers available) rather than on devising admission or selection procedures for students.

These could be left to the institutions themselves subject to a certain general conditions to which a reference will be a little later.

(2) Since the availability of funds and teachers do not permit the upgrading of all colleges to a high level, a selective approach should be made in the development of institutions of higher education and at least one college should be developed as a first-grade college in every district before the end of the Sixth Five Year Plan. These institutions should have adequate hostel facilities and scholarships in order to enable students from other parts of the district to avail themselves of their educational programmes.

(3) There should be a general rule that only students who have obtained more than a prescribed percentage of marks at their school leaving or University entrance examination would be allowed to proceed further to higher education on a full-time basis. Experience has shown that such rules, if rigorously followed, come to be accepted and become workable.*

(4) A liberal provision should be made for scholarships, the target to be reached being to provide scholarships to the top 15% of the students by the end of the sixth Plan, exclusive of the scholarships provided, on social grounds, for students of the backward classes.

(5) It will be necessary to separate, as early as possible at this stage, the gifted students from the rest and to provide intensive and specialised honours courses for them in the more institutions.

(6) It is essential to develop, on a very large scale, programmes of part-time education for three categories of students: (a) those who are qualified to proceed to higher education but who have not been able, for some reason or the other, to obtain a seat in an institution of higher education.

*As a transitional measure, some concession in this regard may be allowed to students from the backward communities or rural areas.

on a full-time basis; (b) those who are not qualified to proceed to higher education on a full-time basis and yet desire to study further; and (c) those who have entered life, but wish to improve their professional competence or to enrich their personal life through higher studies of a vocational or cultural character.

(7) It will be necessary to expand facilities for post-graduate education and research considerably as well as to improve its quality, because the work at this stage is crucial to the qualitative improvement of education as a whole and for economic growth. An attempt should, therefore, be made to expand enrolment at post-graduate stage to about 20% of that at the under-graduate stage through an expansion of University Teaching Departments, the development of Graduate Schools and autonomous colleges. There should be a very liberal provision of scholarships at this stage to cover about 50% of the total enrolment and admission should be limited strictly on merit.

(8) It is necessary to expand education in the natural sciences and also all professional, vocational and technical education at the third level. The target should be to increase the facilities for such education, by the end of the sixth Plan, to about 60% of the total facilities available in higher education.

If the above policies are adopted, the overall expansion of higher education may reach, by the end of the Sixth Plan, to about 8% of the total enrolment in the corresponding age-group. This target could be broken down for the third, fourth and the fifth Plans also as follows:-

Time	In Humanities (on a full-time basis)	In courses of science and professional, vocational and technical education (on a full-time basis	In part-time education: general or vocational	Total
At the end of the third Plan (1965-66)	1.2	0.8	-	2.0
At the end of the Fourth Plan(1970-71)	1.6	1.2	0.6	3.4
At the end of the Fifth Plan (1975-76)	2.0	2.4	1.1	5.5
At the end of the Sixth Plan (1980-81)	2.4	3.6	2.0	8.0

These are averages for the country as a whole. The position will vary considerably from State to State.

5. It will be seen from the above discussion that, under the proposed enrolment policy for the third level, higher education on an institutional and full-time basis would be available for most of the students who desire it and qualify for it and part-time education will be available for all others who desire to study further, irrespective of the fact whether they qualify for it or not. This policy is, in fact, liberal enough to meet all requirements except one, viz., the desire of persons who may not qualify for higher education and who may yet desire to have it on a full-time basis. The pressures on behalf of such students are strong; but in the larger interest of the society and the students themselves, it may be desirable to resist them. If, however, it is felt necessary to provide opportunities of full-time education for them also, it may be done in such a manner as will throw no burden on the public exchequer. One way to do this would be to allow private colleges

to admit such students and to devise a system under which no grant-in-aid from the public exchequer is paid for such students.

6. Man-power Aspects of these Proposals: What would be the manpower aspects of these proposals? Here two specific issues will have to be answered: (1) Would this order of enrolment provide all the man-power we need for the all-sided development of society and particularly for economic development? and (2) Would it be possible to provide a job for every person who would come out of the educational institutions, especially at the second and third levels? The broad reply to both these questions is in the affirmative; and the details will be presented in a separate paper on the subject which is being prepared in the Task Force on Man-power Development.

7. Broad Outlook for the Next Three Plans: A continuance of these policies for three more plans will obviously result in the following:-

(1) A large-scale expansion of pre-primary education to cover about 50-60 per cent of the children in the age-group 3-5;

(2) Provision of universal and full-time education for all education in the age-group 6-14;

(3) Universal secondary education for all children in the age-group 15-18, full-time education being given to about 80 per cent children and part-time to the rest; and

(4) Higher education to about 20 per cent of the children in the corresponding age-group.

It will thus be seen that the continuance of the above enrolment policies will enable India, within a period of 15 to 30 years to rise to a position of educational equality among the advanced nations of the world.

New Delhi,
31st March 1965.

J.F. Naik
Member-Secretary

Item NO. 6
8th Meeting.

EDUCATION COMMISSION
(Government of India)

Subject:- The Teaching of Foreign Languages in Some Selected European Countries - A Note prepared by Mr. J.F. McDougall

1. The following synoptic view of the place of foreign language teaching in thirteen European countries is grouped under six headings: (a) number of languages taught as compulsory or optional subjects; (b) stage at which each is introduced and years taught; (c) the time in the weekly time-table given to language teaching; (d) the aims of foreign language teaching; (e) the content of the courses; and (f) the teaching methods used.
2. In order to present this material in a short note and in a form where it can be compared, it has been necessary to gloss over the very different forms secondary education takes between the countries examined and even within each country. For example, education is a local matter in both Switzerland and the Federal Republic of Germany and patterns vary within each country. Again, in the United Kingdom there are no official syllabuses or approved methods of teaching. One must additionally bear in mind that secondary education takes many forms. By and large technical and vocational forms of secondary education are not considered in the review below, but even so it has not been possible to take account for each country of all the other possibilities in streaming or sections available in general secondary education.
3. It is important to bear in mind that the summaries below apply in certain cases only to students who

follow a full secondary course. For example, in Table II, 6 years of study of a second language in Belgium would be true only of a student who remained in school until the age of 18. Many would, of course, drop out at the end of the compulsory period.

4. Lastly, it is necessary to warn against hasty comparisons being made with conditions in India.

Though all of the countries surveyed report a shortage of specialist teachers, all are more fortunately placed than India. Secondly, it should be remembered that many of the foreign languages taught are close relatives of the mother tongue and all, except Russian, have a common script. It is of course also obvious that the amounts of reading materials available as well as the use of audio-visual aids differ considerably from conditions prevailing in India.

Table I - Number of Foreign Languages Taught to End of the Secondary Period

Country	2nd Language	3rd Language	4th Language
Belgium	Compulsory	Compulsory	Compulsory or Optional
Czechoslovakia	Compulsory	Compulsory	Optional
Denmark	Compulsory	Compulsory	Optional
France	Compulsory	Compulsory or Optional	Optional
Germany (Fed. Republic)	Compulsory	Compulsory or Optional	Optional
Hungary	Compulsory	Compulsory	Optional
Netherlands	Compulsory	Compulsory	Compulsory
Norway	Compulsory	Compulsory	Compulsory or Optional
Sweden	Compulsory	Compulsory	Compulsory
Switzerland	Compulsory	Compulsory or Optional	Optional
U.S.S.R.	Compulsory	Russian Compulsory in non-Russian Schools	Optional
Yugoslavia	Compulsory	Compulsory or Optional	Optional
United Kingdom	Not compulsory but generally taught	Optional	Optional

Table II. Stage at Which Languages are Introduced and Years Taught

Country	2nd Language		3rd Language		4th Language	
	Introduced : at age :	Years Taught	Introduced : at age :	Years Taught	Introduced : at age :	Years Taught
Belgium	12	6	13 or 14	4 or 5	14 or 15	3 or 4
Czechoslovakia	9	9	15	3		
Denmark	12	7	14	3	16	3
France	11	7	13	5		
Germany (Fed Republic)	11	9	14	6-7		
Hungary	10	8	14	4		
Netherlands	12	6-7	12	5	12	4 or 5
Norway	12	7	14	5	14	5
Sweden	10	9	14	5	16	3
Switzerland	10-12	8	12-14	4		
U.S.S.R.	11-12	7	11-12	7		
Yugoslavia	11	8	15	4		
United Kingdom	11-12	5-6				

III. Time Given to Language Study

1. The variations here are too great to permit any summary. School year, stream or section followed, total weekly timetable, grade and age all determine the place of language study in the curriculum and patterns vary from country to country.
2. Some generalisations which can be made within these limits are as follows :
 - (a) The total number of hours per week at the secondary level is generally in the range 30-36, with the exception of France where it is 24 or 25 and some lower secondary schools in Switzerland with 45 hours per week,
 - (b) In countries (e.g. Belgium, Netherlands, Sweden) where three foreign languages are compulsory in certain streams, the maximum time given to foreign language study is about 40% of the weekly total. If study of the mother tongue is included, the maximum total language study is about 50% of the weekly hours;
 - (c) In countries where two foreign languages are taught, the maximum time devoted to foreign language study is 25% of the total. If study of the mother tongue is included the maximum language load is about 35% of the weekly total.
3. An example from one form of schooling (Gymnasium) in Lower Saxony, Federal Republic of Germany, may be cited:

Hours per week of language study

Gymnasium in Lower Saxony (5th to 13th School Year)

	5th and 6th			7th Year			8th Year			9th Year			10th Year			11th Year			12th Year			13th Year					
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C			
(a) Modern Languages																											
English	0	5	5	7	4	4	4	4	4	2	4	4	2	2	2	2	4	3	2	5	3	3	5	3			
French	0	0	0	0	6	6	0	5	5	0	4	4	0	4	4	0	5	5	0	4	5	0	5	0			
(b) Mother Tongue		5			4			4			4			4			4			4			4				
(c) Total Hours in Weekly Timetable	29-30			34			34			32			33			32			31			29					

A = Classical Section; B = Modern Languages Section; C = Science-Mathematics Section

IV. Objectives of Foreign Language Teaching

Some examples

Belgium: To develop an understanding of the languages in their written form and promote a practical knowledge of them.

Czechoslovakia: Mastery of the language as regards reading; both oral and written expression; understanding of spoken form. A high standard demanded for 2nd language (Russian); good basic standard for 3rd language.

Denmark: In lower secondary schools to give pupils practical knowledge of the language; cultural aspects not disregarded but of secondary importance. In the gymnasia (grammar schools) an attempt is made to combine cultural and linguistic study.

France: To give pupils practice in using the language and help increase their inner resources by a study of representative texts dealing with the life and thinking of a foreign people.

Federal Republic of Germany: To lead pupils to make practical use of the oral language through learning of sufficient vocabulary and idiomatic expressions. This knowledge should help him in reading literary works for better understanding of the mentality, thought, culture and institutions of foreign country. At gymnasia (Grammar Schools) deeper study of oral and written language and larger place to literature.

Netherlands: To enable the pupil to converse and communicate with people of surrounding countries and

introduce him to their cultures.

Sweden: The aim is functional, i.e. based on need for knowledge of languages. Present tendency is to stress mastery of spoken language rather than translation and composition. Increasing importance laid on cultural objectives and knowledge of the country whose language is studied.

USSR: The aim is to make the pupil capable of maintaining a conversation in the language studied as well as of reading, with perfect comprehension, simple texts of a literary nature or which deal with popular science or social and political problems relating to the countries whose language is studied.

V. Content of the Courses

Some examples:

Belgium: Syllabuses are prescribed for use in official schools. Customary spoken language stressed; literature studied in last three years.

Czechoslovakia: Study begins with vocabulary, grammar, spelling and pronunciation; literature introduced later. Pupils introduced to main representative works in Russian, to lesser extent with other languages.

Denmark: In the gymnasia both written and oral English and German. Translation from and into the language required. For French oral ability only. In lower secondary schools English both oral and written and German oral only. Reading, Translation, conversation and some grammar taught at this level.

France: In general secondary schools the emphasis is on pronunciation, vocabulary and grammar as well as the literature and civilization of the language studied. Pupils examined in translation (from and into the language), oral and written expression.

Federal Republic of Germany: At first lessons deal with oral language and grammar learnt by induction. Vocabulary taught through its practical application and words learnt in sentences and from relationships. Phonetics considered important as well as free translation; repetition of words and phrases aloud. Mother tongue used as little as possible. In the gymnasium (Grammar school) special attention is given to the conversation lesson, and emphasis, as regards oral language, placed on listening, understanding and expression. Rules of grammar and syntax are taught in relation to the spoken language.

Netherlands: Stress is given to pronunciation, rudiments of grammar, written and oral exercises, writing and composition, literary discussion, reading of well-known words. Pupils examined in written and oral abilities, including translation.

Sweden: Stress is on oral ability and comprehension of both written and oral passages. Examinations take form of translations and comprehension tests.

U.S.A.: Examinations check students' ability in spoken language, reading comprehension, translation with or without a dictionary and ability to carry on a conversation.

VI. Teaching Methods

With the general switch of emphasis away from the grammatical, philological approach seen in IV and V above, teaching methods now stress mainly oral ability and functional use of the language learnt. Audio-visual aids, language laboratories and programmed instructional material are being more widely used. A few examples need be cited:

Belgium: The syllabuses are accompanied by official instructions which advise use of a direct, oral and active method. Textbooks, readers, anthologies, films, slides etc. may be chosen from approved lists. Radio sets, projection apparatus, record players and records, tape recorders, etc. supplied where possible and use recommended. Some experimental use of language laboratories begun.

Denmark: Emphasis placed on active methods and teaching of practical skills. Vocabulary based on most frequently used words. Instruction proceeds from centres of interest (the school, family, community, etc.). Translation avoided as teaching method and grammar taught in connexion with the text or to help understanding. Use made of films, slides, records, film strips etc. Television and radio broadcasts available. Language Laboratories being introduced.

France: Official instructions are for use of direct or active method. Choice of textbooks left to teacher but recommended that literary as well as texts dealing with civilization of language studied be used. Large use of audio-visual methods - films, records, tapes etc. - and radio lessons in English and German given regularly for which special texts have been compiled for the pupils and distributed in advance.

Sweden: The oral method is favoured and grammatical method yielding to a more modern and practical conception. Wide use now being made of audio-visual aids. Language laboratories, programmed instructional material and teaching machines being introduced.

U.S.S.R.: Direct method is employed. Most attention given at every stage to oral language. From 5th to 7th grades pupil learns to read with resort to translation; from 8th to 11th grades he is ~~given~~ practice in reading texts with aid of a dictionary to encourage habits of independent work. Maximum use is made of singing, dramatisation, recitation, correspondence with foreign schools, games, discussions, cultural clubs. Use of records, tape-recorders, film, slides, posters etc. recommended.

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IN INDIA

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APPENDICES

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Introduction

The Education Commission have earlier seen a note on Reorganisation of Secondary Education on a 12-Year (10 + 2) System and also a note circulated on the Development of Secondary Education. Lord Robbins in recent discussions with the Education Commission recommended that in Indian conditions, the USA pattern of Junior colleges would be a desirable step from an educational as well as manpower point of view and so in this paper the need for Junior colleges in India is further examined for consideration of the Commission.

2. The main problem which we have to consider is the large number of students anxious to join colleges. At the end of the Second Plan in 1960-61, 10 lakhs of students appeared for the matriculation and equivalent examinations of whom 5 lakhs qualified and nearly 3 lakhs entered the various college institutions. By the end of the Third Plan in 1965-66 it is expected that more than 16 lakhs of pupils will appear for this examination out of whom 8 lakhs will qualify and a large number - about 5 lakhs of them will again be anxious to join different colleges. While the best academically qualified students join courses in engineering, medicine and science (in the order of priority) a large number of average students join colleges of arts and commerce and even science and qualify in pass courses. The earlier Reports of the U.G.C. have emphasised the difficult problem of numbers and we have to examine the question of social forces resulting in establishment of new colleges as well as the question of restriction of admissions.

3. In the Second Plan the additional number of students for university education was of the order of 2.6 lakhs. In the Third Plan this increased to 4 lakhs and it is expected to rise to about 2 lakhs in the Fourth Plan unless

some diversification facilities at the secondary stage are introduced as well as according to some people some measures of restrictive admissions are introduced.

4. It will be seen that both the steps are difficult for immediate implementation and in any case they will have very limited impact on the Fourth Plan.

5. This is because in regard to diversification facilities certain steps in respect of introduction of agricultural schools, technical schools or vocational schools to be introduced at the secondary stage will have to be thought out in a more clear cut way than before. The institutions that will evolve out of such thinking and experimentation could only be established at the end of the Fourth Plan and mostly in the Fifth Plan if well-conceived programmes could be thought out. Therefore, in the Fourth Plan the larger number of students that have come into the last 5 classes of the high schools and higher secondary schools who have already made decisions about their courses cannot be diverted easily to other courses and will get into the colleges as before.

6. The second point about restrictive admissions has been emphasised by many but it has not been possible to stop students from seeking admission to the colleges. Not all the planning techniques have influenced the larger social pressures which are responsible for opening of a large number of colleges every year. On an average about 50 new colleges per year were established in the First Plan, 80 in the Second Plan and about 120 in the Third Plan. The position of colleges in different sectors during 1963-64 along with the figures for 1962-63 are given in the following table :

COLLEGES IN 1963-64

Courses of Study	University Colleges	Affiliated Colleges	Total 1963-64	Total 1962-63	Additional in 1963-64
Arts, Science & Commerce	68	1,350	1,418	1,293	135
Engineering, Technology and Architecture	14	79	93	90	3
Medicine	5	79	84	74	10
Pharmacy	-	3	3	2	1
Ayurveda	-	9	9	8	1
Dental	-	8	8	7	1
Nursing	-	5	5	4	1
Law	11	50	61	54	7
Agriculture	8	40	48	47	1
Veterinary Science	5	14	19	18	1
Oriental Learning	3	160	163	168	-5
Physical Education	-	5	5	5	-
Music and Fine Arts	5	33	38	32	6
Education	9	148	157	146	11
Total	128	1,983	2,111	1,938	173

7. It will be seen from the above Table that during the year 1963-64 135 more colleges were added in Arts, Science and Commerce alongwith rise in enrolment of more than a lakh of students every year.

8. It has been estimated that about 15 lakhs of students will appear in the final school leaving examination 1964-65 out of whom a little more than 90 per cent are at matriculation level and little less than 10 per cent at the higher secondary level. At the current rate of failure about 50 per cent i.e. 7½ lakhs will qualify for entrance to educational training institutions or enter employment market. The following table indicates a rough estimate of the pattern of training/pattern of education/training/employment of the 7½ lakhs students who are expected to qualify in 1964-65.

Field	No. of students	No. of Institutions
1. Industrial Trade Institutions	40,000	318
2. Polytechnics	40,000	263
3. Private unrecognised institutions	20,000	-
4. Teachers' Training Schools	40,000	1,358
5. P.U.C.	2,50,000	1,000
6. Ist year of Intermediate course : 950 x 30 = app.	28,000	950
60 x 200 = "	12,000	60
7. Ist year of 3-year Degree Course; Arts, Science & Commerce	50,000	-
8. Ist year of 5 years Engineering Courses	10,000	
9. Employed	1,00,000	
10. Unemployed or seeking jobs	1,60,000	
Total:	7,50,000	

It will be noted from the above Table that there is some diversification already after the matriculation stage in terms of Industrial Trade Institutions, Polytechnics, Teachers' Training Schools etc. But the number in the P.U.C. after matriculation or the number in the first year of the Three-Year Degree Course after higher secondary, is large enough to create difficulties for existing institutions.

Need for voluntary selection of courses

9. The question is what is the solution for the increase of numbers - through a method of voluntary selection of courses for students on their own in different branches according to their lights, the elimination being done by public examinations at lower levels or through some restrictive measures. The former would imply that nobody is denied the right to seek admission to courses where he or she is admitted according to his or her academic achievement. At the same time a variety of courses have to be

provided which will satisfy both the economic needs and the individual aptitudes of the students.

Sixth Form in the U.K.

10. In England this is achieved by the general certificate examinations at 'O' level taken by majority of the students in the Fifth form at the age of 16. At the age of 18 or 19 they take up Sixth form examination at 'A' level. Eighty per cent of students spend 3 years* and the remaining spend 2 years. There is a very keen competition for places in the universities which may increase if the recommendations of the Robbins Committee were implemented during the next 20 years. But there is a natural elimination of numbers and the students work very hard in the Sixth form to get places in the universities. The courses at the advanced level are so high that at one time they were comparable with the old intermediate standard of our universities. In recent times the courses in the Sixth form have gone up even higher than our intermediate standard of Bombay University where it is still retained or of the U.P. Intermediate Board where of course the standard has become rather lukewarm. In most of the British Universities, particularly Oxford, Cambridge & London, the admission standard to the 3 year undergraduate course was a F class at Intermediate examination of Indian universities which was equivalent to the 'A' level in certain required subjects of the 'Sixth Form'.

11. The boys and girls enter the university in England as well as in U.S.A. at the age of 18 plus or 19. There is a stage of diversification at the age of 16 and age of 18. We have to think of a pattern of education in relation to this age and to see that mature students are admitted to the three-year degree course of the universities so that our B.A. or B.Sc. degree is comparable with the degrees of British or American universities. Today when they say our degrees are 2 years lower than the British or American degrees what they really mean is that the age of admission to the universities is 2 years lower.

* Robbins Committee Report on Higher Education, 1963, p. 17.

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Need for mature
students in universities

12. The Radhakrishnan Commission while discussing the standard of admission to the university courses at the age of entry had stated (page 99) :

" Students arrive at the age of maturity for university work at about the age of 13 though there are exceptional individuals who reach it earlier than 13. Before the age of maturity is reached a boy or girl must stay under formal discipline of the school and should be taught by the methods of the school and not by the methods of the university. That is why the British and European and the American students are seldom admitted to a university before they are 18 or 19."

It will be seen from the above that the problem of numbers is in the first place related to giving educational and training opportunities for every one who deserves it and secondly to see that the best students get the best facilities for higher education for the purpose of various economic needs as well as for research in science, humanities, technology and other branches of knowledge. This is much more possible at the age of 18 + than at the age of 16 as is happening now.

Change in contents of
courses of study

13. Another point is what is often described in modern times along with the "Explosion of Numbers", as the "Explosion of Knowledge". The courses of instruction are being so revised in the U.K., the U.S.A. and the U.S.S.R. that so much more of content is being put into the school, in the junior colleges in the U.S.A. and in the Sixth form in U.K. and the school courses of U.S.S.R. as well as lower classes of their 5-year degree course that our courses of study appear to have very much low content of modern knowledge. This from the point of view of standards has got to be remedied immediately, but the scope for the remedy of measures in regard to the content courses cannot be easily accommodated in the present span of educational courses.

Duration and Vice-Chancellors'
recommendation

14. It was for this purpose that the Vice-Chancellors' Conference in 1962 recommended as follows :-

" It was, however, felt that the period of school and college study required for the first degree should be 15 years and not 14 years as at present. This period could be combined in different ways, for example, 10 years of school education plus a 2-year intermediate course plus a three-year degree course or 11-year course plus 1 year degree course plus a three-year degree course or 12 year school course plus a three year degree course. It was, however, felt that a 10-year school course plus 2 year intermediate course plus a three-year degree course had certain distinct advantages as the 2 year intermediate course would be devoted to a proper preparation for university education".

It will be seen from the above recommendation that a buffer stage between the school and the university of 2 years was important for preparing the students for university life taking them through a method of teaching towards a mature stage of understanding the content courses and preparing them for the higher courses of university education.

15. While there are various alternatives suggested above, the intention is to emphasize a pattern of 10 + 2 + 3 where the '2' will be utilized for giving advanced courses in some of the subjects to be decided by proper authorities and thus preparing for general and specialised courses at the degree level.

16. So far it has been argued that both from the point of view of large numbers and from the point of view of the contents of the courses which have to be enriched, it is necessary to send students to universities after they are mature at the age of 18 or 19 and to have a sort of buffer course between the school stage and the university stage which could be of 2 years and to introduce into the 2 years course more of the intensively rich content courses in a broad way. This 2 year course will also serve the purpose of a broad general knowledge or general education required for citizenship. The whole period will be devoted not so much to scholarship courses as to general knowledge courses. Within the courses there will be scope for various options according to aptitudes such as arts, science, commerce etc. There need not be too many options to avoid the danger of early specialisation.

Defect of early specialisation

17. All educationists agree what Lord Robbins during the discussion with the Commission emphasised that early specialisation is dangerous. He even said that he was critical of the Sixth form in U.K. which meant

early specialisation at the age of 16 to 19. In our system of higher secondary education early specialisation is introduced at the age of 14. This is the greatest defect of higher secondary education which is to be removed in the new pattern which the Commission could recommend to the country. A certain flexibility required for doing this is perhaps made available in a pattern described as 10 + 2 + 3. This really means that up to 10 years there will be general courses of different areas of elementary knowledge for all children with a few built-in-options. Even here loose phrases like social studies have to be defined clearly as history and geography. Similarly other subjects have to be properly defined to mean what they are. But certain subjects like drawing, painting, music etc. have to be put in at the appropriate stage as optional to students. During the 2 year course after the 10th class there could be three streams, one for humanities, one for science and one for commerce. Here broad preparation for university courses should be done and some could be terminal as entry to occupations. Some of the courses which are being taught in the first year of the three year degree course could be brought down to the second year of the two year course. These again will have to be intensified and modernised in relation to developments of modern knowledge as similar courses for children of the age group 16 to 18 or 19 in advanced countries. Those who take up science will have to be prepared for higher courses in engineering and technology, medicine and agriculture and pure sciences - who will again have diversification after this 2 year course into different types of institutions. The present system of 5 year integrated course in engineering will then undergo a proper change of 4 year engineering course after an intensive training in science in a two year course. Today the student is hardly mature to decide whether he should take up engineering course or a science course. The best student in physics and mathematics chooses a course in engineering and finds too late that he was suited for theoretical courses in physics or chemistry or mathematics rather than applied courses in engineering. Such difficult situations will perhaps be minimised by the proposed structure.

Dr. Kothari on Early Specialisation

13. Further, it may be stated that Dr. D.S. Kothari, recognising the dangers of early specialisation, mentioned in his address at the Sixth annual conference of the All-India Science Teachers' Association, held at Udaipur on 26th December, 1961, as follows :-

" At the stage of school education, specialization should be avoided as far as possible. The bulk of the course should be common to all students. One of the serious defects of the present higher secondary school system in our country is that it requires a student hardly 13 years of age, to decide about the subjects he would later take up at the university. In other words the choice of occupation has to be made when a student has hardly the ability or is in a position to make that choice. It is now widely recognised that school education should be wide in character and avoid specialization."

Junior Colleges

19. It was this problem which was considered by Lord Robbins during his discussion with the Education Commission on 23rd December, 1964, when he pointed out that from his observation of Junior Colleges in California, U.S.A., he was convinced that these institutions provided education to a substantial number of persons who may not benefit from higher education proper. (Para 20 of the record of discussion).

20. 'Within the pattern of educational system, therefore, the idea is to provide preparation courses for students which are both functionally preparatory for a transfer to a Three-Year Degree Course and exclusively terminal. In other words, a large number of students after courses of two years in such a system could be well prepared to seek employment in different sectors of our economy and at the same time there will be a number who will be prepared for higher educational courses in different faculties like Engineering, Medicine, Agriculture, Science, Humanities, etc.

Advantages

21. There are two advantages in the system. In the first place, it is an answer to the problem of numbers who would now enter the junior colleges first, enabling them to decide, by virtue of their maturity of developing aptitudes, the courses they should take further. Thus a large number could be naturally discouraged, if they are not intellectually qualified and competent to benefit from university courses and our universities will not

be over-crowded. Secondly, it is an answer to the complaint of the universities that they get rather ill-prepared and ill-equipped students for the advanced courses in the universities. Moreover, the suggestion that there should be some admission restriction in the universities cannot be implemented in any programme of action except through this method. This method again has two aspects. One is that the student is well prepared for further education or employment opportunities and secondly, the numbers to the university courses get naturally restricted without any social pressures or complaints that when a student has qualified in a school leaving examination it is his right to go to the college and the Government should encourage opening of more colleges. In a large sense, the polytechnics, the training schools for primary teachers, the Industrial Trade Schools serve some purpose in diverting students from going to the colleges, but they are not the only answer for the large numbers and it is possible that we have to raise the standards when even the primary school teachers could be trained after 12 classes of education rather than 10 classes, so that their content of knowledge and understanding of methodology of teaching are intensive. Today, there are about one lakh of primary teachers in about 1300 training schools, some after the 8th class and some after the matriculation i.e. 10th or equivalent class. These are trained in ill-equipped training schools and are for primary and middle school teachers. The whole standard of primary and middle school teaching suffers on account of the bad preparation of these teachers.

Need for graduated stages
in educational structure

22. But this has only been stated by the way. Coming to the main point of the pattern of education, an important consideration is the social aspect of the problem. Nearly 135 colleges in arts, science and commerce were established in 1963-64 for about more than one lakh of new entrants, and it is expected that this pressure on opening of more degree colleges will increase over the next 20 years in the present system and at the present rate of development. We have been thinking of diversification. Educationists recognise that early diversification or early specialisation

are not conducive to development of a young man or woman. Moreover, special aptitudes and skills can only be developed through a variety of courses of education, at least for 10 years upto the age of 16, when students are mature enough to know their own interests and their guardians could be more convinced about the future of their children than earlier. The Sampurnanand Committee Report on Emotional Integration recognised this fact and indicated that there was need for more terminal stages in para 4.20, which is as follows :-

"4.20 There are other additional reasons which point to the desirability of making the end of the high school a terminal stage in secondary education :

- (a) There are many pupils among those who want secondary education who, however, do not need and may not benefit from an additional year of the same kind of scholastic education:
- (b) At the end of the 9-year integrated primary course, it is desirable to have two stages -
 - (i) the high school stage of general education without much specialisation, followed by
 - (ii) the higher secondary stage with provision for specialisation.

It may be noted that the multipurpose courses recommended by the Commission (Secondary Education Commission) are only general education courses with a practical bias which, in our opinion, should be only at the high school stage. The higher secondary stage should include vocational and semi-vocational courses, in which the students can specialise on the experience gained at high school."

23. They further state that there was need for 2 years of pre-university study, which may be done in an independent unit to be called 'Junior Colleges'. Their recommendations are in Paras 4.23, 4.24 and 4.25, which are as follows :-

" 4.23. As a high school stage at the end of 10 years is a necessity and as 12 years of education before the degree course is equally a necessity, we feel that a 2-year higher secondary or a 2-year pre-university stage is essential. Some of its advantages are :

- (a) Students will be one year older when they enter the degree course and will thus be more mature and able to do more advanced work than is possible now;

- (b) Specialisation in academic subjects as well as in technical and vocational subjects will be more practicable in the two-year period;
- (c) During this 2-year period students will have adequate time to have a mastery of the language which is the medium of instruction in the degree course."

"4.24 This two-year unit may be attached to high schools where it can be called the higher secondary classes or it may be attached to the degree college as pre-university classes. It can also be an independent unit and may be called "Junior college". Such junior colleges can be controlled and recognised by the State Education Department or the university or both. Students who successfully complete the higher secondary, pre-university and junior college course may be awarded a diploma to qualify them for different avenues of employment available to them.

"4.25 Pre-university classes will normally be a preparation for university courses, but the higher secondary course and junior college should be planned as multipurpose, or comprehensive institutions. They may provide :

- (a) The necessary pre-university preparation for students proceeding to degree courses;
- (b) All-round terminal education with a semi-vocational or semi-professional preparation;
- (c) Terminal education for a vocation."

24. Thus, it will be seen that there has been our own thinking in regard to this problem, both on 'explosion of numbers' and 'explosion of knowledge'. The approach is not based only on the practices of junior colleges now recommended by Lord Robbins for India, as obtained in U.S.A. or Japan, but we have independently also thought of the same remedy. This is clear from the recommendation of the Vice-Chancellors' Conference of 1962, quoted earlier, and the recommendations of the Sampurnanand Committee Report, mentioned above. Besides, the Panel on Education of the Planning Commission in August 1960 had already recommended the setting up of an expert committee to examine and review the pattern of Secondary Education for in their view, the 12 years' course, as recommended by the Sandler Commission and the University Grants Commission for school education was right and the "11 years' course of higher secondary education introduced during the last 7 years, was accepted in the country as an 'ill-considered compromise' "

Some current trends in the direction of junior colleges

25. It will thus be seen that educationists and various educational authorities have come to the same view, which is now shared by Lord Robbins.

Moreover, it will be seen that the current practices also point in the same direction. The first instance is the decision in Kerala where they have implemented a '2-year junior college' course preparatory to 3-year degree course. The second is the recent recommendation of the Conference of Vice-Chancellors and other educational experts of Andhra State at Hyderabad in late 1961 to have a 2 years' preparatory course before the 3-year degree course. The next example is the insistence of the U.P. Government in their recent decision stating that they do not want to reorganise the Secondary School system of 10 + 2 into a higher secondary system of 11 years, but they consider it desirable to have a 3-year degree course instead of 2-year degree course after the Intermediate stage. The high-powered Committee appointed by U.P. Government in 1961 (presided over by Minister of Education, Acharya Jugal Kishore) recommended:-

- (a) The 12 plus 3 pattern should be our ultimate aim.
- (b) Pending its adoption, when circumstances are favourable, the present 12 plus 2 pattern should continue and be sufficiently strengthened at both the secondary and university levels.
- (c) The 11 plus 3 pattern is not a practical proposition in the present educational set up of Uttar Pradesh.
- (d) The minimum age limit for admission, to first year B.A., B.Sc. and B.Com. should be 17 plus in the month of October following the date of admission.
- (e) Degree colleges may have Intermediate classes also. Colleges catering both for degree and post-graduate teaching may dispense with Intermediate classes."

Moreover, Sir John Sargent in his recent assessment of higher secondary education programme in West Bengal indicated that the 11th class should be made equivalent to Sixth Form in U.K. by addition of one more year.

26. Thus, there are current examples to support the thinking of the Sampurnanand Committee and the Vice-Chancellors' Conference. One additional example could be given and that is, in Delhi itself, which is the home of higher secondary education, the thinking of some teachers is that the students who come from the higher secondary schools are ill-prepared

for the Three-Year Degree Course, and they have been considering whether a one-year pre-university could should not be introduced. The teachers of higher secondary schools in Delhi, in their organisation known as the Post-Graduate Teachers' Association, have criticised the present system of higher secondary education, and their representatives, who are members of the All-India Secondary Teachers' Federation, in a seminar held in Calcutta in 1962, stated as follows :-

" The Seminar is unanimously of the opinion that the 11-class higher secondary school scheme has failed. It, therefore, recommends the pattern of 5 + 3 + 4 meaning 5 years of primary education followed by 3 years of junior or lower secondary and 4 years of higher secondary stage. The 4-year higher secondary stage is to be sub-divided into 2 stages of 2 years each. The first stage will be basically a continuation of general education pursued in the junior high school stage with an attempt at the exploration of individual interests, abilities and aptitudes of children. There will be 3 terminal points in the entire course of secondary education - the first one at the end of the lower secondary stage (at the end of 8th class), the second one at the end of the first half of the higher secondary stage (10th class) and the third one at the end of the higher secondary stage (12th class).

27. It will thus be seen that our own thinking is in this direction and now it has to take a definite form and operational measures. The main reason obviously is the problem of dealing with a large number of school-leavers at the age of 16 - who will soon number to 10 lakhs as qualified matriculates in the middle of the Fourth Plan - who need facilities for higher education and for whom junior colleges of two year would be perhaps the right answer before the select ones are admitted to university courses.

Pattern of junior colleges
and their organisation

29. It has been argued in the foregoing paragraphs that 'junior colleges' have to be established all over the country as buffer between the high schools, which number to more than 22000 and colleges which number to 2000. This system is very popular both in U.S.A. and Japan. In the U.K., a similar system in a restricted way is obtained in the Sixth Form. In U.S.S.R., after a 10-years school course, there is generally a 5-year degree course in most of the subjects, and in all these countries, the

age for university admission is 18 plus or 19. Considering both from the point of view of nature age at which the students should be expected exposed today to the extensive course of higher education and from the point of view of the larger numbers wanting to go to different types of institutions, the system of junior colleges would be found to be a convenient institutional device.

29. It is suggested that a 'junior college' is a better term than the 'intermediate college'. The idea is that in the first place, such an institution must be affiliated to a neighbouring university so that university standards in regard to admission qualifications of students and requirements of courses at the junior stage in relation to higher courses could be ensured. It is felt that the Intermediate Board of Education in U.P. does not deliver the necessary goods, because it is not controlled by the universities. On grounds of flexible administration and autonomy for educational purposes, it is suggested that :

- (a) Government should establish high school boards of secondary education for examination at the end of 10th class.
- (b) Universities should conduct an examination, awarding diploma of junior colleges in different disciplines in relation to junior colleges affiliated to the universities. For example, today about 3 lakhs of pupils appear for the high school Board of U.P. and 1.5 lakhs for the Intermediate Board in arts, science, commerce and agriculture. It is felt that while the U.P. Government should continue to have a Board at high school stage, the Intermediate Board should be disintegrated and the institutions be affiliated to the respective universities of Agra, Lucknow, Aligarh, Banaras, Allahabad and Gorakhpur. In this way, the universities will be able to establish their own standards in relation to junior colleges and the present complaint that the Board has grown too unwieldy as well as unable to control standards could be met. The universities, in their turn, will have to establish a machinery for this purpose like they did

when they were in charge of conducting the old matriculation and intermediate examinations. Conducting the examination at the end of the course of 2 years in junior colleges should be a helpful device for university finances, and should provide a certain financial cushion for their improvement programmes.

30. The university pattern that should be adopted in all states of the country would then be 10 years of school education from the age of 5 + or 6, with compulsory courses nearly in all subjects along with built-in or integrated options. The high school education may be 4 + 4 + 2 or 5 + 3 + 2 or 4 + 3 + 3 as the case may be in different states. But, the class contents may be generally uniform in all the states and certain framework of the courses should be the same. This will ensure proper text books preparation suitable for all and difficulties of courses today in science and mathematics in different classes in the various states will be eliminated. The elementary science courses as recommended by the Parliamentary Committee on Science Education in Schools can thus be introduced at the appropriate classes in a uniform way and there will be less difficulties about recommendation of text books, equipment, etc. within this pattern.

31. The other advantage of a system of uniform pattern of contents of courses would be for migrating students. Today a student of the 9th class from a school in Madras, Maharashtra, or Gujarat finds it difficult to get an equivalent class in the school in Delhi because the 11th class structure in those States equates with the 10th class structure of the 11th class pattern of higher secondary system. He cannot be put in the 8th class because that is low nor can he be put in the 9th class because that is a little too high. Thus he either gains or loses a year by being put in one of the classes after an examination for the purpose. Uniformity of class structure is, therefore, very necessary for a certain integration as recommended by the Sampurnanand Committee and it will be possible then that all states would be talking the same language when they discuss curriculum, syllabus courses, methods of teaching etc., in relation to

different classes.

32. There are some difficulties in bringing about this. But the main difficulties in a state like Madras, Maharashtra, Gujarat who have 11 year system of high school will not be there when they recognise that the total span of school and college education will be only 15 years. What could happen is that their present 11 year structure will have to be compressed into a 10 year structure of school education as has been done in Kerala and also in Andhra and Mysore. Madras had also done it but have reverted back only recently to the Maharashtra, Gujarat pattern. But there is no addition of one more class in the total span of school and college education in these States excepting that courses will be more intensified and structure will be different. After the 11 year school course is compressed into 10 years on the basis of certain standards that have to be attained at the end of the school course a 2 year junior college course could be introduced with different streams of science, arts and commerce. Agricultural courses in colleges should be taken only after a student has done a science course in the junior college. In the same way the courses in the engineering and medicine would be taken after the junior college examination or 12-year previous education. The law course should only be taken after the student has done his degree in arts or science. Other specialisations could be fitted into this pattern in a detailed way by different universities.

33. The question then arises with reference to the states which have a 10 year high school system like the Punjab, U.P. Rajasthan and Bengal. All of these will have to add one year more except U.P. where the additional year will have to be put in the degree course as they have not accepted the three-year degree pattern. In the Universities of Aligarh and Banaras where a three-year degree course has been introduced the students who pass from the Intermediate Board Examination of U.P. are admitted in the second year of the three-year degree course. In a sense these courses which are known as 1 + 3 are the same as the old pattern of 2 + 2. The question in the

states is the addition of one year to the total span which is of 14 years. But in view of the recommendation of the Vice-Chancellors quoted earlier and in view of the importance of standards at the higher education courses as well as the school courses the Education Commission should be in a position to recommend **that in** these states one year has to be added either at the Intermediate stage or pre-university stage or at the college stage as the case may be. Punjab, Rajasthan and Bihar have not very much gone ahead with the higher secondary courses. West Bengal has gone ahead about 50 per cent but the opinion of the university teachers as well as school teachers is not much in favour of the system and the recent Sargent Report on West Bengal is all in favour of an addition of a class to the 11 year higher secondary structure.

34. The question is of Delhi Administration and Madhya Pradesh which have gone ahead with the higher secondary pattern. Here the change has to be kept perhaps a little flexible so that ultimately they also fall into the national pattern. In the transitional state it is possible to add one more year to the college course as pre-university but ultimately they can also be brought into the national pattern when separate junior colleges for new entrants have been established.

35. A Note on junior colleges, their objectives, functions and characteristics is enclosed at Appendix I. This is a general note. The list of transfer and terminal curricula provided by junior colleges is given at Appendix II. This would give an idea of the coverage of various subjects in both terminal and preparatory courses in the junior colleges which could be established in a junior college movement in the country. ~~Many~~ programmes of adult education, continuance courses, extension courses, part-time course, correspondence courses, short-term courses, special courses for women could be introduced into the system. Some institutions will specialise in courses preparatory to university education. Others will specialise in terminal courses of a vocational or occupational nature. A third category could be of colleges which will specialise in teacher training. But there will be a tremendous educational activity in this area which will mean

introduction of courses of study in relation to the increasing types of occupations where training requirements of all types would be necessary in an ever developing economy.

Staffing

36. There should be no difficulties about staffing of the junior colleges. There should be insistence on atleast a second class master's degree in science, arts or commerce as the case may be for the teacher to be employed. As these are advanced courses like in grammar schools in U.K. insistence on pedagogical qualifications need not be there but it may be useful for teachers to have such a qualification. On the other hand some of the teachers who are good scholars would consider this as an apprenticeship to becoming college or university teachers later, for a short period say of 3 to 4 years or so during which time they could pursue research work. Thus some percentage of such teachers would always aspire to be college and university teachers and colleges and universities would draw upon for their staff from among the talented teachers of the junior colleges. Today good M.A. and M.Sc. teachers are not available at the higher secondary schools even in Delhi because it is a blind alley for a teacher particularly if he is a scholar and if he has ambitions for doing research work. Very often he would prefer to be a junior lecturer or research assistant in a college or university on a lower salary than a higher secondary school teacher in a better scale of pay. It is also suggested here that instead of insisting on a training or pedagogical qualifications for the teachers of junior colleges they should be taken through certain summer institutes of 6 weeks or so and certain seminars on teaching methods. A qualification of attendance at 2 such summer institutes and a seminar should equip the teacher with the knowledge required for teaching and the methods of teaching and as an inducement to attend such courses the teacher should be awarded one or two increments after completion of such courses. Today nearly 5000 college teachers are being added to the 135 new colleges that are being established every year. These are very often raw M.As. and M.Sc.s. and it will be in the interest both of the teachers themselves and education that they underwent this apprenticeship training

in the junior colleges before they get their positions in colleges and universities. Quite a sizable proportion of teachers of college and university would be of course appointed directly in a system of university education which works on the principle of 'feed-back' but the colleges and the universities will feed the junior colleges in the same way as they will feed their own departments. The training colleges will be necessary for training teachers at the middle school and at high school levels and not for training junior college teachers.

37. It is felt that the existing 1300 training schools for primary teachers could also be converted at an appropriate time into junior training colleges and their contact with the universities established so that both from the point of view of studies, content of knowledge and curriculum courses in these institutions they will be raised into institutions of better standards and will produce better teachers of our primary schools. The teachers of middle schools and high schools have to be normally graduates who have undergone also pedagogical courses of atleast one year in a training college affiliated to a university. There is then the question of other types of institutions which cater to the students after completing the high school or the matriculation course. There are about 270 polytechnics with an admission capacity of about 50000 students a year and about 320 industrial training institutions with an admission capacity of a lakh of students some of them being admitted after they have passed the 8th class. The polytechnics have a three year course after matriculation and the I.T.Is have a 18 months course of vocational training. In a flexible system of education these institutions could continue in the same way for some time and adjustments may take place when some junior colleges having emphasis on vocational courses get themselves involved in their relationships with the polytechnics and I.T.Is. Perhaps the way in which technicians and craftsmen which these institutes produce would be on somewhat similar lines as in other countries like the U.S.A. and the U.S.S.R. and this will influence the further developments of these institutions. Today the polytechnics are

controlled by the State Boards of Technical Education and they come for guidance under the Ministry of Education through All India Council for Technical Education. The industrial trade institutions are also dealt with by separate State Boards and they come under the guidance of Ministry of Labour & Employment, through the National Council for Training in Vocational Trades established in 1956 under the aegis of the Directorate General of Employment & Training. Constant re-thinking about the adjustments of relations of various institutions of certain patterns at the middle level training along with the junior colleges will be there and there should be re-evaluation of such developments at the end of 5 or 10 years periodically. A dead uniformity in this respect may not be conducive to the various types of experiments that must continuously be made in the different sectors of education and training. We, however, feel that the basic school structure upto 10 classes has to be uniform in all the states from the point of view of curricula and courses with a great deal of scope for experimentation and built-in options.

Administration of Junior colleges

38. In the foregoing paragraphs we have discussed a certain organisational pattern. We have indicated that the junior colleges should be affiliated to the universities and this has to be done mainly for two purposes, one, prescription of courses of study for the 2 years and the other the examinations. The university should also be incharge of certain maintenance of standards for the purpose. These institutions will be mostly established by private bodies and some if necessary could be established by the state governments. Some will be attached to the degree colleges but there should be separate wings of the colleges where they are established in this way. They should all get a maintenance grant from the state government and for that purpose it could be necessary perhaps for the state government to bring them under the administrative supervision of the Director of Education. Like other high schools in the state the appointment of a Deputy Director for junior colleges in the states may be one of the devices that might be introduced by the states, and there could be frequent meetings of these Directors and Deputy Directors Incharge of junior college administration

in order to survey the field and suggest improvements. Since the junior colleges will be affiliated to the universities it is possible that the development grants for these should be the charge of the University Grants Commission. The other alternative will be to provide the necessary funds with the Director of Education for both maintenance and development of the junior colleges.

Junior colleges for encouragement
of women's education

39. A point that may be mentioned here is that a large number of junior colleges will have a large number of women included in the enrolment. We should generally recommend co-educational institutions at this level as well as at all higher education levels - But quite a number of junior colleges will be established specifically for women with e.g. home science courses. Most women look forward towards marriage and they could prefer a 2 year junior college course with a diploma as a qualification providing home making education. In Japan more than half of the junior college students are women and in many cases a junior college has become primarily a women's college. The women's polytechnics could be easily absorbed into such a system of junior colleges - the largest sector of course is the junior colleges of education which should train women primary teachers. A junior college is thus a great device for encouraging women's education after the school stage.

A select bibliography on the subject is given in Appendix III.

A NOTE ON THE JUNIOR COLLEGES

THE JUNIOR COLLEGE IN U.S.A.

The Junior College in Educational Ladder

The United States of America has created two unique institutions; the two-year 'junior college', increasingly called the 'community college', and the four-year liberal arts college. These two innovations, the one bringing higher education to the students' own doors, and the other offering a general education instead of the professional studies traditionally associated with the university, have been primarily responsible for the unprecedented college enrolment in the U.S.A. The junior college, this 20th century phenomenon in American education, is a result of man's inventive genius in devising ways to meet society's increasing demand for accessible and appropriate post-high school education giving two-year course of instruction - the freshman and sophomore years of the 4-year college and the university. The junior college stands as a cooperating institution between the high school and the 4-year college. It occupies an important position in American educational ladder, unquestionably higher than the 'glorified high school', distinctly lower than the scholarly specialisation of the university.

The Progress and Popularity of the Junior College

2. An idea of the popularity of this kind of institution can be had from the following figures:

<u>Year</u>	<u>Number of Junior Colleges</u>		
	<u>Public</u>	<u>Private</u>	<u>Total</u>
1921-22	67	136	203
1938-39	258	317	575
1957-58	391	276	667
1959-60	390	273	663
1963	-	-	over 700

P.T.O.

1. Fields, Ralph R.: The Community College Movement; Administration in Education Series. McGraw Hill Book Co. Inc. 1962, page 37.
2. Cleazer, Edmund J.: American Council on Education, Washington: American Junior College, Sixth Edition, 1963.

In 1962, 55% of students in junior colleges were studying in public institutions; i.e. those maintained by the community, county, State or city. In 1962 out of a total of 4,206,672 students enrolled in all colleges and universities, 592,328 or 14% of the degree-credit enrolment were studying in junior colleges. 'One student in every 4 beginning his programme of higher education in 1963 in the U.S.A., enrolled in a junior college'.²

According to Edmund J. Gleazer Jr., Executive Director of the American Association of Junior Colleges, 'by the fall of 1965, junior colleges in the U.S.A. would be enrolling 1,121,000 students and will be employing 37000 teachers. During 5-year period between 1965 to 1970 the enrolment will rise to 1,735,000 students with a staff (full-time) of 49,000, and by 1975 the enrolment will be 2 billion'.³ Current data indicate that total enrolments in junior colleges are increasing at a faster rate than total enrolment in 4-year colleges. 'Between 1939 and 1961, for example, the total degree-credit enrolment increased by 250% in 2-year colleges and by 177% in 4-year institutions'.⁴ All types of 2-year colleges enrol large number of students who do not have as an immediate goal the traditional bachelor's or higher degree. Some are adult students who are not concerned with either transfer credit or occupational preparation. Others are preparing for technician and semi-professional positions. During each of the 5 succeeding years that the Office of Education, of the

P.T.O.

2. Ibid

3. The Junior Colleges in '1960's, in the School and Society - October 19, 1963 Vol. 91, No. 2230, page 297.

4. The 2-Year Community College, U.S. Department of Health, Education and Welfare : Office of Education.

United States Department of Health, Education and Welfare, has collected data on enrolments and graduates in organised occupational curriculum, 2-year institutions have accounted for an increasingly larger percentage of enrolments. 'Of the quarter of a million students now in these programmes, 2/3 are in 2-year institutions'⁵ and they belonged to the ages from 16 to 60 at least in some of the institutions according to Lamar Johnson in publication, "The Public Junior College" of the National Society for the Study of Education, 55th Year Book - Part I, 1956.

The principal types of junior or community colleges that have developed are (a) the locally controlled and supported junior or community college with or without state aid, (b) the junior college or technical institute fully controlled and supported by the State, and (c) the two-year extension centres of a 4-year college or a university.

The Objectives and Functions of the Junior College

3. According to Dr. Medsker "no unit of American higher education is expected to serve such diversity of purposes, to provide such a variety of educational instruments, or to distribute students among so many types of educational programmes as the junior college".⁶ In a system of higher education that prides itself on diversity, junior colleges will not be mere centres for the accommodation of hordes of students. "Community Colleges", as the Board of Regents of State of New York have expressed it, "have a meaning and competence in their own right". They can provide as well technical-

P.T.O.

5. Ibid

6. Medsker, Leland L.: The Junior College - Progress and Prospects, page 4.

terminal education, competent pre-professional and general education instructions.

4. The proponents of the junior college, as a distinctive institution have charged it with heavy responsibilities. Among the functions which are usually ascribed to it, the following are particularly significant in a diversified educational system:

- (i) providing 'terminal' curricula of 2-years or less in length;
- (ii) providing 'transfer' curricula preparatory to advance undergraduate education in 4-year institutions;
- (iii) providing general education for all students, terminal and preparatory;
- (iv) aiding students to make educational and vocational choices that are consistent with their individual characteristics; and
- (v) offering a wide range of general and special courses for adults.

To those who can't finish their 4-year course in a university, or would have only come to the intermediate stage in any case, 'the junior college offers an opportunity to contribute to better citizenship by a general education of 2-years designed to promote broader and better understanding in the course that emphasizes breadth, unity and understanding'.

5. Consistent with the objectives which the junior colleges were expected to reach, they offer three different kinds of programmes and courses. The courses for the 'transfer' students are usually intended to provide the same kind of instruction that the 4-year institutions are offering in their first two years. The students are, therefore, given general courses in different subjects so that they can begin specialisation in their third year. The 'terminal' programmes are

quite varied. Some of them are remedial courses, i.e., those intended to help the students who did not make enough progress in the particular subject in the high school. These 'late-bloomers' may find opportunity to repair certain academic deficiencies before taking bachelor's programmes. Other 'terminal' programmes are common to the 'transfer' courses in what may be called the "core" subjects. Then there are vocational or occupational courses, which in fact are the special feature of the junior college. These may range in such subjects as electronics, machine technology, nursing, secretarial work, garment-making, hotel and restaurant management, journalism, laboratory techniques, auto-mechanics, music, salesmanship, watch-repairing, police science, agriculture, etc. In addition to these 'terminal' and 'transfer' programmes, most junior colleges, particularly the public ones, also function as community centres for adult education and organise lectures, evening courses, forums, panel discussions, short-term courses, conferences and workshops and often offer special science courses with the cooperation of teachers, museums and other facilities in neighbouring 4-year colleges and universities.

Characteristics of Junior or Community Colleges

6. (1) The unique characteristic of a junior college is its contribution to the community in particular and the society in general. From the community's point of view, the junior college provides an upgrading of skilled personnel and improves the educational, cultural, and artistic climate of the area. It creates self integrity by providing terminal and adult programmes of greater depth and requiring greater maturity than are offered in high schools.

(2) Most of the junior or community colleges offer some 'terminal occupational' curricula designed to prepare students for immediate employment in occupation on variety of occupations. Completion of 2-year curriculum (either transfer or terminal - occupational) is generally recognised by an academic award, most often an associate degree, such as associate in arts, associate in applied science, associate in business, etc.

(3) The junior or community college is a comprehensive institution and in a sense it is a multipurpose institution of the intermediate type. It prepares a local student upon completing schooling for the first two years of the American College or University. Secondly, it offers preparation for certain technical vocation or occupation such as accounting, engineering, teaching, nursery, and hundred of other courses of the same type for the age-group 18-20 both men and women. Thirdly, educational needs of adults of the community are satisfied by this institution. In other words, it is an institute of further education like the 'county colleges' of the U.K. It caters to the requirements of students who seek careers in business and industry. Fourthly, the educational opportunities for adults, particularly, in fields like language, literature, art, music, dramatics, etc. are provided by these institutions. There are also special courses of short-time duration on home and family life, consumer economics, psychology of personality and nuclear physics. An idea of comprehensiveness of programmes offered by the community colleges may be had by referring to the list of actual curricula reported by the junior colleges (Appendix II) in American Junior Colleges, 1963, edited by Edmund J. Gleazer Jr.

(4) The junior or community college is a democratizing agency. It has a liberal admission policy and provides for a well-developed guidance programme to the day, the evening, the full-time, and the part-time students. It offers opportunities to those students whose academic background may preclude their entrance to 4-year colleges or universities. Tuition rates are low and in some states no tuition is charged in public controlled community colleges. The establishment of an increasing number of this institution has brought them close to the homes of many potential students thus again reducing the total cost of attendance. In a study Koos showed that in median school systems with junior colleges, the median percentage of graduates entering college was almost 2½ times larger than that for systems without junior colleges. For the higher socio-economic groups it was about 1½ times larger, and for the lower socio-economic groups about 3½ times larger.⁷ In one county the percentage of high school graduates beginning college work rose from 10% to 52% in 10 years following the opening of a community college.⁸ Proximity to home encourages part-time attendance of students and makes the junior college an important contributor to equality of educational opportunity.

(5) Most of the community colleges are community-centered, locally supported and locally controlled and the population is proud of these institutions. This

P.T.O.

7. Medsker, Leland L.: The Junior College - Progress and Prospects, page 20.

8. American Council on Education: American Junior College 1960, page 7.

increases the responsiveness to local needs and heightens the interest of the local citizens in the educational programmes. The college campus is essentially community resource for cultural, recreational and civic needs.

(6) A community or junior college is dedicated to life - long education. It plans and coordinates educational opportunities and provides for continuing education for the betterment of the community. This really makes for the comprehensiveness of the institution.

(7) To fill in these purposes and perform these functions the community college is adaptable both in the sense of adjusting and of modifying fittingly, i.e. adapting to the changing purposes and demands of the community.

(8) A recent survey of the junior college entrants⁹ has found that although about 66% of them have initially the intention to transfer to the third year of a 4-year institution, only about half of them, i.e. 33% of the total, actually did so. This means that for 2/3 of the entrants to the junior colleges, these institutions are in effect the end of the formal education.

(9) The community colleges provides guidance and counselling service to the students. The college serves a sort of distributing agency which helps students to find places in higher educational institutions, or in industry.

P.T.O.

9. Medsker, Leland J: The Junior College - Progress and Prospects. p.110.

The two-year comprehensive community college, characterised by low cost to the student and the community, geographical availability and direct responsiveness to community needs, offering both terminal and technical - terminal programmes, are considered to be the best single means of (a) accommodating the future demand for higher education, (b) embracing the increasing heterogeneity of abilities, tastes and attitudes represented in students graduating from secondary schools, and (c) providing the education necessary for an emerging group of semi-professional occupations.

General Education in the Junior Colleges

7. General Education has long been urged as a proper programme for the junior colleges. The enrolment in the junior colleges differs greatly in experiences, needs, capacities, aspirations and interests. Students' differences beget divergent needs. The junior college provides an excellent medium for rounding out the general education; further a programme of general education is desirable to complement the more technical courses in vocational education.

An analysis of the philosophy, nature and extent of junior college responsibility and their statements of educational consequences of common needs was attempted by a Junior College Workshop¹⁰ in California in 1950 as follows:

"The general education programme aims to help each student increase his competence in

1. Exercising the privileges and responsibilities of democratic citizenship;

P.T.O.

10. Johnson, B. Lamar: 'General Education in Action', A Report of the California Study of General Education in the Junior Colleges: American Council on Education, Washington D.C. 1957 pp.21-22.

2. Developing a set of sound moral and spiritual values by which he guides his life;
3. Expressing his thoughts clearly in speaking and writing and in reading and listening with understanding;
4. Using the basic mathematical and mechanical skills necessary in every day life;
5. Using methods of critical thinking for the solution of the problems for the discrimination among values;
6. Understanding his cultural heritage so that he may gain a perspective of his time and place in the world;
7. Understanding his interaction with his biological and physical environment so that he may better adjust to and improve that environment;
8. Maintaining good mental and physical health for himself, his family, and his community;
9. Developing a balanced and social adjustment;
10. Sharing in the development of a satisfactory home and family life;
11. Achieving a satisfactory vocational adjustment; and
12. Taking part in some form of satisfying creative activity and in appreciating the creative activities of others.

General Education may, then, tentatively be defined as a process of achieving the goals set forth above.

There is a wide diversity in general education practices among the junior colleges. They undertake programmes of general education to serve the purposes of full-time and part-time, terminal and transfer, and college-age and adult students. The general education courses fall into at least in 5 groups; communication; social science, natural science, humanities and personal adjustment. In fact, some of the objectives of general education, such as citizenship and participation in aesthetic experiences, are more realistically involved in the extra-class experiences than they are class-room activity.

LIST OF 'TRANSFER' AND 'TERMINAL' CURRICULA AND
EVENING PROGRAMMES PROVIDED BY THE JUNIOR COLLEGES*

A - TRANSFER PROGRAMMES

1. Agriculture
 - (a) Agricultural Engineering
 - (b) Agronomy and Field Crops
 - (c) Animal Husbandry
 - (d) Horticulture
2. Architecture
3. Business Administration
4. Engineering
 - (a) Aeronautical
 - (b) Chemical
 - (c) Civil
 - (d) Electrical
 - (e) Mechanical
 - (f) Mining
 - (g) Petroleum
5. Forestry and Wildlife Management
6. Home Economics
 - (a) Clothing
 - (b) Food and Dietetics
 - (c) Interior Decorations
7. Humanities
 - (a) Art
 - (b) Drama
 - (c) English & Literature
 - (d) Foreign Language
 - (i) French
 - (ii) German
 - (iii) Russian
 - (iv) Spanish
 - (e) Music
 - (f) Philosophy
 - (g) Speech
8. Industrial Arts
9. Journalism
10. Law
11. Librarianship
12. Mathematics

P.T.O.

*American Junior Colleges, Edmund, J. Gleazer Jr., 1963.
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13. Medical Fields
 - (a) Dental Hygiene
 - (b) Dentistry
 - (c) Medicine - Osteopathy
 - (d) Nursing
 - (e) Occupational Therapy
 - (f) Optometry
 - (g) Pharmacy
 - (h) Public Health
 - (i) Veterinary Medicine

14. Natural Science
 - (a) Astronomy
 - (b) Bacteriology
 - (c) Biology
 - (d) Botany
 - (e) Chemistry
 - (f) Geology
 - (g) Physics
 - (h) Zoology

15. Social Sciences
 - (a) Criminology
 - (b) Economics
 - (c) Geography
 - (d) History
 - (e) International Relations
 - (f) Political Science
 - (g) Psychology
 - (h) Social Science

16. Teaching
 - (a) Elementary
 - (b) Secondary

B - TERMINAL PROGRAMMES.
(Eight Vocational categories)

1. Agriculture
 - (a) Agricultural Business
 - (b) Animal Production
 - (c) Crop Production
 - (d) Farm Machinery
 - (e) Flower shop Management
 - (f) Landscape Design
 - (g) Nursery Practice
 - (h) Ornamental Horticulture

2. Applied Arts
 - (a) Advertising and Graphic Arts
 - (b) Ceramics
 - (c) Commercial Art
 - (d) Commercial Photography
 - (e) Fashion Illustration
 - (f) Graphics
 - (g) Technical Illustration

3. Business

- (a) Accounting
- (b) Advertising and Display
- (c) Banking
- (d) Clerical Operations
- (e) Data Processing
- (f) Insurance
- (g) Management
 - (i) Store Management
 - (ii) Small Business Management
 - (iii) Supervision
 - (iv) Merchandising
- (h) Real Estate
- (i) Receptionist
 - (i) General
 - (ii) Medical
 - (iii) Linguistic
- (j) Secretarial Science
 - (i) Executive
 - (ii) Legal
 - (iii) Medical
 - (iv) Technical
 - (v) General

4. Engineering and Industrial Technology

- (a) Aeronautical or Aero Space Technology
- (b) Air Conditioning and Refrigeration Technology
- (c) Architectural Engineering Technology
- (d) Atomic Power Technology
- (e) Atomic Products Technology
- (f) Chemical Technology
- (g) Civil and Highway Engineering Technology
- (h) Computer Technology
- (i) Drafting Technology
 - (i) Architectural
 - (ii) Design
 - (iii) Engineering
 - (iv) Industrial
 - (v) Machine
 - (vi) Petroleum
- (j) Electrical Power Technology
- (k) Electronics Technology
- (l) Industrial Technology
- (m) Mechanical Technology
- (n) Metallurgical Technology
- (o) Plastic Technology
- (p) Surveying and Topographical Drafting Technology

5. Trade and Industrial Curricula
- (a) Airframe Construction
 - (b) Aviation Engines
 - (c) Air conditioning and Refrigeration
 - (i) Manufacture
 - (ii) Repair and Maintenance
 - (d) Appliance Repair
 - (e) Automotive
 - (i) Auto Mechanics
 - (ii) Auto Machine
 - (iii) Auto Body and Painting
 - (f) Building Construction
 - (i) Carpentry
 - (ii) Construction Supervision
 - (iii) Mill and Cabinet
 - (g) Diesel Mechanics
 - (h) Electricity and Electrical Machinery
 - (i) Farm Machinery
 - (j) Machine Production
 - (i) Tool and Die
 - (k) Metal
 - (i) General Metal Fabrication
 - (ii) Welding
 - (iii) Sheet Metal
 - (l) Office Machine Repair and Service
 - (m) Radio and Television
 - (n) Ship construction and repair
6. Health Fields
- (a) Dental Hygienist
 - (b) Dental Technician
 - (c) Dental Assistant
 - (d) Dental Secretary
 - (e) Medical Technician
 - (f) Medical Secretary
 - (g) Medical Librarian
 - (h) Nursing (RN)
 - (i) Nursing (VN)
 - (j) Optical Technician
 - (k) Psychiatric Technician
 - (l) Sanitarian
 - (m) X-ray Technician

7. Apparel, Culinary and Homemaking Arts
- (a) Child care and Nursery School
 - (b) Clothing
 - (i) Apparel Design
 - (ii) Dry Cleaning
 - (iii) Garment Manufacture
 - (iv) Textiles
 - (c) Decorative Arts
 - (i) Interior Decoration
 - (ii) Upholstery
 - (d) Food
 - (i) Baking
 - (ii) Catering
 - (iii) Hotel and Restaurant Technology and Management
 - (e) Home Management
8. Miscellaneous Curricula
- (a) Broadcasting and Telecasting
 - (b) Correctional Science Supervision
 - (c) Custodian - Supervision and Management
 - (d) Cosmetology
 - (e) Fire Training
 - (f) Forestry
 - (g) Journalism
 - (h) Law Enforcement - Police Science
 - (i) Library Assistant
 - (j) Music Commercial

C - EVENING PROGRAMMES

- (a) Agricultural Pest Control
- (b) Taxation Principles & Procedures
- (c) Credit Administration
- (d) Negotiable Instrument
- (e) Supervision Techniques
- (f) Child Developments
- (g) Play Production & Theatre Laboratory
- (h) Creative Writing
- (i) Conversational French
- (j) Spanish/Russian
- (k) World Religions
- (l) Medical Lecture Series
- (m) Mining Geology
- (n) Contemporary World Problems; Family & Marriage Counselling; Law Enforcement - In-Service Series; Building Codes
- (o) Engineering Test Laboratory
- (p) Appliance Repair
- (q) Automatic Auto Transmission.

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AN ALL-INDIA EDUCATIONAL IMPROVEMENT PROGRAMME

SOME Matters to be Considered

Dr. John Guy Fowlkes

By Way of Getting Started (Usually Called Introduction)

The opportunity to have spent the last five weeks in hearing and to a small degree joining in discussion of educational affairs in India has been deeply appreciated and truly enlightening. The high ability matched by extraordinary commitment of the members of the Education Commission are indeed impressive and inspiring. The skill of the Chairman of the Commission and the demonstrated interest of a long list of public officers is heartening.

It would be presumptuous for the writer to attempt to suggest, much less list, specific matters that should be inaugurated or the calendar of execution for any actions which seem indicated. On the other hand, it seems that the plight of educational institutions and the circumstances which prevent the adoption of prompt and operating changes in the educational programme are universally differences of degree and not of kind.

There seems to be ample evidence to conclude that an All National Educational Improvement Programme is demanded throughout the world, specially among the larger, and hence quantitywise at least, more important nations of the world. The following list of items is submitted for the perusal of and cogitation by the Education Commission of India, 1964.

1. Recognition of the Need for Sharp Change Educationally Demanded:

It appears that only a small minority of individuals in any country recognise the urgency for far-reaching

change in educational practices in institutions for all age-levels. The basis for what may appear to some, such a drastic statement has its foundation in the nature of learning, and the traditional concepts of provision for the stimulation, direction of and consultation to learners.

Learning is a personal individual matter. Learning may or may not take place in the presence of other individuals. Whether alone or in the presence of others, learning is an individual and a personal matter.

It would seem, therefore, that what has traditionally been termed teaching, basically should embrace not only so-called teachers but a wide array of other teaching staff members and essential spaces (of unique designs) towards given kinds of learning and a wide sweep of equipment along with a diversified list of printed materials including books, magazines, charts, etc.

In the light of the above comments, it seems clear that all educational institutions should, as nearly as is feasible, make it possible for each and every individual to learn at his own rate. This can best be achieved by emphasis to each learner that learning is his affair and that save for the exchanging reactions to ideas and ideals with other learners, learning rests upon the individual and not on any other single individual nor group.

It, therefore, follows that traditional practices in the grouping of students, the calendars of educational institutions - day-wise, week-wise and year-wise - seem to demand sharp revision (e.g. (a) Why should all schools not be held six days a week? (b) What are the optimum lengths of so-called class periods? How many times should classes meet per week, month, year for varying age-levels in various disciplines? (d) Should the length of class periods vary for different types of material being learned

and also in relation to the age-level of the learners?)

The recognition of individual differences among teachers is just as imperative as the recognition of individual differences among learners. Ability to lecture, also to diagnose, to recommend remedial treatment for academic difficulties are not held universally to the same degree by all teachers although it is granted that some skill in all of these and other specialised aspects of teaching should characterise all who are called teachers.

Suffice it to say that continuance of a discussion of the improvement of educational programmes and the raising of the quality of education in terms of traditional and largely, present day practices seems to be a futile and, therefore, wasted effort.

2. Is a Shift in Educational Objectives Indicated?

By and large, the educational objectives of all educational institutions for all age-levels is focussed on memorisation and relatively isolated (and often out-dated and indeed incorrect) minutia. Broadly the traditional objective of educational institutions has been that of recall.

According to Bloom's Taxonomy of Educational Objectives, recall is the lowest order of intellectual activity. The more rigorous intellectual activities, going up the scale, are comprehension, application, analysis, synthesis, and evaluation.

Bloom might have added that the education of the heart (equally as important as the education of the head) is even more complicated than the education of the head (social studies at all age-levels is especially important in this connection). The phenomenon of human motives seems certainly an unavoidable matter for serious attention in all educational institutions at all age levels.

Hence understanding, and to the maximum degree feasible, skill in the techniques of motivation certainly seem essential among those who carry the title of teacher, professor, et al in the educational world.

In the light of the indicated demand for a shift in educational objectives a corresponding shift in the staffs required for educational institutions appears clear. Clerical, secretarial and other ancillary specialists as active partners with teachers seem indicated.

3. Qualifications for Primary and Secondary Teachers:

It seems increasingly clear that requirements for qualifying for teaching should be comparable (sometimes termed the same) for both primary and secondary teachers. The assumption that, putting it loosely, almost anyone is qualified to teach young children (i.e. to teach in the primary schools) is fundamentally false. Certainly one, if not the most valuable, benefit of going to school is learning how to learn.

The hypothesis that strong universities, colleges and training schools can be built upon relatively weak secondary schools and strong secondary schools in turn can be developed on the basis of weak primary schools seems to be illogical and demonstrably untrue. Were the choice to be made by the writer, provision for scholarly, inspiring, sympathetic and high skill in the handling of human beings for the primary schools, would take priority over secondary schools and institutions of higher learning in case inadequacy of funds did not allow universally high quality staff throughout all educational institutions. For those to whom this position seems questionable, they may well familiarise themselves with the wanton waste that results from the development and establishment of attitudes of indifference, boredom and indeed antagonism towards

learning found so widely throughout the world among primary and secondary schools.

There is telling evidence that both qualitatively and quantitatively the learning capacity of primary and early secondary school enrollees especially, has been markedly under-estimated. The measure of a good teacher is not how much knowledge he can display personally (after all only an infinitesimal fraction of existing knowledge can be acquired by any one individual), but rather how familiar is he with the sources of knowledge and even more critically important how skillful is he in tutoring learners in the utilisation of knowledge, i.e. the processes of inspection, analysis, deduction and generalisation.

4. Inservice Training of University and College Staffs:

The assumption that because a person has acquired a degree of scholarship in a given field he is qualified to "teach" is widely demonstratedly false. Not only junior members but indeed total colleges and university staff under the leadership of such officers as Vice-chancellors, Deans, Departmental Chairman, et al should regularly focuss their attention on how students, whom they are expected to "teach", can be stimulated more productively. Regularly scheduled seminars might well be held on this matter. The "New Curricula" in Science and Mathematics are "new" to considerable degree because of different organization, emphasis and equipment in comparison with such matters utilized in the past.

5. Universities and the Preparation of Primary and Secondary School Teachers:

All universities and colleges in any nation have a strong stake in the primary and secondary schools. This seems particularly true in the more largely populated nations and, therefore, specially for India.

It would seem that active participation by all universities in the preparation of primary and secondary school teachers should be inaugurated in India as soon as feasible and continued thereafter.

The particular form of participation of universities in the preparation of primary and secondary school teachers might well vary.

It would seem that every university should include a School or College of Education. The overwhelming majorities of faculties of such schools or colleges of education might well be not specialists in pedagogy but rather distinguished scholars in the various subject matter fields. To be sure, competent and able scholars (along with high expertise) in the nature and formation of emotions, human learning and the psychology and skills of motivation should be provided. Similarly, basic foundations such as historical, philosophical and sociological foundations of educational institutions should be offered. In some institutions, participation and preparation of secondary and elementary teachers might well take the form of affiliation between a university and a training school, with the university participating to a high degree in the development of the curriculum of the training school and also helping in the selection of the faculties of such schools.

6. The Number and Proximity of Teacher-Training Schools:

The number of teacher-training schools and their proximity should be determined basically in terms of the distribution of population, the feasibility of travel and the extent to which participation in the preparation of teachers is recognised as an essential part of a university's programme. As just indicated, it seems sound to have all teacher-training schools affiliated with a university. In the light

of the fact that such relationship has not prevailed in India along with large improvement in the highway development in India whereby travel is markedly easier and heavier than in the past, it seems possible that in some areas two or more teacher training schools might be consolidated or indeed in some cases certain training schools might well be abolished along with the affiliation of teacher training schools with universities.

7. Salary Differentials for Teachers and Demonstrated Skill:

It seems increasingly clear that differentiation in salaries for teachers who have had apparently the same kind of or comparable academic background of preparation and experience are desirable. It is recognised that at first the reaction to this is one that "it will not work". Comparable practices are found with respect to salary differentials among workers in many contemporary industrial and commercial institutions.

It is universally conceded that there are profound differences in the effect "teachers" have on learners. The evaluation of teachers in relation to salary differentials in terms of skill might well be handled by "evaluation teams" including headmasters or headmistresses, consultants from Directorates of Public Instruction and teachers in various subject matter fields and teaching techniques, particularly with reference to the use of instructional material.

8. Expand Widely Inservice Training Programmes for Faculties at all Levels of all Educational Institutions.

The assumption that faculties for schools, colleges and/or universities may be left to their own in connection with the continuing inservice training seems open to serious question. Institutes such as those for teachers of Science, Mathematics, Technical Education which were

held in India during the summer of 1964 along with the ones that are scheduled for the summer of 1965 seem to offer tremendous benefits. One of the salient strengths of these institutes is the attention being paid to the material or subject matter fields and the presentation of so-called "new Mathematics and new Science".

These institutes are examples of effective cooperation by and among the Government of India, Ministry of Education, the Education Division of USAID, and the University Grants Commission. Similar Institutes and/or seminars or conferences might well be established for a wider range of faculties including those of colleges and universities and also administrative and supervisory officers from both local school and staffs of the DPIs.

9. The Internship as a Major Experience in the Preservice Preparation of Teachers:

Widespread dissatisfaction with so-called practice-teaching engaged in while a prospective teacher is taking a regular programme of college studies has long been open to wide criticism in many nations. Such so-called practice-teaching in schools, commonly called demonstration schools, model schools or practice schools, is also open to serious question.

Experience has established that a teacher internship plan whereby a prospective teacher spends a quarter or semester in a given primary or secondary school is far more valuable than the traditional plan of practice teaching at a campus school. Furthermore, practice teaching in a non-campus school done under the direct supervision of the faculty of the school with members of university, college and/or training school faculty members being joint supervisors with the school staff seems to be markedly more effective than a plan of supervision under the exclusive jurisdiction of university, college or training

school faculties. Also, as early as possible prospective teachers should be trained to become members of teaching team.

10. Primary and Secondary School Demonstration Centres:

A given number of primary and secondary schools might well be designated as demonstration centres. Also programmes of visiting and conferences at these centres by teachers from surrounding primary and/or secondary schools might well be encouraged.

11. Informal Educational Experimentation

Informal experimentation in all matters pertaining to curriculum development methods and practices in teaching should be encouraged at all levels of educational institutions. The reporting of such experimentation should be encouraged in the form of newspaper or magazine articles and to a given extent, bulletins issued by both local schools and institutions of higher learning.

12. Long-term Formal Experimentation and Research in Education

It is generally recognised that one of the major reasons at educational institutions are, in terms of

their potential, relatively so ineffective is the absence of a substantial body of reports on long term and continuing experimentation and research. To a tragically high degree, educational institutions are organised and operated on the basis of belief, conviction and political influence. All three of these matters are important, necessary and appropriate adjunct circumstances to educational institutions.

However, sound educational policy, professional belief and effective educational practices demand the benefit of the most exacting and thorough, continuous research programmes possible.

In the past, funds available for research in

pedagogical matters have generally been woefully inadequate. Happily, the necessity for sustained research concerning educational matters has been recognised in India by the setting up of the National Council of Educational Research and Training. Foresight reflected in the establishment of this institution is praiseworthy. Vigorous programmes of educational research carried on in schools, colleges and universities directed at the determination of "how" human beings learn at different age-levels in "various" areas of knowledge might well receive high priority. It is established that the presence or absence of learning materials such as books, maps, models, globes, charts, film strips, slides and films have a profound effect on the nature and quality of learning.

13. Is Different Concept and Practice of Educational Administration Needed:

The development of a different concept and corresponding practice of educational administration seems badly needed. Educational administration may be defined as the identification, selection, appointment, stimulation and evaluation of personnel towards the achievement of given objectives.

Some of the major characteristics of a good administrator (including educational administrator) are a necessary degree of intelligence and scholarship, sensitive insight and a deep and sympathetic understanding of human beings. He must be concerned with the staff he administers, reflect sympathy and at the same time be capable of making decisions objectively rather than in terms of personal preferences. Educational administration may truly be described as the process of leadership. Explanation and persuasion play a large part in the effectiveness of an administrator.

A judicious administrator must realise that one of

his chief privilege, is to assume responsibility for anything that goes wrong with the institution he is administering and give full credit to the stature and competence of the faculty for things that go well.

The undertaking of essential and important paper work necessary for efficient operation should not be confused with the process of administration. Furthermore the staff assigned to the execution of paper operations, while demanding full recognition as indispensable partners in the administrative process, should not be allowed to make discretionary decisions on matters of educational policy.

Clearly, the selection and professional preparation of educational administrators are highly important in the development of a strong educational administrative staff.

Parelleling of the recommendation towards establishment of a teacher internship, serious consideration might well be given to the inauguration of educational administration internships of a wide variety, such as internships for prospective headmasters, deans, registrars, vice-chancellors and a wide array of other professional workers necessary in the offices of the D.P. Is.

14. Roles of the Central and State Governments in Educational Programmes

Happily the total performance of the Ministry of Education during the past (what is now approaching to be 20 years) reflects imaginative foresight joined with realistic administrative leadership both with respect to educational policy at the Federal level and operational relationships with the D.P. Is.

By and large the role played by the Ministry of Education seems to be laudable indeed. As more concerted effort in the selection and inservice training of the

educational officers of the State Departments of Education evolves, it seems probable that the Chief State School Officers (DPIs/DEs) will exert more vigorous leadership in the state policy concerning education.

15. Inservice Training of Educational Officers of the DPIs

The Government of India, via the Ministry of Education, University Grants Commission, National Council of Educational Research and Training and et al Federal agencies might consider joining with the DPIs in the development of inservice training programmes for the educational officers of the DPIs. A question may be raised as to whether the operating concept, philosophy or point of view of the educational officers in some of the DPIs is in harmony with the best administrative practices found in educational institutions and also in some industrial and commercial firms.

The term 'inspector' seems hardly in keeping with the spirit of a professional partnership which should prevail between the DPIs and individual local schools. Also, a casual examination of samples of inspectors' Manuals suggests that "school inspections" are far too mechanistic and routinised to have much lasting influence on matters of fundamental educational importance. The posts and corresponding titles demanded in the office of the DPI in this latter part of the 20th Century might well be examined. The term 'consultant' as opposed to "inspector" or "supervisor" might well be considered along with proper titles for other staff members in the DPIs.

16. Respective Roles of the I.A.S. and Professional Educational Officers:

Admittedly the writer has not had sufficient opportunity to make a thorough study of the official and actual roles played by members of the I.A.S. and professional educational officers in the State Departments of Education.

However, repeatedly and unsolicitedly the suggestion has been made that non-educational officers at times attempt to assume functions which belong only to a professional educator.

Happily, under the leadership of Maulana Azad the respective roles of professional educational staff officers and the I.A.S. (formerly I.C.S.) in the Central Ministry of Education was clearly established, viz., that educational matters should be handled by educators with the essential partnership of I.A.S. The policy so staunchly supported by Maulana Azad seems happily still to prevail in the Ministry of Education.

It has been repeatedly reported that a corresponding policy concerning the State Departments of Education in India and the I.A.S. members unfortunately does not prevail.

Such a circumstance is indeed undesirable as it is unfortunate. It might be well if the appropriate Central Government agencies such as the Ministry of Education and/or the University Grants Commission, et al took official steps to stimulate the establishment of clear understanding of the proper relationship between professional educational administrative officers and the I.A.S. officers in the State Departments of Education, colleges and universities.

17. Selection and Appointment of Headmasters:

It seems clear that the definition and designated functions of the post of headmaster might well be examined. Possibly, the State D.P.I. might establish a roster of qualified headmasters which could be utilised by local authorities in the selection of administrative officers for given schools. Also, the D.P.Is might well assume active leadership for inservice training programmes for headmasters, particularly in the form of Summer Institutes which might well be devoted to curricular matters along with ways and means of rendering most valuable advisory services to instructional staffs. The true measure of the headmaster is the extent to which he serves as an educational leader to the staff and community.

18. Financial Demands for Educational Programmes:

Amongst not only professional educators but also a wide array of eminent industrialists and commercial leaders, it is generally conceded that one of the major reasons for the ineffectiveness of educational institutions is the paltry sums of money that have been made available for educational institutions of all kinds and at all levels. India is no exception in this connection.

The writer is sensitively and painfully aware within his capability of the economic pressure which the Government of India is under. On the other hand, if, as is held by some of the demonstrated distinguished leaders of India, the people of India constitute its only basic asset, it is imperative that budgets for education be sharply increased at the "quickest".

Essential as the industrial and commercial development of India is, it seems that unless corresponding and parallel attention be given to the educational programme, grave results will ensue.

Particularly imperative are unprecedented sums for educational administrative leadership. However, it is questionable as to whether priority should be given to large budgetary appropriations for educational research and experimentation until a marked increase is made in budgets for improved economic status of teachers and manifold increase in expenditures for instructional material.

19. The Grand Strategy for Educational Improvement in India:

Happily the educational programme in India is a matter of real interest and concern politically. If the educational programme of the nation does not enjoy the attention of political leaders, there seems no prospect of the educational programme developing as is demanded.

As has been previously indicated, many examples of inspired leadership in relation to the educational programme in India have been observed during the last approximately 20 years.

However, the question may be raised as to whether a "Grand Strategy" towards the rapid expansion and improvement of the educational programme has been conceived or developed.

It would seem that a vast number of industrial, civic and community leaders should become involved actively and regularly in the study and support of the educational programmes of the Government of India and the Directorates of Public Instruction.

Lay councils on education at national, regional, state and local levels have been found highly useful in some countries. Organisations of various groups representing professional workers in education have made valuable contribution to the educational programme in India during recent years. The question can be raised as to whether groups of professional educators would not do well to work in closer cooperative fashion with citizens towards a more adequate functional educational programme in terms of social weal.

20. Educational Institutions and Their Parent Society:

Professional educators including teachers and administrative officers in the very acceptance of their posts acknowledging an abiding obligation as loyal and active citizens to their nation, state and home communities. Similarly, the educational institutions at all levels must exert considerable effort to be known not only as "good educators" but also "good citizens". Often the degree to which workers in education assume their responsibility as citizens is the determining factor in the attitude and confidence the general citizenry holds towards EDUCATION.

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EDUCATION COMMISSION
GOVERNMENT OF INDIA

Item No.5
9th Meeting.

Subject:- Letter from Dr.V.K.R.V.Rao dated 5th April
1965 regarding Dr.Fowlkes's paper on
'An All-India Educational Improvement
Programme'.
..

The following letter has been received by the Chairman
from Dr.V.K.R.V.Rao on the above subject:-

"Dr. Fowlkes called on me this morning and gave me a copy of his paper on 'An All-India Educational Improvement Programme'. After reading the paper I was highly impressed and I ventured to send copies of the same to the Union Education Minister as well as to the State Ministers of Education. I would also commend the ideas contained in the paper to you. In particular, I would like to stress the following four points:

- (1) The need for having a fresh look at our teaching programmes and methods in the light of the objective of education being regarded as comprehension, application, analysis, synthesis and evaluation, as one goes up the educational scale, rather than being focussed on memorisation and relatively isolated minutia;
- (2) 'The hypothesis that strong universities, colleges and training schools can be build upon relatively weak secondary schools and strong secondary schools in turn can be developed on the basis of weak primary schools seems to be illogical and demonstratedly untrue'. It is, therefore, necessary to give priority to primary and secondary schools in terms of improvement of quality as against spending more and more funds on institutions of higher learning;
- (3) The desirability of exploring the prospects of a teacher internship plan whereby a prospective teacher spends a quarter or semester in a given primary or secondary school rather than following the traditional plan of practice teaching at a campus school; and
- (4) The need for bringing education as a discipline much more under the universities than has been the case so far, encouraging the setting up of departments of education of high calibre in the universities and also making for active participation by all universities in the preparation of primary and secondary school teachers."

2. The matter is placed before the Commission for discussion.

J.P. Naik.
Member-Secretary
11.4.1965

P.S. to Chairman
All Members of the Commission
All Officers of the Commission.

A Note concerning the Development of
Teacher Internship

By
John Guy Fowlkes,
Director, Wisconsin Improvement Program,
University of Wisconsin,
USA.

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In keeping with your request, I have written a short comment on (1) the encouragement of informal experimentation in primary and secondary schools, (2) possible ways of training school faculties - both primary and secondary - to supervise teacher internees, and (3) how the programme of teacher internship and the whole array of newer educational practices can be introduced.

1. The encouragement of informal experimentation: For this discussion, the subject of informal experimentation in reality is meant to convey the exercise of original and at least unusual, if not unique, practices which could be followed by teachers that are sharply different from practices of other teachers teaching the same subject matter at corresponding age and school division levels.

There is mounting evidence that, although there is necessity for a substantial amount of standardisation and specific direction with respect to school curricula and teaching practices (methods), there is much more need for the encouragement of the exercise of originality among individual teachers. The syllabii for the various school subjects at various age-levels which have been examined by the writer and the observance of which has been made compulsory in the schools of several countries visited by the writer prompt the following conclusions.

Often the syllabii for school subjects are far too detailed and correspondingly stereotype and dull and monotonous. They stimulate textbooks. The imposition of such kinds of syllabii should be removed as early as feasible. Experience has proved that the most helpful syllabii are those organised on broad lines supported by

a wide array of learning materials in such forms as books, magazines, newspapers, maps, globes, charts, models, slides, film-strips, films, tape-recorders, etc. The basic reasons for encouraging individual teacher uniqueness seems to be that only in this way can the full utilization of teacher's powers of stimulating learning be enjoyed.

2. The supervision of teacher - interneers - traditionally termed 'practice teaching'.

The writer recommended to the Commission that the supervision of teacher interneers, as indeed all those who are engaged in field experience (traditionally termed 'practice teaching') should be the official responsibility not of faculty members of training schools or colleges but the faculties of primary and secondary schools in which the prospective teachers are trained. To be sure, faculties of teacher training schools, teachers colleges and schools of education in universities should be active partners in the supervision of practice teaching.

The training of local school faculties to supervise practice teaching demands the identification of a minimal code of various feasible approaches to the presentation and pursuit of the stimulation and direction of learning. One of the basic requirements is the realisation of prospective teachers that schools exist in order that learners learn. Learners not teachers are the important people in schools, colleges and universities. Ways and means of stimulating, directing and evaluating learning along with skills in diagnosis and remedial suggestions and the exploration of techniques and procedures of motivation should be given first priority in training teachers of lower and secondary schools who are to supervise practice teaching.

3. Approaches to the introduction of the teacher internship:

The question has been raised as to possible approaches to the establishment of the teacher internship programme.

Experience in some areas has indicated that one effective approach is a plan or a scheme in which a State Department of Education - the D.P.I. - a major University, one or two training schools and/or teachers colleges and a number of local schools agree to join as operating partners in the development of a teacher internship programme.

After such an agreement has been reached, the initial step might well be the examination of reports from widely selected areas - countries - concerning recent innovations in the organizations of primary and secondary, colleges and universities such as team teaching, open book examinations, the encouragement or fulfilment of residence requirements by examination in part rather than class attendance alone, the utilisation of such learning equipment as tape recorders and language laboratories.

In Conclusion:

Although to be sure, there seems to be some common adjustments in teaching practices, unless inevitable differences and uniqueness among teachers are not only allowed but encouraged, it is unlikely that teachers will truly be stimulating and consulting partners with learners.

Ruskin once defined a labourer as one who works with his hands; an artisan as one who works with his head and hands but an artist as one who works with his hands, head and heart combined.

To the degree possible, the training programmes of prospective teachers should aim at the production of artist teachers. It seems clear that the teacher internship programme is more likely to produce artist teachers than any other programme of teacher preparation yet developed.

J.G. Fowlkes
10.4.65

Circulated to all members of the Education Commission and the Task Force on Teacher Education and Teachers' Status for information.

J.P. Naik
11.4.65

Education Commission
Government of India.

'Stability And Change in
Human Characteristics'

by

Dr. Benjamin S. Bloom
Published by John Wiley & Sons, In. New York, 1964.

This work is based on an analysis of several longitudinal studies of the development of certain human characteristics, such as intelligence and personality, conducted by many investigators in the U.S. and abroad. The findings of these studies seem to stress the tremendous importance of the first few years of life for all that follows. The studies reveal three important factors about human development, that (a) the most rapid period of change and development is in the early years of life; (b) the environment influences such development significantly; and (c) variations in the environment have greatest quantitative effect on characteristics during the period of rapid development. These factors are derived from various longitudinal studies described in detail in this book.

As regards general intelligence, for instance, it is seen from the relevant studies that in terms of intelligence measured at the age of 17, about 50% of the development takes place between conception and age 4, about 30% between ages 4 and 8 and about 20% between 8 and 17. Thus general intelligence appears to develop as much during the first four years of life as it does during the 14 years from age 4 to age 18.

The Role of Environment

It is, nowadays, generally agreed that intelligence development is, in part, a function of the environment in which the individual lives. "The effects of the environment

appear to be greatest in the early (and more rapid) periods of intelligence development and least in the later (and less rapid) periods of development. A conservative estimate of the effects of extreme environments on intelligence is about 20 I.Q. points. "This could mean the difference between a life in an institution for the feeble-minded or a productive life in society. It could mean the difference between a professional career and an occupation which is at the semi-skilled or unskilled level."

With the exception of school achievement, the most rapid period for the major development of characteristics such as general intelligence and personality traits is in the first five years of life.

The environment will determine what is learnt and even the extent to which learning will take place. As regards interests, attitudes and personality characteristics their direction and nature are largely determined by the environment in which the individual develops. In most of the general curves of the development of a characteristic there appears to be a period of relatively rapid development which is in the early years, followed by a period of a less rapid development. A characteristic can be most drastically affected by the environment, in its most rapid period of growth, that is in the early years of life. Thus, early environment has a significant effect on the development of certain important characteristics. Its crucial importance depends on the following factors, (a) the very rapid growth of characteristics in the early years, (b) the consequential nature of human development, (c) the learning theory

according to which the first learning takes place more easily than a later one that is interfered with by an earlier learning.

The general conclusion drawn by the writer is very significant in considering any programme of education. He says on page 89: "A society which places great emphasis on verbal learning and rational problem-solving and which greatly needs highly skilled and well-trained individuals to carry on political-social-economic functions in an increasingly complex world cannot ignore the enormous consequences of deprivation as it affects the development of general intelligence. Increased research is needed to determine the precise consequences of the environment for general intelligence. However, even with the relatively crude data already available, the implications for public education and social policy are fairly clear. Where significantly lower intelligence can be clearly attributed to the effects of environmental deprivations, steps must be taken to ameliorate these conditions as early in the individual's development as education and other social forces can be utilized."

The scale of vocabulary development and the longitudinal studies of educational achievement also point in the same direction and indicate the great importance of the first few years of school as well as the pre-school period in the development of learning patterns of general achievement. As Dr. Bloom has remarked "These are the years in which general learning patterns develop most rapidly, the failure to develop appropriate

achievement and learning in these years is likely to lead to continued failure or near failure throughout the remainder of the individual's school career. The implications for more powerful and effective school environments in the primary school grades are obvious." Dr. Bloom has also pointed out that research raises serious questions about the value of educational remedial measures at later stages.

These findings have an obvious bearing on the measures for improvement to be adopted at the different stages of education in India. On financial and administrative grounds, the planners and the administrators tend to postpone the intensive development of education to the secondary or even the higher education stage. Psychological researches, however, show that the pre-primary and primary stages of education are the most important for providing the right kind of environment for the development of an individual's potentialities. Though the potentialities of development are inherent in the individual's constitution, in a sense, variations in the environment can lead to either a full development or a stunted growth. One has only to see small children in Indian villages to realise how repressive environment comes in the way of their development. One comes across many children whose curiosity and power of expression have been atrophied because of the authoritarian environment in which they grow up and because of the dull and drab environment in which they have to live. A rich environment and an understanding teacher can do a great deal towards

the development of the child's potentialities, if they are made available in the early years of life i.e. at the pre-primary and the primary stages. The administrators and the planners will, therefore, have to consider what weightage will have to be given to the psychologist's findings in recommending programmes of intensive improvement in education at the various stages. It is true that pre-primary education i.e. education of children of the age 3 to 6 is a very expensive proposition because of the large numbers of children involved. In the long run, however, if one accepts the psychologist's findings, it will be more economical to spend at these stages of education than to reserve the resources for later stages, chiefly on the ground that smaller numbers would be involved at that stage. In attempting to improve the whole structure of education, the pre-primary and the primary stages will have to be given their right place in the scheme. The refrain of the psychologist and the researcher is: it is less difficult for the individual and for society to bring about a particular type of development early in the history of an individual than it is at a later point in his history.

S. Panandikar
8.4.65.

Item 8
9th Meeting

EDUCATION COMMISSION
GOVERNMENT OF INDIA.

In his letter dated March 15, 1965, Shri G.D. Sondhi has made the following suggestion for consideration by the Commission:

"Regarding the work of the Commission, I have a suggestion to make: that the Commission either by themselves investigate the causes of student indiscipline or recommend the setting up of a committee to investigate these causes. There is so much loose talking and loose thinking on this matter of student indiscipline that an authoritative statement of the causes and possible remedies is urgently required. As the matter is of personal interest to me also, I may be writing a note on it. But I feel that the matter should engage the attention of a larger number of educationists and even of politicians."

The matter is placed before the Commission for consideration.

J.P. Naik,
Member-Secretary.

EDUCATION COMMISSION
GOVERNMENT OF INDIA

Item No.9

9th Meeting

Subject:- Interviews with Prominent Persons

The following note has been received from

Dr. V.S. Jha, Member.

"Under our programme of interviews with prominent persons, we have so far interviewed only 14 persons. We have got more than 100 names on the waiting list and some more names are being added to it from time to time. At present we hold interviews for four days in a month and that too in the afternoons only. We are thus able to take in about 8-10 persons per month.

In order to accelerate the pace of interviews, I suggest that interviews should be held in the forenoons also. But even this additional time will be in-sufficient. I, therefore, wish the Commission to consider this situation and to allow more days in a month to interviews."

The matter is placed before the Commission for consideration.

J.F. Mc Dougall
Associate Secretary

Item No. 20
9th Meeting.

EDUCATION COMMISSION
GOVERNMENT OF INDIA

Educational Planning in the Developing Nation.
(~~A~~ Address by Dr. P.H. Coombs)

The text of a speech given by Dr. P.H. Coombs at Montreal early in March is attached.

2. The Points in the Section, "The Tasks ahead for Educational Planning" are, I believe, worth noting for our own report, especially:

- (a) the need for a strategy of expansion (systems within system),
- (b) the need for planning units dealing with evaluation and development (in addition to quantitative projections) to ensure continuing attention to qualitative improvement.

J.F. McDugall
Associate-Secretary

EDUCATION COMMISSION
GOVERNMENT OF INDIA

" EDUCATIONAL PLANNING IN THE DEVELOPING NATIONS "

Address by
Philip H. Coombs,
Director, International Institute for
Educational Planning

at the Fourth National Conference of the
Canadian National Commission for Unesco

Montreal, 9-12 March 1965

Your kind invitation to attend this important conference provides me a welcome opportunity, as an old New Englander, to visit my friendly neighbours again, and on behalf of the International Institute for Educational Planning, to express our warm appreciation for the interest and support given to our activities from the outset by your Canadian Unesco National Commission.

I want also to extend our congratulations and good wishes on the significant progress being made on educational planning here in Canada. I hope that the Dominion Bureau of Statistics and the Educational Commission in Quebec headed by Mgr. Parent will find it possible to provide our Institute with sufficient copies of their excellent recent reports to distribute to the Unesco and UN sponsored regional centres and institutions around the world where tomorrow's educational and economic planners for the developing nations are being trained. They will be much encouraged and well instructed, I feel sure, by Canada's example. As already demonstrated, Canada is uniquely equipped to be of great help to the developing countries in their educational planning and development efforts. And in the process of providing such help, I dare say, Canada will also profit from the ideas and experience gained.

My assignment today, however, is to speak not about Canada, but about educational planning in the developing nations of Latin America, Africa and Asia. Such qualification as I may have for this results mainly from the ringside view which our Institute, like its founder Unesco, is privileged to have of the educational revolution that has been sweeping the world during the last decade.

We profit from excellent instructors and access to rich learning materials. To illustrate, last spring our Institute held a five-week seminar in Paris on the 'problems and strategies of educational planning and development in Latin America', attended by some 30 leading educators, economists, sociologists and government officials from Latin America. They taught us a great deal from their practical experience. At the next seminar, in Bellagio, Italy, last summer, we gained further insights from an international group of experienced researchers and policy officials who helped us draw a road map of the most important practical research needs of educational planning. Publications based on these two seminars will be available soon. We also got started last year on research studies of the educational planning experiences of France and the Soviet Union, which we hope will shed useful light for others.

Currently our main attention is focussed on Africa. The Institute, in co-operation with Unesco and others, is conducting a series of studies designed to establish a solid research base for training future African planners and administrators. We are also taking a preliminary look at Asia - for example, by co-operating with the Indian National Education Commission which is currently taking a hard look at how far India education has come since Independence and where it should go from here.

These exposures to diverse country situations provide a basis for comparative analysis, and though it is too early for firm conclusions, we are beginning to discern not only the striking differences but some interesting common denominators. With these in mind, I should like to focus my comments on two important questions. First, what progress has this educational revolution made thus far and what problems have arisen? Second, in light of the experience to date, what major tasks must educational planning in the developing countries cope with in the years immediately ahead?

Needless to say my observations must be tentative and impressionistic and they do not apply uniformly to every developing country. In effect I shall try to give a composite picture of a more or less "typical" situation. It should be borne in mind, moreover, that whatever has happened in the past ten years has by and large not resulted from educational planning, for most developing countries are only now, with substantial help from Unesco, getting firmly started on educational planning, which takes time. Indeed, some of the serious problems encountered in past years show why strong educational planning is needed. Thus, the real test for educational planning is in the coming years.

THE PAST DECADE: PROGRESS AND PROBLEMS

Looking first to the past, we can say that the most striking feature has been the enormous increase in enrolments, especially at the primary school level, and the equally striking increase in educational expenditure in many developing countries, not only in absolute terms but as a percentage of total public expenditures and of total national income.

This, of course, is because these nations are endeavouring to move from an earlier west-pocket educational system, which served only limited purposes and a lucky minority, to a full blown educational system designed to serve the whole population and the full gamut of national development needs. This is a goal which more advanced countries have been pursuing for a century or more, and have not fully achieved yet. These developing countries, understandably, are in a great hurry; they reckon in years, not in decades.

Equally impressive are the quantitative expansion targets of these countries for the future. The majority of developing countries are pledged to achieving universal primary education by 1975 or 1980, even though many are as yet less than half way there. Most have equally ambitious expansion targets for secondary and higher education. In short, this educational revolution has only begun.

To cite a few concrete examples: elementary school enrolments in Latin America rose from 14.3 million in 1950 to 24.8 million in 1960 - an annual increase of more than

11 per cent- and in six countries they more than doubled in a decade. University enrolments in Colombia, for example, have doubled in 8 years, while in Venezuela the number of university students shot up from about 10,000 to 35,000 in only 5 years, from 1958 to 1963.

The expansion in Africa, which of course began at a lower level, has been even more dramatic. Elementary enrolments in Nigeria, for example, trebled from 1950 to 1962, while university enrolments, small to start with, rose tenfold. Throughout Africa, especially since the important Addis Ababa Unesco Conference in 1961, enrolments have been rising rapidly at all levels and promise to continue their upward march.

India, of course, is the giant illustration. Elementary enrolments rose there from under 19 million in 1950 to over 50 million at present. University and other post secondary enrolments in the last 5 years alone have risen some 60 per cent. Meanwhile, the proportion of India's total National Income spent on education has gone up from 1.2 per cent in 1950 to at least 3 per cent now. The goals presently projected in India's Perspective plan include a trebling of elementary education by 1975 over 1961, a four-fold increase in secondary education, and a three and one-half fold increase in higher education. This would carry the percentage of national income spent on education to 4.7.

This world-wide tidal wave of educational expansion, it is important to remember, does not result simply from decisions by political leaders that more education would be a good thing for their country. Fundamentally, it is the product of wide-spread popular demand; education is seen by the impatient masses, long at the bottom of the socio-economic heap, as the upward ladder for their children. For them, freedom and democracy mean the promise of educational opportunity; not eventually but right away.

This popularly ignited educational explosion is feeding upon itself. Bright youngsters of illiterate parents who finish primary school want to push on to the next level, and the graduates of secondary school are ambitious for a university degree, especially when this is the ticket of admission to a scarce and secure government post (in some countries even for clerks). Sharply rising population curves have added greatly to these pressures of popular demand. Because of the rapidly growing child population, many countries must run fast educationally just to stand still; the complications it imposes on education can scarcely be exaggerated.

These impressive increases in enrolments and in educational effort are indeed encouraging, but they must not be allowed to conceal some equally impressive problems and shortcomings if the future is to see even greater progress. These problems and shortcomings must now be dealt with firmly and courageously, or the statistics of expansion may prove a great illusion. They can be summarized in terms of three basic imbalances.

The first imbalance is between the educational system's output and the development needs of the nation. One

form which this imbalance takes is a mismatch between the pattern of manpower skills and specialities required for economic growth, and the pattern turned out by the educational system. Village education, for instance, is often ill-suited to the individual needs of rural youngsters and to the requirements of improved agricultural productivity and overall rural development; in some cases the kind of education given may even prove counter-productive to national development. Similarly, the complaint is widely heard that urban secondary schools are turning out too many young people with an old-fashioned preparation for university entrance, and too few who have had terminal programmes which equipped them for middle-level technical work required for economic growth. There are similar maladjustments at the university level; overproduction of lawyers and arts graduates, for example, and underproduction of scientists, engineers and other technically trained persons needed to modernize the economy.

Beyond the more specific mismatches, and perhaps more serious and perplexing, is the growing phenomenon called "the educated unemployed" which results, at least superficially, from a lag between the creation of new jobs and the rapid expansion of educational output -- at any rate, jobs which appeal to school leavers and university graduates. In fact, of course, this apparent "over-production" of school and university graduates does not necessarily mean that the country is getting too much education; neither the explanation nor the cure is that simple. But it clearly does mean that a disturbing backlog of frustrated, unemployed young people with educational credentials is accumulating in the major cities, like so much social dynamite.

The second imbalance is within the educational system itself-- between the different levels, which have been growing at different rates, and between the demand for and the supply of teachers. In many countries priority has been given to expanding elementary and university education, both having great popular appeal, while teacher training and secondary education have remained the forgotten man. The result, of course, is that elementary schools find themselves without qualified teachers, universities without enough qualified students, and employers without enough well trained middle-level manpower. By now a number of countries are trying to correct this imbalance, but it is difficult to reverse the momentum generated by their earlier popular priorities and lack of planning.

The third and most pervasive imbalance is between the scale of available educational resources and the scale of educational expansion. Inadequate resources have been spread so thin that quality has suffered severely. What is worse, in this great preoccupation with quantitative expansion, the old educational status quo -- which in many respects is now the wrong educational system to fit the new needs and scarce resources of these countries -- has been left largely unchanged; it has mainly been made bigger.

It is not entirely correct, of course, to say that there have been no important changes; there have been some new additions to the old system, particularly in science and technology at the secondary and higher levels and in forms of teacher training. Foreign aid has contributed

much to these innovations, sometimes, however, including new imports of old foreign models that do not fit the recipient point too well, though they may nevertheless have had a useful tonic effect. Overall, however, the dead weight of the old curriculum, structure, methods and procedures still tends to dominate the situation.

There has evolved along with these three basic imbalances a regrettable waste of educational resources which can ill be afforded by these poor countries. One notable form is the high drop-out rate in the early years of elementary school, before students have even learned to read, running as high as 50 per cent in some countries. Another is the under-utilization of expensive facilities and equipment, for example, in technical schools and institutes, and in universities due to adherence to conventional academic schedules, or in some cases popular prejudices against technical training and manual labour, and the failure to develop part-time training for active employees, which would use these facilities evenings and in other off-hours. Then there are subtler forms of waste such as spending relatively too little of the recurrent budget on textbooks or other learning materials with the result that students -- especially those with poor teachers -- waste their time not learning. Similar waste of time and resources results from retaining unimportant, irrelevant or obsolete courses in the curriculum. Most of these forms of waste can, of course, be found in advanced countries, but in many developing countries they are more serious or at least more conspicuous.

Let me make clear that these various shortcomings -- the imbalances and the wastes -- are not the discovery of external observers; they are the concern and the very wholesome concern -- of educational leaders in the developing countries themselves. They do not, of course, apply with equal force to all countries, but they are sufficiently widespread to warrant serious attention and action.

Nor should a candid acknowledgement of these problems be allowed to distort our perspective, for the fact remains that very substantial and heartening educational gains have been made, and a powerful momentum has been established which can, if properly channeled, help to overcome these deficiencies in the future. It is inevitable in a period of rapid change and expansion that many dislocations, transitional inefficiencies and unsatisfactory results will occur. This is precisely why it is now so important that the horizons of educational planning be broadened, and its muscles strengthened, with a view to overcoming these defects and achieving a more orderly expansion from here on.

Let us turn our attention, then, to the more specific implications of all this for educational planning, to the question of what its priority tasks must now be, and to a consideration of what kinds of strategies might be appropriate.

THE TASKS AHEAD FOR EDUCATIONAL PLANNING

From what has gone before it should be clear that educational planning must be concerned with much more than making statistical projections and promoting a larger

version of the educational status quo. Its three priority tasks in the coming years, I suggest, are the following.

The first task is the better integration of education with the major needs of economic growth and social development. This will require closer study of prospective manpower requirements, not only on a national scale but more particularly in various sub-regions and major labour markets, and not least of all in the agricultural and rural sector. It will also require a substantial recasting of educational programmes and structures to match these requirements better, and greater efforts to inform parents and guide a students so that their educational and vocational choices will be brought into closer harmony with the realistic needs of national development and their own best interests. Every effort must also be made, inside and outside education, to adjust employment attitudes and practices to the larger flow of educated young people, to create more job opportunities and to break down psychological and institutional barriers to labour mobility.

The second task is a more balanced and selective expansion of the educational system. The quantitative expansion of the past cannot and should not be stopped in its tracks. The aim now should be, however, to bring the different levels and the different programmes -- such as general education and technical education -- into better balance with each other and with the realistic needs of society. Greater emphasis in this expansion should be given especially to programmes of pre-service and in-service training of teachers and administrators, and to enlarging the supply of good textbooks and other teaching materials so that well motivated students if need be can learn a good deal for themselves. The over-riding necessity is to keep the overall rate of educational expansion from getting out of hand in relation to the total of resources available for education (which not doubt must be larger), and to preserve a sufficient share of these resources for non-quantitative forms of improvement.

The third task -- and the most crucial -- is the energetic inducement of essential changes and improvements of all sorts within the educational system. These changes should comprehend the structure, content, teaching methods and materials, physical plant and equipment, admission standards, and organizational and administrative arrangements. They should aim at raising quality, efficiency and effectiveness. These changes and aims are essential in their own right, but they are also tactically essential if education is to justify its claim for getting still larger resources. In any event, the education sector of society, by virtue of simple arithmetic, cannot go on forever getting an expanding proportion of the Gross National Product and of total public funds, though in many cases its present share is not yet sufficient. Education must give equal emphasis to getting more funds and to utilizing more productively the resources it already has, and the latter will require many changes of present practice.

These internal changes, as we all know, will not come easily, but not simply, as often assumed, because educational systems by their very nature are resistant to fundamental change. An equally important reason is the

sheer logistical complexity of educational change. Like agriculture, education is a large industry of small and widely dispersed units, run by thousands of "operators" (in this case teachers and administrators). To achieve a widespread change of standard practice requires communicating with them, and somehow persuading, re-training and assisting them (and often the parents and students as well) to accept new practices and apply them effectively. In other words, educational change itself requires a major educational and technical assistance effort.

The most fundamental obstacle to educational change therefore, is the absence of sufficient institutional mechanisms within the educational system whose prime business it is to change and improve the system -- to evaluate old practices critically, to develop new and better ones and to persuade and assist the far-flung "operators" of the system to innovate as is done in the more dynamic industries as a matter of course. Priority should therefore be given to creating such mechanisms. This too will not be easy.

A good starting point, I suggest, might be to create at the top of each ministry or department of education, at every governmental level, and perhaps in each university as well, two new staff units. One might be called the Performance Appraisal Unit. Its job would be to apply critical analysis to the ongoing educational process. It would, for example, conduct comparative cost studies and space utilization studies, to discover places and ways to use resources more efficiently and to raise quality; it would explore the causes and costs of high student drop-out rates and seek effective remedies; it would follow up on graduates to find out whether they were in fact appropriately trained, or were successful in getting appropriate jobs; it would study the relative advantages of different methods of providing technical skills; it would identify the best sources of teacher supply, evaluate different ways of training teachers, and new ways to enable teachers to be more productive and thus better paid.

The second new unit would be the Research and Development Unit, which would take a somewhat deeper and longer range view. It would devise a well-conceived strategy of research and experimentation, aimed at improving education at the most promising and critical points, instead of the hit-or-miss approach which has tended to characterize educational research and experimentation in the past. It would marry research and development, as industry and agriculture have done so successfully but as education has rarely done.

As these two new units gathered momentum and came up with significant findings, a third new unit -- The Educational Extension Service -- would be needed to bring the word of new findings and developments directly to the thousands of teachers and administrators who alone can put them into practice. And they are more prepared than is often assumed, I believe, to put a good new idea into practice -- if only they can hear about it and be given authoritative assurance that it is sound and workable.

Educational planners should take the lead in encouraging new mechanisms for change, in identifying the places where change is most needed and can be most fruitful, and in seeing that adequate resources are made

available for the basic improvement of education through critical self analysis, research and experimentation. The planners cannot themselves do all these things, they have neither the time nor qualifications, but they can support and indeed be prod others whose business it is to improve each part of education.

The fourth important task of educational planning I suggest, should be to strengthen education outside the classroom. I mean by this all those things that are often lumped together - some much more important than others - under the ambiguous label "adult education."

The developing countries suffer seriously from the sharp dichotomy traditionally made between "formal education" and all other organized forms of training and education, many of which are just as important to national development as what goes on inside the schools and universities. This includes, for example, farmer training and rural youth programmes, part-time and on-the-job technical training to upgrade workers, self-improvement courses for government workers, and programmes for young mothers. In many instances these types of training and education can be efficiently tied to the formal system, for example through part-time and correspondence courses, and through the direct involvement of agricultural, engineering and teacher training institutions, in extension services. For nations at an early stage of development, these types of activities can often give a quick and relatively inexpensive boost to national development - if they are carefully selected, planned and operated.

These four major tasks of educational planning must be placed within a well-conceived overall strategy which provides a rational basis for allocating resources to different educational purposes and for achieving a proper balance between education and society's needs.

A useful conceptual frame for such a strategy may be suggested by a diagram of three concentric circles which embrace all educational activities. The middle circle represents the "formal" educational system, at all levels, which, as we have seen, has been undergoing rapid expansion. It needs to keep expanding while at the same time being changed and improved, and linked more effectively with economic and social development requirements. This however, is a mammoth undertaking and will take a long time, for as has been noted, sweeping changes are not easily wrought in an old educational system.

The inner circle, constituting of perhaps five to ten per cent of the formal educational system, represents what might be called a "system within the system", made up of carefully selected institutions at all levels which, as it were, can play the role of seeing-eye dog for the educational system as a whole in coming years. These are the institutions - sometimes private and sometimes public - which have the appropriate chemistry, that rare combination of leadership, imagination and sense of direction, which makes for good educational pioneering. They should be provided with the means required to pioneer successfully -- including not simply money but freedom from externally imposed regulations and administrative restraints which,

though often necessary for weaker institutions, hobble the potentially stronger and innovative ones and inhibit the release of human creativity. It is not politically easy to favour chosen institutions, but unless a group of them are enabled to move ahead more rapidly than the others, there will be nothing in the future with which to pull the mass of the system to a higher level of performance. In other words, it is easier to encourage change and innovation in the most promising sector of a massive educational system, and thereby establish for it a sharp leading edge, than to try to reform the whole system at once.

Finally, the outer ring represents the important training and educational activities outside the formal /which system/ should nonetheless be planned in relation, to it and kept in the same broad perspective of human resources development.

By keeping these three sectors clearly in view, the inner and the outer ones are likely to get more nearly the share of resources they require (which though small in relation to the requirements of formal education as a whole, have been seriously neglected). And it is more likely, too, that the essential inter-connections both within education and between education and society will be more clearly kept in view and better developed. But concepts on paper, of course, are only the beginning; they must be undergirded with efficient administrative machinery for implementing them.

Let us try to sum up briefly the thesis of my remarks. Educational planning has made only a good beginning in most developing countries. It is urgently important that it gather strength swiftly to manage the formidable tasks of the future. The people of the developing nations have wisely sensed the great importance of education -- of human resources development -- as the prerequisite for both individual progress and overall national progress, economically and otherwise. In response to this popular demand, developing nations have put overwhelming emphasis on the quantitative expansion of their earlier educational system, though they have also added some promising new institutions and practices. The old status quo, however, is not good enough; it fits neither their needs nor the pocketbook, and in some respects it has grown even worse in the process of rapid expansion. These defects, however, should not be allowed to obscure the very real important gains already made. But the need remains for vastly greater gains in the future, including not only more expansion but, even more important, the building of educational systems that will give these countries what they really need and the most and best educational results for the scarce resources they invest.

Educational planning can be an important instrument for accomplishing this, providing it sees its tasks and priorities clearly. Four tasks in particular now require emphasis: the better integration of education with the requirements of economic and social development; selective and balanced quantitative growth of the educational system, the achievement of basic changes and innovations of many sort within the educational system -- especially through pilot experiments involving leadership institutions, and finally the fashioning of stronger and selective programmes to serve

the needs that lie outside the formal educational system.

All this, needless to say, is far easier said than done, but to draw the right road map to start with is essential. It will take a long time to get there, even under the most favourable circumstances. Miracles should not be expected of educational planning, but it can produce far better results than otherwise. For educational planning, after all, is simply the application of rational analysis, common sense, and a broader and longer range perspective. It can provide a broader frame through which to view many old and familiar, educational problems better in a fresh light. If it is adequate planning, and not simply a statistical exercise, it will lead to wiser choices and better decisions, and it will plant the seeds of its own implementation.

One can therefore take encouragement from the serious efforts being made today by the majority of developing countries to establish an effective process of educational planning. Whatever the more developed countries can do to help in this endeavour is bound to bring high rewards -- not only for the recipients but for the donors. For most of what can be said about the future priority tasks of educational planning in the developing nations applies also to the more advanced ones. Judging from their recent record, the educational leaders of Canada should have no quarrel with this last proposition.

NO. 3(11)-1(3)/EC
EDUCATION COMMISSION
(GOVERNMENT OF INDIA)

The following letter No. GCO 4662/31852 U dated the 30th November 1962 from the State Government of Maharashtra addressed to the Government of India has been referred to the Education Commission by the Ministry of Education for consideration:

"I am directed to invite attention of the Government of India to the question of prescribing suitable pattern of an academic year for all types of educational institutions (schools and colleges) in the country and to state as under:

(1) Prior to 1914, the academic year of the Bombay University commenced in January and ended in September. The two terms were from 3rd January to 15th April and from 10th June to 30th September. The University Examinations including the Matriculation Examinations were held in the months of October, November and the results were declared in the month of December before commencement of the new academic year in January. This arrangement was, however, revised to the present pattern in which the academic year begins in June and ends in May (with two terms from June to October and October to April) because the best part of the winter season was spent in Examinations and vacation while the duration of the summer vacation was considered to be short. The change in the pattern of the academic year also suited the convenience of a large number of college professors and principals who were Britishers and who preferred to spend their hot weather vacation outside India. The school year was also changed along with the University year to the present pattern of academic year from June to May with a short winter vacation and a long summer vacation.

(2) It has been represented to the State Government, that the present pattern of the academic year does not encourage students to undertake activities, such as Sports, N.C.C. and Youth Festivals, as these activities cannot be effectively organised in the first term due to Monsoon and when these are organised in the second term, the students are engaged in preparing for their examinations. It has, therefore, been proposed that the academic year would begin from January and end in December, so that the examinations can be held in November-December and the students can participate in sports and other activities for a continuous period from November to May which includes the period of the Cold Season. The period from June to October can be utilised by them for preparing their examinations. This would also enable the students to participate whole-heartedly in the celebrations of the Republic Day and the Sports week which is organised to synchronise with it as required by the Government of India under their letter No. F.11-29/60 P.P. 2 dated the 8th December 1960.

(3) The question of change of the academic year cannot, however, be considered by one state alone, but will have

have to be considered as a matter of all-India policy. I am, therefore, to suggest that the question of changing the present pattern of the academic year may kindly be placed before the Central Advisory Board of Education and the Conference of State Educational Ministers for their consideration and necessary action.

(4) An early reply intimating the views of the Government of India on this subject and the action proposed to be taken by it in this respect will be very much appreciated."

The matter is placed before the Commission for decision.

J.F. Naik
Member-Secretary
29.3.1965

P.S. to Chairman, Education Commission.

All Members of Education Commission.

Member-Secretary, Education Commission.

Associate Secretary, Education Commission.

All Officers of the Education Commission.

Education in the States
Monograph No. III: BIHAR

E D U C A T I O N I N B I H A R

Some Important Problems

By

J.P. Naik

E D U C A T I O N C O M M I S S I O N
UNIVERSITY GRANTS COMMISSION BUILDING
BAHADUR SHAH ZAFAR MARG, NEW DELHI-1.

1965

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EDUCATION IN BIHAR : SOME IMPORTANT PROBLEMS

1. General Background: Bihar has a rich tradition of ancient learning and has the most traditional and least modernised people. With the exception of certain parts of Kerala, it has the highest density of population in India, especially in North Bihar. It has also very frequently been affected by famines and floods, particularly on the banks of Kosi - Bihar's river of sorrow. Its economy is still largely agricultural, although it has the richest mineral deposits in the country. It is the poorest State in India (the National Dividend being only Rs 220.69 as against the all-India average of Rs 334.54 in 1960-61), the average output per worker also being the lowest (Rs 533.02 against an all-India average of Rs 778.25). Caste plays a very dominant role in its social life and this creates several problems in politics as well as in education, especially in relation to the appointment of teachers and the management of voluntary organisations. The Permanent Settlement of Land Revenue introduced in the State by Lord Cornwallis created a Zamindari system which led to the impoverishment of the rural peasantry and development of feudal values and outlook on life which survive even today, although the Zamindari has ceased to exist. The Permanent Settlement also retarded socio-economic development by restricting the financial resources available to the State Government, nor was this situation improved by the voluntary efforts of the Zamindars themselves because the zamindars in Bihar, who did not become an enlightened group as in Bengal, did not play any major role in the educational and cultural development of the people. This general gloomy picture was further reinforced by administrative history. Originally, Bihar formed a part of the old Presidency of Bengal. As the British Government tended to emphasise the metropolis and to ignore the peripheral areas, the general development of Bihar was, by and large, not seriously attended to before 1911-12

when the Province of Bihar and Orissa was separated from Bengal. Things improved somewhat after the first World War; but even in 1936-37 when it was separated from the State of Orissa, Bihar was a very backward State with a total revenue of about Rs 5 crores and a total expenditure of about Rs 70 lakhs only. The earnest efforts to develop Bihar are, therefore, very recent and date only from the attainment of independence. Consequently, the emergence of a local leadership in Bihar is also a comparatively new phenomenon. Prior to 1911-12, the leadership in the State was in the hands of the Bengalis who dominated the learned professions and monopolised most of the key posts in the Government. The situation began to change after the separation of Bihar from the Presidency of Bengal. But the Bengalis continued to dominate the scene till about 1937 and it is only in the post-independence period that the Biharis have come into their own. The backwardness of Bihar, which affects education as well as the most other walks of life, is thus the result of a number of social, economic and political forces : traditionalism; poverty; feudal attitudes and outlook on life; dominance of caste; lack of adequate public finance; a long period of domination by non-local groups; and the comparative infancy and immaturity of local leadership.

2. Teachers: One of the most difficult problems in Bihar refers to the remuneration of teachers. Prior to 1947, this was extremely low; and although several attempts have been made to improve it during the last three plans, the position continues to be very unsatisfactory. The main difficulty arises, not from the basic scale of pay which is fairly good, but from the discrimination made with reference to dearness allowance: the teachers in the service of local bodies and private organizations (and these form the overwhelming majority among teachers) get a dearness allowance which is much lower than that given to government servants drawing the same salary. The primary teachers,

for instance, get a dearness allowance which is about Rs 30-40 less per month than government servants with the same salary. Even a Peon in government service gets a higher remuneration (all told) than primary teacher at the beginning of his service. The morale of the teachers is, therefore, at the lowest ebb and things have been very sadly aggravated by the recent rise in prices. Consequently, one of the major tasks which the Government has at present to face is to equalise the dearness allowance paid to government servants and teachers. This is a problem which Bihar shares with U.P. and these are the only two States to have such problems.

3. It is estimated that a sum of Rs 22.5 crores would be required in the fourth Five Year Plan to bring about this equalisation. The State Government has submitted a proposal in this regard to the Finance Commission and is hoping that the additional amount required (Rs 4.5 crores per year) would be made available to it by the Finance Commission as a grant-in-aid during the next quinquennium. In the meanwhile, the secondary teachers in the State threatened to go on strike; and to prevent it, Government has taken an interim decision to improve the scales of pay of secondary teachers at a total cost of about Rs 2.8 crores per annum. About Rs 1 crore out of this would be provided for by the State Government from the general revenues. Of the two States which have similar problems in this regard, it is obvious that the efforts of Bihar to meet the crisis are larger and more commendable. It is to be hoped that they succeed and that, with the assistance of the Finance Commission, the problem of remuneration of teachers in the State is satisfactorily solved before long.

4. Private Enterprise: Another important area in which innumerable problems arise is that of voluntary enterprise in education - its role, grant-in-aid, control over

appointments of teachers, determining the rights and duties of the managing committees, etc. It is necessary to examine this problem in some detail because it is seen in its acute form in this State.

5. Prior to 1947, secondary and collegiate education in Bihar was mostly the responsibility of private enterprise because the British Government maintained only a few high schools and colleges as models and left the field free for private schools to grow. The grants given to these institutions were also low - due to the meagre resources of the State - and the tradition has generally been to assume that private institutions should maintain themselves on their fee-incomes. Very naturally, the control over these institutions was also nominal. In the post-independence period, the first two of these trends were continued: the expansion of secondary and collegiate education is still mostly the responsibility of the private sector and the grants paid to them are still meagre. But a number of evils crept up owing to the caste-ridden social life and the earlier traditions of laissez faire. The appointments of teachers were made on a caste basis rather than on merit; the running of private schools and colleges became a new zamindari under which unscrupulous managers of educational institutions began to make a living; politicians began to compete with one another in capturing the managing committees of schools which became new centres of power in the democracy and developed large potentials for vote-catching; and embezzlement of funds, ill-treatment of teachers, etc. became common evils. Government, therefore, introduced several measures of stricter control. For instance, the Bihar High Schools (Control and Regulation of Administration) Act, 1960 tries to reconstitute and control the managements of secondary schools. A University Services Commission has been created to regulate all appointments of teachers in private colleges and secondary schools also. But in the absence of the basic reform - raising of

grant-in-aid - the evils have not been controlled to any material extent. On the other hand, the 'good' managers of schools are exasperated at the policy of Government to treat all institutions alike. Nationalisation of all these institutions is the most favourite proposal of reform which the official circles and teachers of these institutions put forward at the moment. But it is not likely to go through; and its results are also doubtful.

6. Some facts about the grant-in-aid are very revealing. There are no definite rules of grant-in-aid to colleges and all grants are given on an ad-hoc basis. There is only one college, Nalanda College at Bihar Sherif, whose entire deficit is met by Government. Several other colleges get only a fixed recurring grant, which is expected to cover a percentage of their deficit. In actual practice, this principle does not mean much because there are no criteria for calculating the deficit nor is assistance given at any fixed proportion of the deficit. In actual practice, this principle does not mean much because there are no criteria for calculating the deficit nor is assistance given at only fixed proportion of the deficit. At present, the total grant-in-aid available to colleges is about Rs 45 lakhs per year so that the total grant-in-aid per student does not go beyond Rs 50 per annum (including recurring as well as non-recurring expenditure). At the secondary stage, the picture is just the opposite. There are too many rules of grant-in-aid and too many different criteria. For instance, there are as many as 18 different types of grants, the calculations for which are to be made separately for each of the 1600 secondary schools which now exist. The mechanical work involved in this process is indescribable and yet the total grant-in-aid paid to secondary schools on account of ^{all} these different types of assistance comes only to about Rs 21 per student per year. The old procedures

for grant-in-aid have remained unchanged for years, and rationalisation has not been attempted at all.

7. On the whole, one cannot help feeling that what is needed in Bihar at present is a substantial increase in the amount of grant-in-aid available to private secondary schools and colleges and rationalisation and simplification of the existing rules of grant-in-aid. The effort is worth making and will pay rich dividends.

8. Some Special Points that Arise at the Different Stages of Education: With these preliminary remarks, we may turn to a study of the different stages of education.

(1) Elementary Education: In the field of elementary education, Bihar is one of the six backward States in the Indian Union and is lagging behind by about a Plan period.

(a) Primary Stage: In 1947, only about 21% of the children in the age-group 6-11 were attending schools. This proportion increased to 28 at the beginning of the first Plan and 35 at its end (1955-56). The second Plan made outstanding achievements due mainly to annual enrolment drives and succeeded in bringing in about 16 lakhs of additional children once again. But unfortunately, owing to cuts in financial allocations, the actual additional enrolment would be only 12 lakhs and the percentage of enrolment would rise only to 65, as against an all-India average of 76. The main difficulty experienced is in respect of girls, although it is commendable that more progress has been made in this regard in Bihar than in the other backward States. In 1950-51, the enrolment of girls at the primary stage was only 2.13 lakhs or one girl for every six boys or 8.1% of the age-group. At the end of the third Plan, the enrolment of girls will increase to 11.1 lakhs or one girl for every three boys or 34% of the age-group. Co-education at this stage is definitely becoming more

popular in Bihar, thanks to the organization of the enrolment drives and the education of public opinion.

One point must be remembered. The additional enrolment of pupils in the third Plan (12 lakhs) would have needed about 30,000 teachers. Owing to the non-availability of finances, the number of teachers appointed has been far from adequate; and consequently the pupil-teacher ratio has risen very considerably - from 1:28 in 1947 to about 1.45 at present.

Bihar has a two-year course of teacher-training and except for women and tribals, it recruits matriculates only. It has about 100 training institutions with an enrolment of 200 each, so that the output is about 10,000 per annum. The main problems to be faced are:-

- (1) The poor quality of training institutions, due largely to the failure to prepare teacher-educators - there is only one P.G.B.T. College in the State;
- (2) All trainees receive stipends (Rs 20 for men and Rs 25 for women) but the amount is inadequate;
- (3) There is a large number of untrained teachers in service. If they have to be sent for training, they will have to be given full pay (under recent orders of the High Court). For want of funds, therefore, there is hardly any programme for training them;
- (4) There is unemployment among trained teachers and yet untrained teachers continue to be recruited; and
- (5) some of the newly established training institutions are without any proper buildings.

Bihar took the lead in introducing the experiment of basic education; but now the situation is more or less the same as in all other States. An integrated syllabus has been introduced in all basic and non-basic schools.

(b) Middle School Stage: In classes VI-VIII, the total enrolment was only 2.23 lakhs or 7.8 per cent of the

age-group 11-14 in 1956-57. It increased to 5.35 lakhs or 18.9 per cent of the age-group in 1960-61 - a supreme achievement. In the third Plan, the pace has slackened again, one to financial stringency. By 1965-66, the enrolment would be only 7.78 lakhs or 22.2 per cent of the age-group as against the All-India average of 32 per cent. As at the primary stage, the position of girls' education has improved considerably. In 1950-51, there were only 11,000 girls in classes VI-VIII (i.e. one girl for 20 days or 0.9 per cent of the age-group). In 1965-66, their enrolment will rise to 120,000 or one girl for about five boys or about 7 per cent of the age-group. It may be pointed out, however, that, in the third Plan, the population in the age-group has increased by about 6 lakhs. The additional enrolment, which stands at 2.43 lakhs, is, therefore, not keeping pace even with the growth of population.

(c) Secondary stage: In Bihar, the pattern of schooling is 4 plus 3 plus 4 plus 1 plus 3 or 15 years in all, except in basic schools where the pattern is 5 plus 3 plus 3 plus 1 plus 1. An attempt has, therefore, to be made to introduce a common pattern basic and non-basic schools.

The higher secondary system in Bihar covers 12 years and has been introduced in 364 schools out of 1600. It is not working well and the following problems have arisen:-

(1) It is difficult to get suitable teachers for the higher secondary classes which follow an integrated course in the last three years (called IX special, X special and XI special).

(2) The universities complain that the products of the higher secondary schools are poor because of poor teachers and poor facilities provided. They, therefore, give preference to FUC students when making admissions to the degree classes. Consequently, higher secondary students find themselves in a difficulty when entering a college.

Many of them, even while studying in higher secondary schools, prefer to appear for the matriculation examination at the end of class XI (or X special) and then join the university in the P.U.C. class. This creates a good deal of disturbing effect on the teaching in higher secondary schools and has a demoralising effect on them. The matter was recently examined by a committee which has recommended that the integrated higher secondary course should be abandoned; that there should be a common course for all students till the end of class XI when the High School examination is held; and that the syllabus for class XII in higher secondary schools should be the same as in PUC class. This is likely to be accepted by Government.

(3) There is a very large number of substandard schools. Government has a small number of schools - which were originally meant to be model schools - but the conditions in most of these schools have deteriorated. In the private schools, lack of resources (due mainly to paucity of grants) is the cause of low standards. Political pressures also play an important role and the Department is unable to enforce its rules in several cases.

(4) There is a good output of trained graduate teachers every - about 800. A large number of trained teachers are unemployed (estimated at 5000). But the percentage of trained teachers in the schools is only 40. This is because the rules require only two trained teachers per school (which are also not in several cases). The schools do not appoint trained teachers because they will have to pay higher salaries. In spite of all this, it is proposed to expand training facilities for secondary schools in the fourth Plan !

(5) The results of the High School examination are poor, sometimes as low as 36 per cent.

(6) There is no convergence between the school year (1st

January to 31st December) and the university year which begins on 15th July. Consequently, a boy changing from high school to college loses six months unnecessarily: he enters class XI or XII on 1st January and joins P.U.C. or the degree course only on 15th July of the following year. It would be good if this wastage could be stopped.

(7) There is a general complaint that the curricula are old-fashioned, out-of-date and over-crowded. Prima facie, it appears that these curricula have not been prepared with adequate care. For instance, there is a course in Irrigation Engineering provided at the secondary stage which, in the opinion of the authorities in charge of technical education, does not have any value. There is a course in Agricultural Education at the secondary stage which is so planned that students undergoing it are not admitted to the Agricultural Colleges in the State. The whole position will have to be reviewed.

(8) It was very painful to see how the actual number of teaching days was reduced in all the educational institutions in Bihar. A very long time is lost in examinations. There are also other programmes which interfere with the work of the school. Though the total number of working days in secondary schools is as high as 220, the actual number of teaching days is often as low as 110. One of the most urgent reforms needed in the State is to cut out all these matters which interfere with classroom instruction and to increase the hours of effective teaching per year to at least 1200.

(9) The expansion of secondary education has been very rapid. At the end of the Third Five Year Plan, the enrolment in secondary schools is expected to be about six lakhs or 18% of the corresponding age-group. This is almost the all-India average. In other words, though the primary and middle school education in Bihar is lagging behind that in the other States, in so far as secondary education is concerned, Bihar is almost on a par with the other States. The education of girls, at

this stage, is, however, comparatively backward. At the end of the Third Plan, only about 60,000 girls (for one girl for every 10 boys) are expected to be in schools - this represents 3.5% of the corresponding age-group.

(10) One very important and interesting experiment in Bihar is the Netarhat School which is a Public School teaching through the medium of Hindi. Admissions to this school are strictly regulated on merit and practically all expenditure of the students is borne by the State. The results are extremely good. A separate note on this school prepared by Shri A.R. Dawood is enclosed (Annexure I).

(d) University Stage: Patna is the oldest university in Bihar (1917). The next university in the State, the Bihar University, was established in 1952 as an affiliating university for the State as a whole and the Patna University was converted into a teaching and residential university for the Patna city. Later on, however, a decision was taken to establish one university for each Division of the State. Consequently, the jurisdiction of the Bihar University was restricted to Tirhut Division with headquarters at Mazaffarpur; and new universities were established for the other Divisions in the State - the Bhagalpur University for the Bhagalpur Division, the Ranchi University for the Chhota Nagpur Division and the Magadh University (with headquarters at Gaya) for the Patna Division. Besides, a Sanskrit University was established at Dharbhanga. There are thus six universities in the State at present and there is a demand for seventh university - the Mithla University at Darbhanga. Obviously, Patna is the oldest and the best of the universities. It has also been able to maintain fairly good standards because of the restriction in numbers which it can impose, the overflow of non-admitted students flowing into the colleges of the Magadh University. All the other universities are very recent and far from well-established.

A unique feature of higher education in Bihar is the establishment of the State Universities Commission of which the Chancellor is the Chairman. There is a whole-time Vice-Chairman, and the members include all the Vice-Chancellors in the State, the Director of Public Instruction, Education Secretary and the Finance Secretary. The State Government places all the funds it has for higher education at the disposal of the University Grants Commission and it is the Commission which distributes them to the different universities. The regulations made by the Universities have to be approved by the University Grants Commission and their Statutes are approved by the Chancellor on the recommendation of the Universities Grants Commission.

A very important point which arises in this context is whether such State level organisations should be created to deal with universities. There are arguments on both sides. It is said that the creation of such an organisation will make further inroads into the autonomy of universities and that these bodies will act as an intervening block between the University Grants Commission and the with whom it is dealing directly at present; on the other hand, it is argued the position of a Vice-Chancellor is considerably strengthened in dealing with the State Government because of the existence of a central organisation of this type. The Commission will have to consider this problem in detail, especially because every State now has a large number of universities and there is no effective machinery at the State level for coordinating their work.

Another interesting feature of higher education in Bihar is the constitution of the University Services Commission whose main object is to recommend persons for appointment in the affiliated colleges. It justified on the ground that there were immense irregularities, largely based on caste considerations in the appointments to affiliated colleges. A detailed note on the working of this organisation is given in Annexure II. This is also an important point for the Commission to examine and the

desirability or otherwise of creating similar organisations to deal with appointments in affiliated colleges will have to be considered. The scales of teachers in affiliated colleges are low and need immediate revision. A reference to this problem has been made already.

There has been considerable expansion of higher education in Bihar in the post-independence period. In 1946-47 there were only 33 institutions of higher education with an enrolment of 14,600. At the end of the Third Plan, the number of these institutions will be more than 200 and the total enrolment is expected to be about 1,50,000.

Another interesting feature of higher education in Bihar is that the State Government has established a number of institutions and centres of higher learning. These include:

- (i) A.N. Sinha Institute of Social Studies;
- (ii) K.P. Jaswal Research Institute in Ancient History and Culture;
- (iii) The Arabic and Persian Institute at Patna;
- (iv) The Navlanda Maha Vihar at Nalanda. It conducts postgraduate teaching and research in Pali and Budhology.
- (v) The Prakrit Institute at Vishali, which conducts research in Prakrit and Jainology.
- (vi) The Bihar Rashtrabasha Parishad, which publishes high quality books in Hindi.

There is at present no adequate coordination between these research institutes and the universities. Since some of these institutions have an all-India character, the Government of India has a moral responsibility to assist them. It is, therefore, necessary to take steps to integrate them with the universities and to see that they get a fair measure of central assistance. This problem will have to be examined in detail and pursued.

The introduction of the three-year degree course in Bihar is more a matter of form than a reality. It was a surprise to find that most of the university teachers were still in love with the old pattern of a two-year intermediate

course followed by a two-year degree course merely as a financial necessity and in view of the grants-in-aid offered by the U.G.C. for the introduction of the course. But no integrated three-year degree course has ever been introduced and all that has been done is to divide the intermediate course into two parts: the first year is called the P.U.C. and an examination is held at its end; and the second year is called the first year of the three-year degree course and is also followed by ^{an} examination at its end, which is the same old intermediate examination. The next two years of study have both Pass and Honours courses and follow the same pattern as was laid down for the two-year degree courses in the past. There is also a strong feeling that the three-year degree course has not worked and that it would be, on the whole, desirable to go back to the old pattern of 11-year school, followed by a four-year university course - two years for the intermediate and two years for the degree. Bihar is thus a supreme example to show how a mere tinkering with pattern leads nowhere or only makes matters worse.

As is but to be expected from the poor conditions of teaching provided in the affiliated colleges, the incidence of student indiscipline in Bihar is comparatively larger and is causing concern to the authorities. Recently, there were ugly incidents at Darbanga which are now being enquired into.

As pointed out earlier at the secondary stage, the number of working days in the Colleges of Bihar is very low and in some institutions, there are as few as 80 days in a year. There are also a number of tutorial colleges which mean part-time institutions of a very poor quality. The staff-student ratio is also far from happy, especially in the affiliated colleges, and owing to lack of adequate accommodation, several institutions are working in shifts. If the standard of educational institutions at the university stage is to be raised substantially, a very large investment would be needed.

With regard to admissions to the universities, the Vice-Chancellors as well as the university teachers were not very

much in favour of restricting admissions on the basis of merit. Their main argument was that it is impossible to put restrictions on admissions to colleges because there are no adequate openings available to students. This also made it impossible, as a corollary, to control the growth of substandard institutions. They, however, felt that selective admissions should be made at the post-graduate stage.

An important feature of higher education in Bihar is the restriction on the autonomy of the universities. Under the existing law, these universities are not free to recruit their own staff. This is done by the State Public Service Commission on their behalf. The universities thus lose caste and it is understood that the Inter-University Board of India has refused to give them its membership on the ground that they are not autonomous. Very naturally there is a strong feeling in the university circles that they should be given the authority to recruit their own staff. The State Government is unwilling to take the risks involved, which are probably very real in a caste-ridden State like Bihar. There is, however, a willingness on the part of the State Government to consider some modification of the existing procedure which will give a greater voice to the universities in the ultimate selection of their staff. This peculiar situation raises important issues which the Commission will have to examine in detail.

The idea of a Central University being established in each State has caught the imagination of the University teachers in Bihar. This is obviously regarded as a panacea for all their ills of financial starvation at the hands of the State Government. Patna and Ranchi are competing for this privilege at present.

(e) Professional, Vocational and Technical Education: The problems of professional, vocational and technical education have been, by and large, neglected in Bihar. No attempt has so far been made to prepare estimates of man-power needs in the State for the next 10-15 years.

(1) Agricultural Education: Agricultural research in Bihar is under-developed. It has three Agricultural Colleges. These need both expansion and improvement. There are, however, no agricultural schools (except the Gram-Sevak Training Centres which are mis-called 'agricultural schools'). The outlay on agricultural education was Rs. 1.68 crores only in the Third Plan and will be about Rs. 1.90 crores only in the Fourth. This is a very neglected area that needs attention.

(2) Technical Education: The total annual intake of engineering colleges in the State would be only 1,116 at the end of the third Plan which is extremely meagre. It is proposed to increase this to 2,266 by the end of the fourth Plan. Similarly, the intake of polytechnics will be only 2,139 at the end of the third Plan. This is proposed to be raised to 6,700 at the end of the fourth Plan. In spite of these large expansions, Bihar will be a backward State in engineering education. But the effort proposed for the fourth Plan is really commendable: it involves an outlay of Rs. 5 crores in the third Plan.

(3) The I.T.Is: At the I.T.I. level, the position in Bihar is fairly good. There are 13,000 seats at present and these would be raised to about 25,000 at the end of the fourth Plan. There is some unemployment among those trained in the I.T.Is in the non-engineering trades. These facts are proposed to be taken into consideration while planning expansion of I.T.Is. in the fourth Plan.

On the whole, one has the feeling that professional, vocational and technical education in Bihar is rather sadly neglected and that it deserves a very high emphasis in the next three Plans.

9. Education of the Backward Classes: About 23.5% of the total population of Bihar belongs to the backward classes. The proportion of scheduled tribes is very high. This problem has not received as much attention as it should and will have to be emphasised in the next three Plans.

10. Finance: The total educational expenditure on education in Bihar has always been much lower than that in other States. The following Table shows how the public expenditure in Bihar has increased since 1947:

Year	Total Revenue expenditure of the State(In crores.	Total Revenue Expenditure on Education(In crores)	Percentage of Col.(3) to Col. 2	Total population of the State (In crores)	Per capita expenditure on Education
1	2	3	4	5	6
1947-48	16.80	1.24	7.38	3.64	0.34
1950-51	26.05	3.19	12.24	4.02	0.79
1955-56	54.45	7.74	14.21	4.22	1.83
1960-61	72.40	13.26	18.31	4.65	2.85
1965-66 (Budget Estimates)	113.64	19.57	17.22	5.21	3.76

Source: Memorandum of the State Government (page 60)

It may be pointed out that the public or State expenditure on education in India will be about Rs. 7 per head against which that in Bihar will be only Rs. 3.76. It is this financial issue that is mainly responsible for the salary problem in Bihar.

11. Fees: Fees play a very important role in the financing of education in Bihar. It is rather sad that, in this extremely

poor State, fees (which form a very regressive form of taxation) should play so important a role. At present, education is free for all girls up to class VIII. It may be worthwhile to make it free for boys also, by increasing the cess, if necessary. Bihar will not be able to make education compulsory in the age-group 6-14 till 1985 or so. It may, therefore, be worthwhile to make it at least free in the fourth Plan.

12. Text-books: The memorandum of the State Government mentions that the setting up of a Text-Book Corporation may augment the resources available to education through its profits (p.53). At present, the State charges 100 p.c. profit. The quality of books is poor and prices are high. This leads to piracy and several other evils. It would be better not to regard text-books as a source of revenue, to emphasise the improvement of quality and to sell them on the principle of 'no profit and no loss'.

13. Administration: Bihar shows a considerable weakness in administration and that is probably one of the major causes of the rather depressing picture that education in the State presents.

(1) Some of the difficulties of educational administration go beyond education and are common to all the other departments as well. For instance, the Secretariat and the office of the Head of the Department which are both in Patna are huge because no body wants to go out of Patna and the field staff is comparatively weak. The average 'district' in Bihar is very large. (Darbhanga has a population of 50 lakhs) and even though it is staffed in a fashion similar to that in other States, the work-load is immense. The sub-division (there are 58 sub-divisions in Bihar) which has a population

of about a million is the real comparable district in Bihar and at this level the staffing is very inadequate.

(2) The education districts are the same as revenue districts with the result that the work-load on officers is very uneven - from 87 secondary schools in one sub-division to 3 in another. The idea of carving out separate education districts has been conceived but not implemented so far, owing to lack of funds.

(3) The general level of officers (barring some noble exceptions) leaves much to be desired.

(4) The rule is that every school should have one inspection and four visits a year, but this is hardly ever possible because of the heavy load on officers. The lowest inspecting officer is so frequently used for non-educational work by the B.D.Os that he can spare very little time for supervision or educational work proper.

(5) The Panchayati Raj scheme has been just adopted, although with considerable hesitation. The Act was passed in 1961 but remained unimplemented for three years. Last year, the experiment was introduced in two districts - Gaya and Darbhanga - and this year, it was extended to two others, the object being to try out the experiment in one district of each Division before it is extended to others. (It was understood that the recent extension to two districts has been staged by the High Court on some technical grounds). It is too early to judge the results; but the usual complaints of harassment to teachers etc. are coming in plentifully.

(6) There is a great need to rationalise procedures in several matters (e.g. grant-in-aid) and to streamline administration.

14. The Fourth Plan: The following Table shows the expenditure incurred on general education in the first three Plans:

Sector	Rs. in crores					
	First Plan		Second Plan		Third Plan	
	Approved	Actual	Approved	Actual	Approved	Actual
Elementary	3.34	4.84	10.38	9.67	19.48	13.56
Secondary	0.33	0.50	4.95	3.38	7.14	4.38
University	0.62	0.80	1.70	2.43	5.37	3.84
Social	0.39	0.36	0.38	0.06	0.41	0.11
Miscellaneous	0.11	0.16	2.83	1.40	1.23	1.06
TOTAL	4.79	6.46	20.33	16.94	33.58	22.95
Cultural	0.05	-	0.17	0.16	0.45	0.26
Grand Total	4.84	6.46	20.50	17.10	34.03	23.21

Source: Data supplied by the State Government

Two important points emerge from this Table:

- (i) Secondary education has been the worst sufferer, both in the second and the third Plans, although the expansion here has been very large. This crucial weakness affects the entire system.
- (ii) The cuts in education in the third Plan were to the extent of 31.2 per cent, although the over-all State Plan has been nearly fulfilled (actual expenditure of Rs. 316 crores as against the projected target of Rs. 337 crores). This includes an increase of 17 crores on irrigation and power and the total cut of Rs. 38 crores, of which about Rs. 11 crores have been taken from education alone.

The present proposal for the fourth Plan is to have a Plan of Rs. 939 crores (rather ambitious). In this, the expenditure on general education stands at Rs. 72 crores which works out at about 8 p.c. of the total Plan outlay. If we add Rs. 29 crores proposed for technical education, the total expenditure would be Rs. 101 crores or about 11% of the total Plan outlay which should be regarded as fair, or even generous, The only fear is that, as in the past, the cuts would fall heavily on education in practice and the favourable balance of this proposal will be lost.

There is another aspect to this problem. The total educational investment in India is Rs. 1300 crores. Since Bihar

has 10% of the population of India and is backward, it will need about 13% of the expenditure to come up to the mark. But as now proposed, it will have only 8 p.c. of the expenditure. The net result is likely to be that the lag between Bihar and other States is likely to increase rather than decrease at the end of the fourth Plan.

It is too early to comment on the proposals of the fourth Plan which are too tentative at present. But one comment may be made; they are all traditional and imaginative. For instance, at the secondary stage, there are proposals for expanding teacher-training, establishment of two more schools on the Netarhat pattern, conversion of more schools to higher secondary, etc. Even if they are fully implemented, none of the basic problems are likely to be solved and some of them might become worse. What is needed is a new and bold approach. In fact, a study of the educational problem in Bihar leaves one with a clear realisation that pumping additional funds into the existing system on traditional lines is likely to add to the wastage rather than to improve the situation.

J.P. Naik
Member-Secretary

ANNEXURE I

A Note on Netarhat School, Netarhat

(Bihar State)

I. General:

The Netarhat School is a residential institution for boys between the ages of 10 and 18, maintained by the Government of Bihar for the education of selected pupils whose parents are permanent residents of Bihar State. It is situated on a small plateau at a height of more than 4000 ft. and at a distance of 95 miles from Ranchi. The school is a unique educational experiment of its kind in India. It is run on the lines of good Indian public schools, but unlike them, it is financed largely out of State funds, and is intended not for the children of the privileged few who can afford to pay high fees but for the gifted sons of persons whose monthly earnings, generally speaking, do not exceed Rs 500 and in a large number of cases (more than 40%) are less than Rs 100. A statement showing the rates of fees payable by pupils in accordance with the income of their parents is given in Appendix A. Appendix B shows the income composition of the parents of the pupils during the last six years.

II. Admission:

Admissions to the school are made through an open competition held at Sub-Divisional Headquarters every year in the first week of February. The standard of examination is approximately that of the Class VI of Bihar Upper Primary Schools. The candidates are examined through written papers in:

- (a) Language and literature;
- (b) Arithmetic;
- (c) Social Studies; and
- (d) General Science.

It is reported that about 1800 students offer themselves for the examination every year. On the basis of the results of the examination, about 200 boys are selected for psychological tests and interviews at Divisional Headquarters.

and 60 boys are finally admitted to the school every year. Provided suitable candidates are available, 11% of the seats in the school are reserved for candidates belonging to Scheduled Castes and Scheduled Tribes and 4% for candidates belonging to the Backward Classes. I was told that about 80% of the pupils in the current year are from the rural areas.

III. Curriculum:

The medium of instruction in all the classes is Hindi, but English is taught from the very beginning. For the first two years all the boys have to pursue the following courses of study; the periods mentioned are per week.

(A) <u>HUMANITIES</u>	(B) <u>SCIENCE & MATHS</u>	(C) <u>ARTS & CRAFTS</u>
Hindi 6 Pds	Mathematics 6 Pds	Woodwork 2 Pds
Sanskrit 2 "	Chemistry 2 "	Metal work 2 "
English 6 "	Physics 2 "	Agriculture 2 "
Social Studies 2 "	Biology 2 "	Painting 2 "
History 2 "		Music 2 "
Geography 2 "		

During the third year, the boys can choose from among the C group one or two subjects only and work for four periods a week. They will select their subjects in consultation with their housemasters, the teachers concerned and the counsellor.

The following alternative courses are available at the school for preparing the boys for the Higher Secondary School Examination. These courses, besides the core subjects, will be pursued in classes X, XI and XII.

1. Humanities
2. Science
3. Woodwork, Metalwork and Workshop
4. Agriculture
5. Fine Arts.

It is reported that the vast majority of the students have offered the Science subjects this year for the Higher Secondary School Examination.

IV. Staff:

Besides the Principal, there are 27 Assistant Masters in the school and four Instructors for Arts, Metalwork and Agriculture. The staff is highly qualified. The Principal, Shri J.N. Dar, has considerable experience of residential

schools, having worked for seven years in the Vidya Bhavan, Udaipur, and for over ten years in the Scindia School, Gwalior. Twentyfive out of 27 Assistant Masters possess post-graduate qualifications, and six of them are First Class M.As or M.Sc.s; twelve of them, however, do not have any training qualifications. There are only two pay scales - one for the Assistant Masters: Rs 350-15-380-25-480-30-750, and the other for Instructors: Rs 125-250. It was found that, though the first pay scale is high, the senior teachers who have been in the school since its inception are somewhat discontented as there are no selection grades. Though the staff is on the Government pay roll, the teachers cannot be transferred to other Government educational institutions.

V. Students' Ashrams:

The pupils are accommodated not in large dormitories but in small ashrams in which about 20 boys live along with a housemaster and his family. The Ashram has a courtyard in front and the inmates of three Ashrams have meals together. The special feature of these Ashrams in the absence of menials, and all the cleaning and sanitary work is done by the boys in turn. There is a regular schedule of work to be done by the different inmates of the ashrams on different days.

VI. Curricular and co-curricular activities

The school follows the syllabus of the Bihar Education Department and the Higher Secondary School Examination; but it has provided for a comprehensive programme of curricular activities. Though the medium is Hindi, the standard of English is high. We had an opportunity of watching the performance of an English One-Act Play by the students. The actors showed a rare command over the English language which they spoke with reasonably correct accent and pronunciation; and the pupils who formed the audience enjoyed the play and seemed to appreciate keenly the wit and humour of the lines that were spoken by the players.

We also saw the interesting language game of 'Antyakshari' in which the pupils participated with great zest. It appears that this game has been used by the school for developing interest among the students in the study of Hindi poetry. We also saw the specimens of woodwork, metalwork and painting by the students and were impressed by the work done in the different classes.

In the first and the second year classes an experiment is being tried of using colour material made from different kinds of soil collected from the neighbourhood and also using the crushed ends of local bamboo and palm twigs instead of costly sable brushes.

The school has extensive play fields, and it is reported that the boys have done remarkably well in outdoor games. The results of the school in the Higher Secondary Examination have been excellent as is clear from the statement given in Appendix C.

VII: Summing Up:

I was considerably impressed by the tone and the atmosphere of the school, the behaviour of the boys in the assembly and the record of their work that was shown to me. The school was established as an experiment but the experiment has more than justified itself. It is for the Commission to consider whether institutions of this type can be established in sufficiently large numbers all over the country for the benefit of talented children of parents of low-income group. It may be pointed out that the expenditure on the Netarhat School was very high. I understand that a sum of Rs 40 lakhs was spent on buildings alone and about 14 lakhs on the construction of the reservoir and the pipe lines for supplying water to the school. The average annual expenditure per child is about Rs 2400/-, the bulk of which is borne by the State Government. It is for consideration whether the 'quality schools' the establishment of which has been suggested in certain quarters should be of this expensive variety, or whether we should recommend 'model

schools' which could be established and run at a much lower cost.

APPENDIX 'A'

Grouping according to parents' income

Group	Income per month	Annual Fee	Clothing & Equipment	Total payment
A	Below Rs 100 per month	Free	Free	Nil
B	Between Rs 101 & Rs 250	Free	Rs 300/-	Rs 300/-
C	" Rs 251/- & 500/-	Rs 400/-	Rs 300/-	Rs 700/-
D	" Rs 501/- & 750/-	Rs 600/-	Rs 300/-	Rs 900/-
E	" Rs 751/- & 849/-	Rs 900/-	Rs 300/-	Rs 1200/-
F	Above Rs 850/-	Rs 1200/-	Rs 300/-	Rs 1500

APPENDIX B

Netarhat Residential School, Netarhat
Ranchi

1. No. of students on 24th April 1965 .. 357
 - (i) Residential (Bihar State) .. 345
 - (ii) Govt. of India Scholars .. 3
 - (iii) Day Scholars .. 9
2. (a) Income composition (Bihar State Students):-

Year of admission	A	B	C	D	E	F	C.Govt.	Day Sch.	Assess- ment awaited	Total
1959-60	36	13	5	1	-	-	-	1	1 / (1 Ex)	57
1960-61	34	14	3	-	-	-	-	-	5	56
1961-62	27	7	-	4	1	-	-	-	15 / (1 Ex)	54
1962-63	21	25	6	4	-	3	-	1	-	60
1963-64	22	14	19	5	-	-	1	1	-	62
1964-65	18	16	16	7	1	2	2	6	-	68
Total	158	89	49	21	2	5	3	9	21	357

2(b) Govt. of India Scholars - 3 - School receives full payment.

APPENDIX 'C'

Netarhat Vidyalaya

Students appeared and passed the Higher Secondary School Examination and their different streams

Streams/Year	1960	1961	1962	1963	1964
1. (a) Humanities	12	17	11	12	15
(b) Humanities with Mathematics	-	-	-	-	1
2.(a) Science with Mathematics	21	29	30	33	38
(b) Science with Biology	6	13	8	4	3
3. Painting & Music	1	2	-	-	1
4. Workshop	1	1	1	-	-
Total	41	62	50	49	58
Results-I Div.	37	60	48	49	42
II Div.	4	2	2	-	-
Positions out of 10	9	-	-	-	-
Positions out of 15	-	8	13	8	-

ANNEXURE II

A SHORT NOTE ON THE FUNCTIONING OF THE UNIVERSITY
SERVICE COMMISSION
(BIHAR)

The University Service Commission was constituted with effect from the 1st March, 1962, by an amendment to the Bihar State Universities Act, with a view to ensure just and proper recruitment of teachers in affiliated colleges, other than Government colleges to which recruitment was already being made on the recommendation of the Public Service Commission. The functions of the University Service Commission, like those of the Public Service Commission, are to make recommendations for appointments, dismissals, removals, termination of service or reduction in rank of teachers of an affiliated college not belonging to the State Government.

2. Under the Act all appointments, dismissals, removals, etc., have now to be made by the Governing Body of a College on the recommendation of the University Service Commission, with the approval of the University, excepting that for short-period appointments of less than six months consultation with the Commission is not necessary. In the matter of dismissal, removal, termination of service or reduction in rank, the recommendation of the Commission is binding on the Governing Body.

3. While the amending Bill regarding the constitution of the Commission was before the Legislature, it was brought to Government's notice that many of the Governing Bodies were making irregular appointments, dismissals, etc. An Ordinance was, therefore, promulgated in March 1962, providing for all such appointments, dismissals, etc., being subject to the orders of the Chancellor, on the recommendation of the Commission. It was found that during the Ordinance period, covering the period from the 27th November, 1961, to the 28th February, 1962, (i.e. about three months), as many as 328 appointments had been made by the Governing Bodies. On the recommendation of the Commission the Chancellor approved 271 appointments and disapproved appointments of 44 teachers; 13 cases remained pending for the Chancellor's orders.

4. The figures of appointment and dismissal, etc., cases referred to the Commission during the three years of its existence, namely, 1962-63, 1963-64 and 1964-65 are given below:-

Appointments

Year	Number of posts advertised	Number of applications received	No. of candidates called for interview	No. of candidates who actually appeared before interview
1962-63	389	5109	3216	2441
1963-64	430	4890	3716	2757
1964-65	206	2161	1443	1210

(Figures for 1963-64 and 1964-65 are provisional)

Number of cases in which concurrence to continuance of temporary appointments given.

1962-63	95
1963-64	108
1964-65	69

Disciplinary cases, including dismissal, removal, etc.

1962-63	32
1963-64	4
1964-65	4

The figures above will indicate that the number of vacancies in the posts of teachers decreased considerably during 1964-65. The reason is obvious. After the Commission was constituted, vacancies in the posts of teachers which previously used to be filled up by the Governing Bodies without any proper programme, resulting in a large number of posts being kept unfilled, were filled up during the first two years of the Constitution of the Commission, in many cases after the Commission, on the basis of statistical data available to it, suggested to Governing Bodies for sending requisitions for advertisement of posts. When recruitments became a little stabilised, the figure of vacancies during 1964-65 naturally come down.

In the matter of disciplinary cases, prior to the constitution of the Commission, teachers were dismissed or their services terminated, in many cases, on flimsy grounds, and in many without observance of the procedure laid down in the Statutes, with the result that when the Commission was constituted there was a spurt of representations from persons affected and also references by the Governing Bodies. This accounts for a large number of disciplinary cases referred to the Commission during the first year of its existence. In subsequent years, when things stabilised and procedures began to be followed, the number of disciplinary cases referred to the Commission came down considerably.

5. Bihar is probably the only State which has taken steps by the constitution of a University Service Commission to ensure a fair recruitment of, and disposal of disciplinary matters against, teachers in non-Government affiliated colleges. The experience of the Commission during the short period of its existence is that this has had salutary effect in the matter of recruitment, and also in the morale of the teachers of non-Government affiliated colleges where, prior to the constitution of the Commission, merit was certainly not the consideration for appointment, and in many cases unqualified persons (e.g. Third class M.A.'s or persons who had just appeared at the Master's Degree examination) were appointed. The non-Government affiliated colleges are, by and large, now appointing teachers on the recommendation of the Commission, and whimsical disciplinary cases against a teacher has become a matter of the past. In one University, it is understood, the general rule is that the first nominee of the Commission for a post (out of two recommended in order of preference for every post) must be appointed, and in case the Governing Body desires to make an exception by appointing the second nominee, the previous sanction of the University has to be obtained. Another University, where a college was dilly-dallying appointment of teachers on the recommendation of the Commission, the Vice-Chancellor took stringent action by stopping grant to the college with the result that the college authorities have since then begun to observe the provisions of the law and statutes properly. The success of the University Service Commission would depend to a very large extent on the co-operation it gets from the Universities by their ensuring that the Government Bodies implement the recommendations of the Commission and observe the necessary provisions of the Bihar State Universities Act and the University Statutes. There are a few loopholes in the Act and the University Statutes also of which undue advantage is being taken by some of the Governing Bodies. These loopholes will require plugging. The Commission is taking up the matter separately with the authorities concerned.

Appendix

Section 48-A of the Bihar State Universities
(University of Bihar, Bhagalpur and Ranchi)
Act, 1960

48 A. Establishment of a University Service Commission for affiliated Colleges not belonging to the State Government and its powers and functions - (1) With effect from such

date as the State Government may, by notification in the Official Gazette, appoint, there shall be established a Commission by the name of the University Service Commission.

(2) The said Commission shall be a body corporate having perpetual succession and a common seal, and shall be the said name sue and be sued.

(3) The Commission shall consist of a Chairman, and two other Members to be appointed by the State Government, who shall be whole-time officers, and shall hold office for a term of three years from the date of assumption of charge of office, on the expiration of which term they, or any of them, may be re-appointed for only one more term which shall not exceed three years.

Provided that in case of absence of one or more members on leave or otherwise, the remaining members or member, as the case may be, shall constitute the Commission.

(4) There shall be a Secretary to the Commission who shall also be a whole-time officer to be appointed by the State Government.

(5) Other terms and conditions of service of the Chairman, members and the Secretary shall be determined by the State Government.

(5a)(i) the State Government may, by notification in the Official Gazette, make rules, not inconsistent with the other provisions of this section, for the smooth working of the Commission;

(ii) every rule made under this sub-section shall be laid as soon as may be after it is made, before each House of the State Legislature while it is in session, for a total period of fourteen days which may be comprised in one session or in two successive sessions, and if, before the expiry of the session in which it is so laid or the session immediately following, both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.

(6) Subject to the approval of the University, appointments, dismissals, removals, termination of service or reduction in rank of teachers of an affiliated college not belonging to the State Government shall be made by the governing body of the college on the recommendation of the Commission.

(7)(i) In making recommendations for appointment to every post of teacher of any such affiliated college, the Commission shall have the assistance of two experts in the subject for which an appointment is to be made, of whom one shall, whenever possible, be a teacher of the University to be nominated by the Syndicate and the other shall be a person other than a teacher of the University, to be nominated by the Academic Council.

(ii) The experts shall be associated with the Commission as assessors whose duty it shall be to give expert advice to the Commission but who shall have no right to vote.

(8) The Commission shall, wherever feasible, recommend to the governing body of a college for appointment to every post of teacher of the college names of two persons arranged in

order of preference and considered by the Commission to be the best qualified therefor.

(9) In making appointment to a post of teacher of a college, the governing body of the college shall, within three months from the date of the receipt of the recommendation under sub-section (8), make its selection out of the names recommended by the Commission, and in no case shall the governing body appoint a person who is not recommended by the Commission.

(10) Notwithstanding anything contained in the preceding sub-sections, it shall not be necessary for the governing body to consult the Commission if the appointment to a post of a teacher is not expected to continue for more than six months and cannot be delayed without detriment to the interest of the college.

Provided that if it is proposed to retain the person so appointed in the same post for a period exceeding six months or to appoint him to another post in the college the concurrence of the Commission shall be necessary in the absence of which the appointment shall be deemed to have been terminated at the end of six months.

(11) The Commission shall be consulted by the governing body of a college in all disciplinary matters affecting a teacher of the college and no memorials or petitions relating to such matters shall be disposed of, nor shall any action be taken against, or any punishment imposed on, a teacher of the college otherwise than in conformity with the finding of the Commission :

Provided that it shall not be necessary to consult the Commission where only an order of censure, or an order withholding increment, including stoppage at an efficiency bar, or an order of suspension pending investigation of charges is passed against a teacher of a college.

(12) It shall be the duty of the Commission to present annually to the University a report as to the work done by the Commission in relation to such colleges affiliated to the University and a copy of the report shall be placed before the Senate at its next meeting, and the University shall further prepare and submit to the State Government a memorandum explaining, as respects the cases, if any, where the advice of the Commission was not accepted, the reasons for such non-acceptance, and the State Government shall cause the same to be laid before the legislature of the State.

EDUCATION COMMISSION
GOVERNMENT OF INDIA

Item 5
10th Meeting

Subject: Memorandum by Shri Achyut Patwardhan
on Education as Instrument of Social
Change.

1. Trend towards
careerism.

It is essential to note at the outset that education is largely understood to be meaningful and worthwhile, in the measure that it can impart socially useful skills and information to the students. During recent years higher education at the University level, particularly in its technical and scientific branches, has opened out thousands of employment opportunities. They provide a concrete and direct incentive for youngmen to make good, in the wordly sense. The need of the Five Years Plans for various categories of trained personnel, on the one hand, the urge of parents to secure attractive careers for their sons on the other, provide the complimentary levers which sustain our education structure. It must be recognised that such an exclusive stress upon aptitudes and skills inevitably leads to the neglect of "insights" concerning the nature of relationship of man to his fellow-men, and to a loss of perspective about social well-being, and its vital relationship with the right use of national resources. These basic aspects of education as an instrument of social change are totally lost sight of in the present quantitative expansion of university education. Universities need to be guided by men whose thinking is not

2. Eclipse of
"insights"
concerning
human rela-
tionships
and misuse
of social
resources.

3. Lack of recognition of the vital role of a non-conformist attitudes in regard to status-quo.

fettered by an object dependence upon status-quo. They must help the under-graduate to think fearlessly about the social frame-work wherever and whenever it conflicts with basic norms of human dignity; out of such non-conformist thinking new disciplines of the mind have to be evolved. It is the task of the University to rear such non-conformist minds. Social change cannot become an effective and sustaining motive force of the educational system unless education is used to rear such minds at the highest levels.

It is submitted that this was the climate of the mind at some of the national universities and colleges - during the critical years during the struggle for political freedom. This precious asset has been frittered away, and men who represent these attitudes have been elbowed out of colleges and universities. Or else they have slinked away into obscurity. Can such a tradition be built up again in the changed context?

Another aspect of education as an instrument of social change is to use our schools from primary education upwards, as a means for unlearning out-moded anachronistic habits of thought and behaviour. The fetish against cow-killing can and does co-exist peacefully with wanton cruelty to the cows. The disregard of social hygiene in our village life and the dirt and squalour of our small towns are enough to indicate the urgency of this aspect of social education. Most of our norms and habits of cleanness derive from a religious source.

4. Social change through social education cultivation of new social habits and norms.

While these have become increasingly obsolete, conceptions of hygiene deriving from science have made no headway in our domestic life, leading to a sharp drop in standards of social cleanness and public order.

From such simple instances at the primary level, one can go to social evils like dowry system, the Purdah system and the alarmingly wide-spread tendency to seek special favour from ministers and officers by discovering caste or clan sources of influence at Governmental levels. These are all mediaeval proclivities re-asserting themselves. Education as an instrument of social change must be used to eradicate feudal attitudes and habits of mind and behaviour and to make our youth aware of the new social context created by science.

The Indian religious tradition has permitted and sustained hypocritical sanctimonious attitudes in personal life. One may thrive on lying and cheating, one compensates it by Ram-Nam or temple-building. The false note in our religious life must be clearly exposed to a critical scrutiny so as to stimulate more genuine religious feelings. It is necessary to examine how education can become the instrument for eradicating deeply ingrained habits of mind and behaviour like hypocrisy and double-standards. It is disconcerting to recognise social attitudes after 1947 are reverting to pre-British standards in respect of favouritism at the expense of respect for merit.

(II)

Quality & Quantity

The stress upon quantity is inevitable in the face of the urgent necessity of making fortyfive crore people worthy of the onerous burden of democratic citizenship. But education that neglects quality in the pursuit of quantitative targets runs great risks. The right of a student to entrance in a University is not part of fundamental rights guaranteed by the Constitution specifically. It is a privilege which has to be earned by fulfilling conditions under which alone a valid relationship can exist between the teacher and the taught. Such a relationship is a pre-condition for the fulfilment of the basic purposes for which an educational institution comes into being. Student indiscipline stems from a mistaken tendency to equate a student's status with that of the working class status in factories. An educational institution is not merely a processing agency for imparting new skills, it must constantly ask itself, what sort of young men it is turning out, as the future citizens of the country, What type of citizens in India entitled to demand from its universities in order that we may fulfil the challenge of its destiny? In this connection, it is useful to note that the phenomenal spread of Secondary Education in rural areas is serving as a disintegrating force in the social economy of our villages. Promising, bright village lads when they pass their High Schools and Intermediate Examinations become useless for the village without becoming useful for the town. They are up-rooted psychologically from their village base, but they are not helped to find their rightful place in the urban economy.

The divorce of information and knowledge from manual skills is a privation which has to be urgently repaired to prevent the mutilation of our man power in the name of higher

secondary education. Here again the baffling problem of numbers prevents easy solution. It is submitted that if an essential reform of education cannot be carried out for all, there is no reason to prevent its achievement in the first instance in a few selected high schools. Briefly, higher education should not preclude the use of hands. In the servantless economy of an American or European town, the house-wives and other members of the family do every job from the cleaning of the toilets. The Indian counterparts who have graduated from schools and colleges have neglected domestic chores. This is a sad commentary and calls for concrete steps to remedy a situation which maims our men power. The need for cultured men and women to do every domestic job has revolutionised the look and technic of every one of these jobs like cleaning of vessels. The kitchen and the w.c. as well as the bathroom in western towns and even most villages are so smart that even the Kings and Queens of Mogul times could not have boasted of such smartness. Caste has riddled the Indian mind with complexes of high and low. Food habits imprison us to regionalism. The evolution of an Indian citizen who is as much at home in Kerala as in Himachal Pradesh dietically, the synthesis of a Rajasthani and Bengali in the matter of food habits and the fabrication of a cosmopolitan mode of living: These are aspects of education grossly neglected even at the University level. A time is coming when it would be difficult to find such a person as an Indian! The evils of an excessive stress on regionalism must be eradicated before the country is once again balkanized. We live in an age when for the first time in human history technology has made it possible for man to go round the earth in 90 minutes. However, while man has moved into outer space at one end, his mind still remains fettered to petty loyalties - This is

the perspective of world problems today. We have set standards for educational institutions by which such a new climate of social relationship can be brought into existence. Even the awareness of these problems is lacking in our colleges and Universities.

This is particularly true about the education of our girls. We still produce goody-goody survive utterly dependent young women who for all their modernized look are unable to stand on their own, not only financially but even in a civic sense. Even our young men have not learnt the meaning and implications of respect for a women citizen as an equal of man. The need to inculcate respect for woman in all walks of social life must be recognised as one of the acid-tests of cultural worth. As more and more women come to earn their livelihood in the towns and villages a society that kept women in purda has to be taught to work with them with dignity and consideration.

(III)

Indian life during the last fifteen years was set on a fool's errand by the illusion that political power is the major instrument of social change. Control of political power has become an obsession not between political parties only but also within political parties. Thus resulting in the development of cliques and factions within each political party. If 'Power' is believed to be the decisive factor in social affairs, its proliferation in academic bodies and Managing Committees of colleges is inescapable. All this has led to the dominance of educational institutions by the manager, by the Registrar or Treasurer and by the Administrative Wing. The Deans of Faculties, the Principals of Colleges, the Heads of Departments and all those who are called upon to look to the

quality and content of education are placed at the mercy of the managerial wing. Research facilities come to be distributed like patronage and favour and denied disbursement on merits leading to frustration, migration of talents and eruption intrigues etc. In such an atmosphere, the University or College becomes incapable of producing critical non-conformist minds with a passion for concerning themselves with impossible - seeming issues.

It must be remembered that for all its obvious shortcomings the utopian minds, the minds capable of dreaming can only be nourished where values other than power are in command. The men who made India free were a tribe of "impossibilists". It is a pity that we have stopped producing this brand of mind.

It must be recognised that the young man of today does not understand the language of "sacrifice", "suffering" and "service to nation". These words have fallen into disrepute as mere "sales-talk" of discredited power cliques. Western men have evolved a different set of motives to achieve similar ends. They pay a man well and expect no sacrifice from him. However, every man would be ashamed not to give his best in his job for which he is fully paid; if he fails to be competent he would be booted out. The talk of self-sacrifice and service of the nation can cover an amazing degree of incompetence and irresponsibility. Thus old norms are becoming obsolete. We have to think out what alternative norms we can fabricate. The crux of the situation is that talented men have to be discovered and helped; the real reward of their talents is to see them fully utilized for the national development.

How does intelligence become compassion? Research into this vital human process is suffering grave neglect in the study of humanities. With the result that students and faculties of humanities are being treated like 'poor relations'.

(IV)

When education pursues the incentives of employment opportunities, there is a certain inevitable shift of man-power resources. In U.S.A. agriculture has achieved as high a per capita growth as industry. U.K. has increased its agricultural output by 87% from the end of the world war till 1962. In the corresponding period, in spite of the abolition of zamindari and the creation of bhomidhars and our heroic Five Years Plans, we have failed to register a rate of even 3% growth and even this is almost neutralized by the alarming explosion of population. The co-relation of higher academic pursuits particularly in the fields of science and technology calls for a comprehensive scrutiny and re-allocation of man-power and resources. In the context of a planned economy, incentives are decidedly inadequate for directing young men for specialised studies. While India is advancing so well in urban industry agricultural implements and the entire pursuit of agriculture is almost unaffected by technology in spite of the crusading salesmanship of the Community Development Administration. From time to time, one hears eloquent tributes to basic education but co-relation of field problems with applied scientific research leaves tragic gaps.

(V)

Nowhere are these remarks more applicable than in respect of agricultural education. Our Vice-President, who is one of the authors of Gandhi Ji's programmes of 'Basic Education' was frank enough to confess that in actual practice basic education as it exists in Bihar and U.P. is an eye-wash. It required an uncommon courage to see a fact howsoever unpleasant. Such courage is an essential ingredient for scrutiny in respect of agricultural education at every level. At the Junior School level being an aspect of basic education, it is as our Vice-President

has indicated, mere an eye-wash. At the Higher Secondary level, it suffers from lack of co-ordination between the text books and field practices. At the Graduate level, its inadequacies become woeful and since graduate level personnel is recruited to man most of the package programmes and other development activities with respect to agriculture, its inadequacies are projected in the entire field of rural development. Such education as our Agricultural Colleges impart, fails to provide our agricultural graduates with a living faith in agriculture as a means of decent livelihood. When for the first time in the human history it is possible for a man to take up agriculture as a career and to earn as well as men in other vocations do and to live with greater privacy and proximity to nature, and in comfort than our towns make it possible to do. We simply have failed to wake up to the technological revolution in agriculture which is a fact in West-Germany, Japan, U.S.A., U.K. and other countries in Europe. At research level again, the problems of the fields are not faithfully carried to the persons engaged in agricultural research, so that agricultural research is divorced from the actual needs of the agriculturists.

How this state of affairs has come into existence calls for a critical analysis. Since 1947 we have given disproportional importance to patterns of ownership e.g. co-operative farming, Bhoo Dan etc., rural prosperity is sought through the magic portals of an ideal system of land ownership. We have under-rated the importance of management skills along with several communist countries. We have put faith in slogans instead of studying patterns of motivation. We have shown scant respect for those endowed with managerial skills on agriculture who are capable of upgrading quality and output of agricultural lands. It is necessary to insist that the tens of thousands of mis-educated agricultural graduates whom we have let-loose on the countryside should be called back for a proper course of in-service training so that we may repair some at least of the damage we have unwittingly done to those young men, and also the poor villagers.

Lucknow
20.3.65.

Achyut Patwardhan.

PAPERS
FOR
INFORMATION

Education Commission
Government of India

SUBJECT:- AN OUTLINE PLAN FOR INTENSIVE LANGUAGE
TEACHING COURSES

Prepared by
Prof. Y.K. Sohoni
and
Prof. L.B. Harolikar
Poona.

1. PROBLEM: To promote the cause of emotional integration in our country through the teaching and learning of languages as recommended by the Language Commission; viz. (1) National Language: HINDI; (2) Associate Language: ENGLISH; (3) Regional Language: e.g. MARATHI. In addition it will be advisable, in our opinion, to add a Sister Language: e.g. GUJARATHI/TAMIL/BENGALI.
2. BENEFICIARIES: The beneficiaries of this language programme will be of the following categories: 1) National Language. All persons of the minimum age group of 15 ; 2) Associate Language: All persons desiring to enter universities, especially on the Science side; 3) Regional Language: All persons having for their mother tongue a language other than the language of the region in which they are temporarily residing; 4) Sister Language: All persons of the minimum age group of 15 desiring to study this language.
3. COURSE OBJECTIVES: The courses will be intended to impart the following language skills:
 - i) Ability to understand it when spoken;
 - ii) Ability to express oneself orally tolerably well;
 - iii) Ability to read a non-technical book or article in the modern language: and finally
 - iv) Ability to write sufficiently well in that language.
4. METHODS AND TECHNIQUES FOR REALISING THE COURSE OBJECTIVES:
 - 1) ~~Audio-Visual~~ method which will include the use of a language laboratory, film-strips, tapes, charts etc.

4. aiming at establishing a direct relation between "experience and expression".
 - 2) Use of reading material in the form of lessons based on the dialogues taught in stage 1.
 - 3) Use of supplementary reading material based on the stages 1 and 2 and used in different contexts.
5. COURSE MATERIAL: The implementation of this method will presuppose a careful preparation of the course material i.e. 1) Text of lessons; 2) Selection of vocabulary and usages; 3) Supplementary reading material; 4) Film-Strips; 5) Tapes; 6) Charts; etc.
6. STAFF:
 - i) One trained teacher per language taught per batch of about 12 students, preferably a native of that language.
 - ii) One mechanic for the maintenance of the Instruments.
 - iii) One operator for the projector, Master-Tape-Recorder etc. in the class-room session.
 - iv) One peon-cum-watchman.
7. DURATION OF THE COURSE: The Course would require an intensive teaching for about 160 hours to be spread over a period depending upon the convenience of the learners. But in no case this period should go beyond two months. And the daily session should not be of less than 3 hours.
8. TEST EXAMINATION: To assess the students' achievement at the end of the Course a test consisting of the following parts: i) Oral, ii) Written, to be conducted jointly by an internal examiner and an external one of whom one at least shall be a native of that language.
9. TEACHER TRAINING:
 - i) Teachers for such courses will have to be trained at convenient centres;

ii) Admission to the Teacher-Training Course will be given to those who have a good degree and training qualifications in the language for which they are being trained.

iii) Course Content:

- | | |
|--|---|
| <u>Practical</u> | (1) Operation of the machines used. |
| | (2) Study of principles of language teaching and communication. |
| <u>Theory</u>
and
<u>Practical</u> | (3) Special study of the method of teaching the language of his choice through the use of Audio-visual equipment. |
| | (4) Phonetics of the language concerned. |
| | (5) Compulsory observation for a minimum of 10 lessons given by this method. |

iv) Duration of the course: ONE MONTH:

- 10 hours for machines;
- 20 hours for phonetics (in the Laboratory);
- 40 hours for teaching theory ;
- 30 hours observations of lessons.

100 Hours.

A P P E N D I X

1. I feel that it would be possible to give by the Audio-Visual Methods in about 160 hours the four basic skills mentioned under 3. Experiments performed in France have shown that foreign students, having undergone an Intensive Course in French for beginners of about 160 hours spread over a month or two, are able not only to carry on conversation on every day subjects but also are able to follow fairly well lectures delivered at the University Faculties.

(N.B.: My colleague Prof. J.A. Jauvert and I are currently conducting a Two-month Intensive Audio-Visual Course in French for beginners and from the progress we observe in the learners we feel confident that these students will be able to follow normal conversation in French and even to some extent lectures, talks etc. in French.)

2. As far as possible this scheme should be implemented through certain selected Universities, one University for each regional language, for the teaching of that language. Each such selected University should undertake a research for preparing a basic vocabulary, text material, film-strips etc. and also should get this prepared. It should also train teachers for the language concerned.
3. For National Language requisite material should be prepared and research undertaken by a Northern University where the regional language is the National Language.
4. For English similar work be undertaken by the Central Institute of Hyderabad.
5. A suitable Central Agency for coordinating research and other work done at the various selected university centres will have to be established.

6. Language Laboratories, being a costly affair, should, in the early stages of the implementation of the scheme, be set up at important centres only. At ~~smaller~~ centres, the following equipment alone would be enough:

- i) A Master-Tape-Recorder,
- ii) A Film-Strip Projector &
- iii) A Screen
(Per language Class-room)
- iv) Tapes,
- v) Films,
- vi) Wall-Charts, etc.

PROGRAMME OF WORK FOR THE TASK FORCE ON EDUCATIONAL FINANCE

- I. Composition: The Task Force on Educational Finance was constituted in October, 1964 and has held two meetings so far. There have been some additions to its membership since its constitution. The present list of its members is given in Annexure I.
- II. Studies in Costs of Education in India: The Task Force has undertaken a number of studies, in collaboration with the N.C.E.R.T., for bringing together the basic data required for its work. As many as 12 different studies are contemplated in this part of the programme, a list of which will be found in Annexure II. It is proposed to complete the first ten of these studies by August, 1965 and to make them available in printed form by December, 1965. The last two studies will take a longer time because they could only be undertaken after the preliminary work has been completed by the other Task Forces. We propose to complete these by December, 1965 so that their findings could be available to the Commission, for finalising its recommendations and costing them during January - March, 1966.
- III. Programme of Discussions and Seminars:
- (a) On the basis of the questionnaire finalised by the Task Force, it is proposed to hold discussions with a number of selected economists and educationists. The dates fixed for the pro-gramme are 3rd & 4th May, 1965.
- (b) The financial implications of the recommendations which are under the consideration of the different Task Forces will be discussed with the representatives of these Task Forces on the 5th May, 1965.

(c) It is proposed to prepare certain papers on the relevant issues involved and discuss them in two seminars which would be organised in September 1965: (1) Seminar on Teachers Salaries (14th and 15th September), and (2) Seminar on Educational Finance (16th-18th September 1965). The Seminar on Teachers Salaries would be organised in collaboration with the Convenors of the other Task Forces concerned. For the Seminar on Educational Finance the invitees would include economists interested in problems of educational finance.

(d) A second Seminar on Educational Finance would be organised on October 28, 29 and 30, 1965 in which the issues would be further discussed with selected State Finance Secretaries, State Education Secretaries, State Directors of Education and some officers from the Planning Commission and the Central Ministry of Finance.

(e) It is expected that the reports of the other Task Forces would be ready by September 1965. The Task Force on Educational Finance would work on the basis of these reports and prepare a tentative report by the end of December 1965. This would be discussed in a final Seminar to be held on 17th, 18th and 19th January 1966 and then finalised for submission to the Commission.

M.V. Mathur.
9.3.65

P.S. to Chairman.
All Members,
All Officers.

Annexure I

TASK FORCE ON EDUCATIONAL FINANCE

1. Prof. M.V. Mathur, .. (Convener)
Member,
Education Commission.
2. Shri R.A. Gopaldaswami,
Director,
Institute of Applied Manpower Research,
Inderprastha Estate,
New Delhi.
3. Shri J.P. Naik,
Member-Secretary,
Education Commission.
4. Shri K.L. Joshi,
Secretary,
University Grants Commission,
New Delhi.
5. Dr. Sadashiv Misra,
Director of Public Instruction,
Orissa, Cuttack.
6. Dr. Atmanand Misra,
Director of Public Instruction,
Madhya Pradesh,
Bhopal.
7. Dr. D.T. Lakdawala,
Department of Economics ,
University of Bombay,
Bombay-1.
8. Dr. K.A. Naqvi,
Delhi School of Economics,
University of Delhi,
Delhi.
9. Dr. Pritam Singh,
Director,
National Council of Applied Economic Research,
New Delhi.
10. Shri D.A. Dabholkar,
Principal,
Chintamanrao College of Commerce,
Sangli, (Maharashtra)

Annexure II.

EDUCATION COMMISSION
GOVERNMENT OF INDIA

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The study in the Costs of Education in India, which has now been undertaken will, it is hoped, result in the following twelve monographs:-

- (1) Educational Expenditure in India (1950-51 to 1960-61)
- (2) Financial Assistance to Students in India (1950-51 to 1960-61)
- (3) Equality of Educational Opportunity - A Study at the National Level (1956-57 to 1960-61)
- (4) Education Expenditure in India by States (1956-57 to 1961-62)
- (5) Educational Development in the Districts in India (1961)
- (6) Educational Expenditure in India during the Third Five-Year Plan (1961-62 to 1965-66)
- (7) A Study of Grant-in-Aid System of India with special reference to Colleges of Arts and Science, Secondary Schools and Elementary Schools (1965-66)
- (8) Financial Assistance to Students in India during the Third Five-Year Plan (1961-62 to 1965-66)
- (9) Salaries of Teachers in India during the first three Five-Year Plans (1951-52 to 1965-66)
- (10) A Study of the Educational Expenditure in the first three Five-Year Plans (1951-52 to 1965-66)
- (11) A Study of Unit Costs of Education in India.
- (12) A Study of the Growth of Educational Expenditure in India during the Fourth, Fifth and Sixth Five-Year Plans (1966-67 to 1980-81).

SHORT NOTE ON MORAL AND RELIGIOUS INSTRUCTION
IN THE UNIVERSITIES

- First: 'Moral' and 'Religious' should be clearly distinguished. The First concerns our relations with our fellow-men. The second concerns our relations with what may be called 'The Transcendent' or 'The Beyond'.
- Second: Instructions in these matters is, primarily, neither the imparting of information nor of knowledge. It is, rather, the inculcation of habit, the deepening of awareness, the cultivation of sensibility - things which are learnt more by example, by breathing in the atmosphere one lives in, by becoming part of a community which lives in a certain way.
- Third: The University, therefore, should conceive itself as a community into which the student enters and which, whether it knows it or not, will mould his awareness and habits of interpersonal relationships, whether of the personal or the public type, which is the central problem of all morality anywhere in the world.
- Fourth: It may be taken, therefore, as axiomatic that the student will learn more in these matters from what the university is or, rather from what he finds and feels the university to be than by what he is told and preached, however lofty it may be.
- Fifth: If the University becomes conscious of this aspect of its function, it will, or at least should, try to become aware of the nature of its encounters with the student from the very first moment of his coming into contact with the university and ask itself whether it is giving then the image, the feeling, the impression the experience, the values it would want them to imbibe and which it would like to become part of their personality.
- Sixth: For this, it is imperative that it itself becomes conscious of what it exactly wants to inculcate in the student in this field.
- Seventh: In the contemporary context of present day India, I would like to suggest the following in this realm:
1. The ethics of the work.
 2. The ethics of the job.
 3. The awareness of the claims of others upon oneself.
 4. The awareness of indirect claims upon oneself.
 5. The awareness of the distinction between the private and the public.
 6. The awareness of the notion of public responsibility and of the indirect consequences of one's action upon unknown millions in the modern world.

7. The capacity of acting with others in groups for the realization of external valuational ends and the capacity of organizing such groups.
8. Cleanliness and its relation to aesthetics and hygiene.

(The list, it should be remembered, is not in a descending order of priority. The heart of morality consists in the distinction between the PRIVATE and the public, in the awareness of the responsibility for the public consequences of one's action in a public capacity and the capacity for seeing things sympathetically from the other's point of view.)

Eight: If this perspective is accepted, then we ought to try to think of some concrete things to fulfil them in some measure at least.

Here are a few concrete suggestions:

1. The first contact of the student with the University is with the Office-staff when he seeks admission. This encounter should always give him the feeling and impression of efficiency and helpfulness. We should make the clerk at the counter feel the importance of what he is doing in terms of the immense possibility of education in public morality. In fact, the relation of the students and the administration is a thing to be closely studied in this perspective and the points at which the service given and the impression created could be improved should be pinpointed. In this connection, some machinery should be devised for a line of communication between the students and the Vice-Chancellor, so that their complaints may be directly attended to. There might be a complaint box which the Vice-Chancellor should open and look into himself. Or, there may be one evening in every month when students could meet the Vice-Chancellor informally and present their problems, if any.

2. Both at the admission and immediately after it, the student must be made to feel that he has entered a new world with new opportunities, new challenges and new responsibilities. For this, at least one week

should be given for an introduction to this. The fresh undergraduate students should be taught how to sit in the class and listen without making any noise. He should be taken to the Laboratory and the Library and the Play-field and introduced to the opportunities he has for utilising them. If the facilities are limited, he should be taken into confidence and told what has been done to improve them since last year and how if he uses it cooperatively and well, it could still be used to advantage by him and his friends.

In fact, the first week or two should be something like what happens in most universities during the convocation week - lectures, films, music, plays, exhibitions - devised in a way to open up worlds and vistas for the incoming youth.

3. The main function of moral education being to learn to work with and for human beings, the student should be drawn into groups which are concerned not merely with the achievement of some value, academic or otherwise, but also for other persons. Today, this second aspect is totally lacking among the groups that are found on the college or university campuses. There is hardly any student group whose activity is oriented to the welfare of other student members of the community in some form or other. Even the so-called compulsory social work of the student takes him far away into the villages where he works for a community which he does not know and where whatever he does is hardly before the eyes of himself and others in a continuing, enduring fashion to become an example to others who come after him. It may be far more meaningful for the students to work on something in the College or the University itself, something which may be added to and used by the subsequent generations. Also, it may be a good idea if some school in the vicinity is taken up by the student

community as a group and something done for it in a continuous manner.

4. There is nothing more morally educating than the problem of keeping discipline in a community. The students should be drawn into this more and more. There may be a hierarchy of courts in the College or the University manned by the students themselves to judge of such cases. The Vice-Chancellor or the Principal may be the last Court of Appeal but he should function more as a constitutional Head in this matter.

5. Students should be associated more and more at each level of University institutions in some form or other. Or, at least, their viewpoint should be represented and heard on matters academic and administrative that concern them in such a vital way.

6. The Cafeterias, dining-halls and kitchens should be models of cleanliness. There may be competition between Hostels in this respect and awards may be made on that score.

7. A catalogue-list of defacements of the walls and the furniture should be put on the Notice-Board and students should, in some way, be made responsible collectively for the repairs thereof.

These are some of the points on Moral Education that I would like to make. Religious Education is something entirely different and far far more difficult to impart. It is concerned with the inculcation of the awareness of a Transcendent Reality or the possibility of a higher state of one's own being. In any case, the two belong to two different realms and may even come in conflict with each other.

The problem of religious instruction in Universities, I may deal with in a later note.

-Daya Krishna-
Department of Philosophy,
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No.F.3(11)-1(3)/EC
EDUCATION COMMISSION
GOVERNMENT OF INDIA

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TECHNICAL TERMS AND INSTRUCTIONAL LANGUAGE IN JAPAN

BY PROF. SADATOSHI IHARA

...

Terminology is important in all natural, social and human sciences, and except in special cases, technical terms should be easily comprehended not only by the specialist but also by common people.

When modern technical education was introduced in Japan, we had many foreign teachers from England, France and Germany who used their textbooks in each their language. The same thing had thus three terms in the three languages resulting in confusion in many fields.

This experience was bitter but at the time we could not escape from the inconvenience. For many years, now, however, we have made the following progress to overcome impediments in the various special fields.

.....

Circulated for information.

J. P. Naik
Member-Secretary.
15.4.65

P.S. to Chairman
All Members
All Officers.

TECHNOLOGICAL TECHNICAL TERMS AND INSTRUCTION
IN UNIVERSITIES AND COLLEGES IN JAPAN

	Duration	Technical Terms	Instructional language
I	From about 1877	Original terms in original languages (English, French and German).	Original languages
II	From about 1905	Partially English terms. Majority of terms translated into classic Japanese. New terms were etymologically correct, but one could not easily understand their meaning at a glance.	Japanese, Partially English
III	From about 1924	All terms expressed also in common Japanese, excepting new terms which were either difficult to express in simple Japanese and which were expressed phonically in the Japanese alphabet. These then became easy to understand at a glance and contribute to the promotion of scientific knowledge among the people.	Japanese

Education Commission
Government of India.

A brief note on the Youth Hostel movement in India

Motto

"Charan Vai Madhu Vandati"

"Wandering, one Gathers Honey"

The Youth Hostel movement was started in Mysore in 1949. In 1955 with the help of a grant from the Ministry of Education, its National Headquarters moved to Delhi and from then on, it has been making decisive progress as an All India Organisation. The Prime Minister is the Chief Patron of the YHA of India and Shri Justice P.B. Gajendragadkar, Chief Justice of India, is the Patron. Smt. Shanti Kabir is the President. The two Vice-Presidents are Col. B.H. Zaidi and Shri K.K. Shah, both Members of the Parliament. Sardar Mohan Singh, Senior Vice-President of New Delhi Municipal Committee is the Hony. Treasurer.

The Association is registered under the Societies Registration Act of 1960. It is a full member of the International YH Federation composed of 37 Member Associations. Incidentally, it may be mentioned that the YHA of India was the first YH Association to be formed in Asia. The Association's membership of the International YH Federation has earned for the Indian Youth Hostel member the privilege of using over 3,000 Youth Hostels all over the World.

All Youth Hostels Associations are voluntary and non-governmental bodies. They are non-political, non-sectarian and non-commercial in character. They do not recognise any distinctions of class, caste, creed or colour.

The organisational set up of the Indian YHA is democratic. A copy of the constitution is enclosed for reference. The National Council consisting of

representatives of State Councils and other recognised co-operating organisations and affiliated bodies, is the supreme policy making body. The National Council functions through its National Executive and Standing Committee.

The main object of the Association is to provide simple but decent and inexpensive holiday accommodation to all members of the YH organisation, Indian or foreign, who may be travelling with a view to explore either other parts of their own country or the world. It also aims at the promotion of inter state contacts, fostering of friendly relations between the rural and the urban population, bridging of the gap between the student and the non-student youth population and the promotion of national integration and international understanding among the youth in the homely, healthy atmosphere of Youth Hostels.

Youth Hostels are looked after by residential Wardens or House-parents as they are rightly called in many a country. Every member is expected to share domestic duties and contribute at least half an hour of his time during day to help in the upkeep of the hostel. Normally, no one is allowed to stay for more than three nights. All youth hostellers are expected to abide by the discipline and regulations of the youth hostel.

The value of travelling on one's own steam and open air life in activities like hiking, camping, trekking and mountaineering is stressed and inculcated. In addition to the promotion of such healthy and open air activities during week-ends and vacations, the Association also organises voluntary work camps of an international character either for building new hostels or for restoring old ones. The International YH Voluntary work Camps organised at Jagjitnagar near Kasauli in the Simla Hills and Gopalpur-on-sea, may be mentioned here as instances.

The Association organises Youth Hostel Warden's Training Courses and Leadership Courses on Camping and Recreational activities as was done in the year 1963-64.

The Association brings out a quarterly publication entitled 'THE YOUTH HOSTELLER' to propagate the aims and objectives of the organisation. A copy each of the last four issues, enclosed for reference.

Organising Annual Conferences in different parts of the country and arranging exhibitions also forms part of the Association's activities. The eighth National YH Conference was held at Lucknow from 1st to 5th January, 1965.

The Association has also taken up a scheme of utilising old and historic but neglected monuments to serve as Camping grounds for youth hostellers. The first such place which is being used profitably is the Bholi Bhatyari-ka-Mahal on the New Delhi ridge.

The finances to meet the organisational expenditure and other activities are found from grants from the Ministry of Education, donations from charitable trusts like the Sir Dorabji Tata Trust and the Sir Ratan Tata Trust, membership fees and fund raising programmes organised by the Association from time to time. Audited statement of receipts and payments for the past three years are appended for further information. The audited statement of accounts are incorporated in the Annual Report of the Association for the corresponding years.

The Association is having good and cordial relations with other Youth organisations in the country

such as the Bharat Scouts and Guides, the Y.M.C.A., the Y.W.C.A., the Service Civil International (India) and the World Assembly of Youth (India).

The Ministry of Education has been giving grants for organisational work for the past ten years. The Ministry of Education has also formally recognised the Association as one of the Youth Welfare agencies. (copy of circular appended).

The National Integration Committee headed by Shri Sampurnanand in 1961 recognised the value of the movement in promoting emotional integration among the youth of the country and recommended that the YH organisation be enabled to expand their activities further in the national interest.

As a follow up of this recommendation, the Planning Commission took the initiative in forming a Central Committee on Youth Hostels with representatives from the Planning Commission, the Ministry of Education, the Department of Tourism (Ministry of Transport and Communications), the Ministry of W.H. & R. and the Youth Hostels Association of India to ensure effective co-ordination and speedy implementation of YH schemes during the Third Five Year Plan period. An allocation of a sum of Rs. 22 lakhs was also made for YH schemes during the Plan period, with the pooled resources from the Ministry of Education and the Ministry of Transport. It is indeed unfortunate that this Committee which was functioning so well, was also abolished along with several other Committees that were functioning under the Ministry of Education. This has considerably handicapped and hampered the progress of the YHA.

The immediate task before the Association is to expand and intensify the movement by offering more and

better facilities to its members by constructing model youth hostels run according to internationally accepted lines with trained wardens to look after them. Another task will be to standardise the rules and standards governing the several types of youth hostels that are coming up in the country under several schemes, and make them fall in line with the general pattern of youth hostels the world over. There is also an urgent need for giving better publicity to the educational value of the youth hostels movement and the facilities offered by the Association for inexpensive but healthy and fruitful enjoyment of holidays and vacations by the youth of the country.

To achieve this, the decisions of the Central Committee on Youth Hostels has to be implemented in toto and also the pattern of assistance to the YHA of India needs to be revised. The organisational set up in the States need to be strengthened considerably and members are to be given more incentives for this type of activity in the form of travel concessions. To make the students and teachers fully aware of the value of the activity as an aid to education, the subject needs to be introduced in the syllabus of Higher Secondary and Teacher Training Institutions.

A complete set of literature on the YH movement with reports of activities of the Association for the previous three years is sent for reference.

PFI/2/9/65

MEMORANDUM ON EDUCATION IN NAGALAND

EDUCATION COMMISSION
GOVERNMENT OF INDIA
University Grants Commission Building
Bahadur Shah Zafar Marg
New Delhi.

EDUCATION IN NAGALAND

Nagaland, the sixteenth State of Indian Union, is a small administrative unit consisting of three districts only: Kohima, Mokokchung and Tuensang. The total area of the State is 6,366 square miles. There are 860 villages scattered all over this area in hilly and rugged terrain. It is inhabited by a sturdy, valiant and intelligent race of people called the Nagas whose total population is 3.69 lakhs. But this small compact mass of humanity is divided into 17 major tribes, each with a distinct dialect of its own. The children of the majority of these 17 tribes study their own dialect up-to the Elementary stage of Education. Of these 17 dialects Ao and Angami are recognised languages up-to the High School Leave Certificate Examination. Steps have already been taken to produce literature and text-books for schools in Lotha and Sema dialects. Development of other dialects is also contemplated in near future. Nagaland is a miniature India in so far as the language question is concerned.

II PROGRESS OF EDUCATION

In Pre-independent India, Nagaland with two districts, Kohima and Mokokchung, was a part of Assam and it continued to be so up to 30.11.57. On 1.12.57 the N.H.T.A. was formed by amalgamating the Tuensang Frontier Division of the North East Frontier Agency with the two Naga Hill districts of Assam. A full-fledged State with these three districts, Kohima, Mokokchung and Tuensang was ushered on 1.12.63 with great hope and expectation.

Before independence, there was only one Government High School at Kohima and one private High School at Mokokchung which was subsequently taken over by Government in 1948. The land had to bear the burnt of Japanese aggression and there was great devastation in the land. In the wake of such devastation immediately after independence a period of great internal disorder followed for more than 10 years in this State. The progress of Education during this

period was therefore poor. During the third plan period, however, great progress in education has been achieved. At the end of 3rd plan there will be 23 Government High schools, 106 Government Middle schools and 710 Government Primary schools. In addition to these Government schools there would be a fair number of private and aided schools in each category. Prior to 1957, there were 3 Government High schools, 21 Government Middle schools and 212 Government primary schools and compared to these figures, the achievement at the end of third plan may be considered phenomenal.

Three Teachers' Training Institutions, two colleges and one Junior Technical school exist in the State.

A large number of scholarships and stipends are being awarded annually in each stage of education - elementary, secondary and university. A very wide provision has been made for providing Technical education to our youths. A valiant and martial race needs all encouragements for Military education. Accordingly 50 stipends have been provided annually to send the children of the State to Sainik schools.

The work of Text-book Production was taken up since 1962 and the following books in the following Naga dialects have been published:

1. Primer A in Ao and Angami	7000 copies each
2. Primer B in Ao and Angami	6000 " "
3. Arithmetic A in Ao and Angami	7000 " "
4. Arithmetic B in Ao and Angami	7000 " "
5. Rules on spelling & word division(Ao)	2000 copies
6. Gandhiji in Ao and Angami	3000 copies each
7. Esther(Reprinting)Angami	1000 copies
8. Revised curriculum in English(Reprint)	1000 "
9. Sumi Tsa Muku in Sema(Reprint)	3000 "
10. Jibani Sangraha in Ao	1000
11. Reader for Class I in Ao and Angami	3500 copies each
12. Reader for Class II in Ao and Angami	3500 " "

13. Arithmetic for Class I in Mo and Angami	3500 copies each
Total	<u>48,500</u> copies

In the Fourth plan, it is contemplated to convert the existing three Teachers' Training Centres into first rate institutions by constructing all the necessary buildings and by providing them with qualified staff and all the necessary equipment and appliances. It is proposed to establish the State Institute of Education for training programme and research in education. For advancement of Technical education establishment of a Polytechnic has been proposed.

Increased provision of scholarships and stipends have been made. The work of Text Book Production has been considerably increased also.

During the fourth plan every village will be provided with a Primary school and High and Middle schools will be proportionately distributed throughout the State. A great thirst for education pervades the entire land. In the spread of education, the village community in each village has made unique contribution. All the Primary schools with teachers' quarters are constructed by the villagers themselves. The Government only provides the village community with C.G.I. sheets for the school building. The High and Middle school buildings are constructed by Government bu resources of the P.W.D. being small a great number of High and Middle schools are at present run in buildings constructed by the villagers. In Mopungchuket village, which is situated at a distance of 9 miles from Hokokchung, the villagers have constructed a L.P. school building, the cost of which at a moderate P.W.D. estimate will be Rs. 60,000. In recognition of the spirit of self-help the Government has been pleased to give the Managing Board of this school a lump sum grant of Rs. 10,000 this year. The enthusiasm of the people and their capacity for physical labour are unique.

The relevant educational statistics of Nagaland are appended.

III. RECOMMENDATIONS

The entire educational system of India is now being organised on up-to date modern lines and all facilities should be given to Nagaland to develop her educational system in the same line with the rest of India. For emotional integration some of the All-India institutions such as Regional colleges should be established in Nagaland.

These beautiful hills which are the homes of a sturdy, valiant and intelligent race have remained backward for centuries. If sufficient provision can be made for educational advancement of the State, these people will catch up their brothers and sisters of other advanced States of India in a very short time and march with them side by side and will be a tower of strength to whole of India. The State, therefore, needs establishment of more and more modern institutions. The establishment of an Engineering College, a Medical College, a Rural Institute and a Regional Research Laboratory are some of the gradual needs of the State. In order that Hindi, the official language of the Union may be propagated throughout the State establishment of Hindi Training Centres and Hindi medium schools have become a necessity. For the development of the tribal dialects on scientific lines, help of linguistic experts is necessary. In no distant date, Nagaland shall have its own Board for Secondary Education and University. The medium of teaching in Secondary schools and colleges shall continue to be English for some years to come. The people of the State are mainly Christian and so a proper provision of evangelic studies is also necessary.

Nagaland occupies a position of strategic importance in the map of India and so on the shoulders of the healthy and intelligent youths of this State lies a great responsibility which can only be performed if they are given facilities of what is best in modern education.

The Education Commission is therefore requested to consider the needs of this infant State sympathetically.

EDUCATIONAL STATISTICS OF NAGALAND

I- Number of institutions

Type of institions	Number of educational institutions (Government & Private-recognized existed during the years								Anticipated position during the years			
	1956-57		1960-61		1962-63		1963-64		1965-66		1970-71	
	Total	Govt.	Total	Govt.	Total	Govt.	Total	Govt.	Total	Govt.	Total	Govt.
1	2	3	4	5	6	7	8	9	10	11	12	13
Universities	..	..	..	..	..	..	..	..	..	..	..	..
Boards of education	..	..	..	..	..	..	..	..	..	..	..	..
Arts & Science colleges	..	..	1	..	2	1	2	1	2	2	2	2
Colleges for professional education	..	..	..	..	..	..	..	..	..	..	..	..
Colleges for special education	..	..	..	..	..	..	..	..	..	..	..	..
Secondary schools	24	24	61	59	102	84	111	97	N.A.	129	N.A.	224
Primary schools	312	312	407	407	540	534	584	584	N.A.	726	N.A.	1226
Pre-primary schools	..	..	..	..	..	..	..	..	..	..	..	..
Schools for vocational education (D.I.C. & Tech)	2	2	2	2	3	3	3	3	6	6	6	6
Schools for special education	..	..	..	..	4	4	3	3	30	30	280	280
TOTAL:	358	338	471	468	651	626	703	688	N.A.	893	N.A.	1738

II- Number of students

1	1956-57		1960-61		1962-63		1963-64	
	2	3	4	5	6	7	8	9
<u>Collegiate education:</u>								
Research	..	..	..	..	..	..	..	..
M.A/M.Sc.	..	..	..	..	..	..	..	..
B.A/B.Sc.	..	..	..	..	67	7	78	2
Intermediate (Arts/Science) P.U.C	..	..	52	8	79	4	98	4
Agriculture & Forestry	..	..	..	..	..	..	..	..
Commerce	..	..	..	..	..	..	..	..
Engineering & Technology	..	..	..	..	..	..	..	..
Law	..	..	..	..	..	..	..	..
Medicine & Veterinary	..	..	..	..	..	..	..	..
Teachers' training-Basic Non	..	..	..	..	..	..	..	..
Non-basic	..	..	..	..	..	..	..	..
Others (Professional)	..	..	..	..	..	..	..	..
Special education (University standard)	..	..	..	..	..	..	..	..
TOTAL	..	..	52	8	146	11	176	6
<u>School Education:</u>								
Secondary stage	4719	N.A.	14561	4945	22363	7243	24238	7650
Primary stage	8949	N.A.	52906	12128	35910	13680	38468	13912
Pre-primary stage	..	..	..	..	..	..	..	..
Vocational education	N.A.	N.A.	60	..	100	..	118	..
Special education (Adult literacy)	..	..	56	16	147	100	147	100
TOTAL	13668	N.A.	47583	17089	58520	21023	62971	21662
GRAND TOTAL	13668	N.A.	47635	17097	58666	21034	63147	21668

III. NUMBER OF TEACHERS

Type	1956-57		1960-61		1962-65		1963-64	
	Total	Women	Total	Women	Total	Women	Total	Women
Secondary schools	F.A.	K.A.	665	66	710	89	840	105
Primary & Pre-primary schools	..	..	895	99	1316	74	1493	85
Total	..	..	1560	165	2026	163	2333	190

IV. EXAMINATION RESULTS

Name of Examination	1956-57		1960-61		1962-65		1963-64	
	Number passed		Number passed		Number passed		Number passed	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1	2	3	4	5	6	7	8	9
M.A./M.Sc.	..	..	..	..	..	..	..	..
B.A./B.Sc.	..	..	..	..	..	..	..	..
Professional (Degree)	..	..	..	..	..	..	..	..
Matriculation & equivalent examinations	F.A.	M.A.	80	22	136	21	81	11

PFI/3/9/65

EDUCATION COMMISSION
GOVERNMENT OF INDIA

Subject:- Teaching of English in Secondary Schools.

At the request of the Education Commission the Central Institute of English, Hyderabad, has prepared a note on an analysis of the syllabi for the teaching of English in secondary schools in India. This has been reproduced below.

J.P. Naik
Member-Secretary,
Education Commission.

A preliminary survey of the syllabi for the teaching of English in the schools of India carried out by the Central Institute of English, Hyderabad.

We have now completed our preliminary survey of English syllabuses in schools in India, as follows.

The pattern of English studies in the secondary schools in India varies from State to State. In most States the syllabuses and textbooks in English for standards III/VI to IX are prescribed by the Departments of Education. For standards X and XI, however, courses are planned by Boards of Secondary School Education.

Three broad categories of syllabus types can be identified.

(1) The states where structurally graded syllabuses and course books and hand books written in accordance with these syllabuses have been officially accepted. Madras typifies this category. The other states in this category are: Gujerat, Kerala, Delhi, Orissa, Himachal Pradesh.

(2) The states where official syllabuses and books written in accordance with them are followed in some regions, whereas in other regions category (3) below is in vogue. Maharashtra typifies this pattern. In the old Bombay region, official syllabuses are being followed; whereas in Vidarbha no official syllabuses are prescribed. The other states in this category are: Assam, Bihar, Rajasthan, Punjab, West Bengal and Tripura.

Given below are the details of three representative syllabuses. (Madras, Andhra Pradesh and Madhya Pradesh).

Category A Madras

The draft syllabus in English which will supersede the 1957 syllabus is included in the supplement to Part II - section 3 of the Fort St. George Gazette dated Madras, Wednesday, September 30, 1964.

The syllabus is in two parts. The first part deals with standards III to VIII and the second part deals with standards IX to XI.

Standards III - VIII.

The syllabus for standards III to VIII aims at complete mastery of a 1750-word vocabulary in conjunction with 210 graded structures and teaching items.

The details of time allocation, and the language materials to be taught in each standard are given in the table below:

	III	IV	V	VI	VII	VIII	Total
Time per day	20 mts.	40	40	40	40	40	
Vocabulary during the year.	200 words	200	300	350	350	350	1750
Structures & teaching items	36	34	44	38	36	22	210

In writing the course books, authors are guided by the requirements of the situation and environment of the children in each standard, and by word frequency based on books such as the General Service List and the Madras 1957 list.

There is no Reader or Supplementary Reader for standard III.

There are course books for standards IV to VIII.

Supplementary Readers are prescribed for standards V to VIII as follows:

V standard	-	one book after the first 3 months
VI standard	-	two books
VII standard	-	two books
VIII standard	-	two books

For the teaching of 'reading', the syllabus recommends a continuation of (a) the Sentence Method (b) Look and Say method and (c) Phonics. The syllabus recommends 'italic handwriting' which is being used in the MELT campaign.

No formal grammar teaching is recommended.

The use of wall pictures is recommended.

Standards IX to XI

Seven periods a week (of which one period is to be used for translation) are recommended for English teaching in these standards.

The syllabus for standards IX to XI is a continuation of the syllabus for standards III to VIII and aims at giving the pupils a complete mastery (understanding, speaking, reading and writing) of the remaining basic structures of the English language and of an additional 1000 to 1250 word vocabulary and the more common phrases and idioms associated with these words. The syllabus states that in the learning of a foreign language mastery of structure is more important than the acquisition of vocabulary.

The scheme of graded structures used in standards III to VIII should be carried on into standards IX to X.

No new structures are to be introduced in standard XI. The SSLC textbook is to be based largely on the structures and sentence patterns and the 2750 to 3000 words taught in standards III to X. Books for standards IX and X introduce 1000 to 1300 new words in conjunction with the 45 and 52 structural items.

No mention of grammar teaching is made in this part of the syllabus.

Some poetry is to be included in the course books.

Supplementary Readers are to be written mostly within the vocabulary applicable to the standard concerned, additional words being noted and explained. In standards IX to XI, at least two books of between 100 and 125 pages should be prescribed.

The syllabus recommends the reading of outside books in addition to the Readers (course books) and Supplementary Readers.

Madras is following the scheme that was introduced in that state as early as 1953. The study of structures begins in standards III and IV and is carried up to standard X. The work in standard XI is a systematization of the grammatical knowledge acquired earlier.

Category B Andhra Pradesh

The pattern of School Education in Andhra Pradesh consists of an integrated course of eleven years covering standards I to XI, divided into two categories:

Standards I to V Primary
Standards VI to XI Secondary

The teaching of English in the state begins in III standard. Prior to 1962 English teaching began in standard VI. The pupils who started learning English in standard III are now in standard V. In standards III, IV and V the syllabuses (and some books) prepared at the Regional Institute of English, Bangalore, are being used. The RIE plans to produce syllabuses and course books for the remaining standards viz., VI and VII. At the moment in standards VI, VII, VIII and IX books written in accordance with structurally graded syllabuses (fashioned after the Madras 1952 syllabus) are in use.

Books for standards X and XI are not written to any prescription. They contain extracts from standard prose. Some formal grammar is prescribed.

Category C Madhya Pradesh

The teaching of English in this state starts from Standard VI and is compulsory throughout the Secondary School period.

Structurally graded syllabuses have not yet been introduced. In fact no syllabuses or word lists have been officially recommended. The Department of Education recommends a list of books to be used in standards VI through IX. The books for standards X and XI are prescribed by the Board of Secondary School Education. These books contain extracts from standard prose and 10 to 15 poems.

The pattern of English teaching in the state today is no different from the pattern that obtained 20 years ago. The recently established English Language Teaching Institute is reported to be developing syllabuses and textbooks.

I trust this information will be useful to you.

Report on the Conference on Shortage of Science
Applicants to Universities - held at Edinburgh
University on 12th December, 1964.

INTRODUCTION

The conference was attended by Heads and Senior Science teachers of Schools, by representatives of the Scottish Education Department and of the Association for Science Education, by Directors of Education, by University teachers and many others. There were over 100 participants, and the considerable interest aroused by the conference may perhaps be gauged by the fact that over 90% of those invited actually came.

The conference was welcomed by the Principal, Sir Edward Appleton. This was followed by short speeches on different aspects of the problem by Professor Drever, Mr. Brunton H.M.S.C.I., Miss Peters, Vice President of the A.S.E., and Dr. Hale, Associate Dean of the Faculty of Science. After lunch, until 5.45 p.m., there was a wide ranging discussion, chaired by Professor Swann, Dean of the Faculty of Science.

It would be invidious to single out for individual mention any of the large number of speakers who made valuable and important points, and rather than report the whole conference in detail, we have decided instead to present only a brief report, in general terms. The conference itself was exploratory, and we hope that this treatment may serve to highlight the main areas where investigation and action appear to be needed.

Although the absolute number of boys and girls taking School Leaving Certificates to Higher or Advanced level in science and mathematics has been rising, it has not been rising so fast as in Arts. This so-called 'draft towards Arts' is perhaps not so marked in Scotland as in England.

Nevertheless there were some 900 empty University places distributed over Britain last year in the Physical Sciences, Mathematics and Engineering, and there are thought to be about double this number now. By contrast Arts Faculties are full to capacity, and have turned qualified applicants away in substantial numbers. It is difficult to say how serious a national problem this may become, but there is clearly a need for better long range forecasting of supply and demand for mathematicians and scientists.

DISCUSSION

The talks and discussion clearly indicated three main areas for investigation. The first of those concerns the age at which boys and girls often make their decision whether or not to pursue science and mathematics. Numerous speakers, in different ways emphasised that this decision comes around the age of 12 or 13. It is obvious that many of the factors which might influence an eighteen year old, or an adult, are not relevant at this age. It seems indeed that we know next to nothing of the factors that influence children towards or away from science and mathematics at 12 or 13, and there were strong pleas for psychological research into this problem.

A number of speakers felt that unsatisfactory teaching of mathematics was a powerful factor influencing children away from science. There have been great advances here, but much remains to be done. The point was also made that the shortage of good science teachers was leading to a situation when Arts subjects were better taught than science subjects, thus further aggravating the swing away from science.

Very little information is available about children's abilities in mathematics and science, and about the extent to which these abilities can be fostered and developed by special methods of teaching. Very little research is

carried out on these problems, and a much greater effort is certainly needed.

It was also suggested that more guidance of a vocational type was needed and that there should be recognised positions for this in the schools. It was felt too, that Colleges of Education might help to create specialists in this field.

The second main area of discussion centred round University teaching and particularly Honours Courses. These courses came in for very considerable criticism on the grounds that they have now become so elaborate and difficult, particularly in physics and mathematics, that would be scientists, and especially would be teachers are actively repelled. From the University side the point was made that the amount of scientific knowledge has been doubling every 10-15 years. If therefore an Honours Course is to bring students within striking distance of the frontiers of knowledge, increasing difficulty is inevitable, even if, as happens, more and more is pushed into post-graduate work. University representatives felt that schools might be wrong in insisting on Honours degrees for Senior Secondary teachers, since in science the 3 year ordinary degrees course is in fact the same as the first three years of a Honours Course, and in any case, goes far beyond anything taught in school. Alternatively a different form of Honours degree with a wider spread of subjects was suggested. Both ideas seemed objectionable to speakers on the school and training college side, as implying that inferior qualifications were good enough for schools. These different opinions seemed to be almost irreconcilable, and it is clear that the problem needs further thought, inside and outside Universities.

Many speakers made the point, both implicitly and

explicitly, that there is often not nearly enough communication between science teachers in schools and those in Universities. Contacts between the two are often infrequent, and may be non-existent. It is not surprising therefore that many pupils are ignorant or misinformed about university work. It was felt that definite, and semi-formal liaison arrangements were required.

The third area of discussion concerned the very serious problem of getting teachers of mathematics and science, both of high calibre and in sufficient numbers. One possible root cause, namely the difficulty of University speakers, especially some with experience on the appointments side, were insistent that the year of teacher training, on top of a four year Honours Course was a powerful disincentive. This was denied on the College of Education side. Nevertheless a number of people felt it could be shortened, or that it would prove more acceptable after one or two years trial teaching. This again was denied on the College side. Yet other speakers felt that, since many other walks of life offered a salary immediately after graduation, the training college period should be salaried. This would also make it easier for science graduates to come out of industry into teaching, and it is anomalous that a transfer from industry to Further Education establishments is so paid.

SUMMARY

1. At the national level, provision should be made for better long-range forecasting of supply and demand for mathematicians and scientists.
2. Research should be carried out into the reasons underlying the choices for subjects of study made by young children.

3. Research into the basic abilities of children in mathematics and science should be greatly increased.
4. There should be first-class vocational guidance available to all school children, preferably given by full-time experts.
5. Further consideration is necessary as to the suitability of existing degree courses for those intending to teach mathematics and science in schools.
6. Liaison channels should be set up between universities and schools and teachers from each should exchange visits and information on a continuing basis.
7. Grants to graduate teacher trainees should be comparable in value to the salaries available to graduates in alternative avenues of employment.

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