

EC/1-2/64
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FIRST AND SECOND MEETINGS
of the
EDUCATION COMMISSION

Minutes & Agenda
Papers

(2nd and 16th October, 1964)



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EDUCATION COMMISSION
GOVERNMENT OF INDIA
UNIVERSITY GRANTS COMMISSION BUILDING
NEW DELHI-1

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UNIVERSITY GRANTS COMMISSION BUILDING
NEW DELHI-1.

The First and Second Meetings of
the Education Commission.

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CONFIDENTIAL

No. EC/MIN/I

MINUTES OF THE FIRST MEETING OF THE
EDUCATION COMMISSION HELD AT NEW DELHI
ON FRIDAY, 2ND OCTOBER, 1964

EDUCATION COMMISSION
Government of India
New Delhi

EDUCATION COMMISSION
Government of India

Minutes of the first meeting of the Education Commission held in Committee Room 'B' Vigyan Bhavan, New Delhi, at 12.30 P.M. on Friday, 2nd October, 1964.

Present:

1. Dr. D.S. Kothari ... Chairman
2. Shri A.R. Dawood
3. Shri R.A. Gopalaswami
4. Dr. V.S. Jha
5. Shri P.N. Kirpal
6. Prof. M.V. Mathur
7. Dr. B.P. Pal
8. Km. S. Panandikar
9. Shri K.G. Saiyidain
10. Dr. T. Sen
11. Shri J.P. Naik (Member-Secretary.)

Shri K.L. Joshi, Secretary, University Grants Commission, was present by special invitation and Dr. M.D. Paul, Deputy Educational Adviser to the Commission also attended the meeting.

Item I - Preliminary Issues Regarding the Procedure to be Adopted by the Commission and the Organisation of its work.

The Commission considered the recommendations made in the informal meetings of the Indian Members of the Education Commission held on 4th, 5th and 30th September, 1964, and resolved as follows:-

(1) It is necessary to examine the educational problems of each individual State. For this purpose, the Member-Secretary should prepare a Memorandum on the educational problems in each for the information of the Members. The proposal that the State Institutes of Education should organise a Seminar of leading educationists in the State to discuss the problems of education in India in general and those of the State concerned in particular was also approved, as these would be of great help to the work of the Commission. It was, however, felt that in all such studies, we should not lose sight of the main objective of the Commission, viz., to take a 'national' look at the educational problems.

(2) It was decided that the Commission should put out a statement of major areas of interest on which the opinion of the public may be elicited. It should have a suitable preamble from the Chairman. In addition, detailed questionnaires may be prepared on special problems and circulated to selected groups of persons and institutions.

(3) The first three months (October to December 1964) should be devoted to intensive studies of problems and the tours of the Commission should begin from January 1965.

(4) The Commission should divide itself into a number of 'Task Forces', depending upon the major problems identified for its study. Each 'Task Force' should consist of one or more Members of the Commission and a number of high level experts, specially coopted for the purpose. Each 'Task Force' should be provided with competent and adequate secretariat. The Member-Secretary was requested to informally contact the Members of the Commission and prepare a document which would identify the main problems for study, the 'Task Forces' to be set up, their composition and terms of reference. This should be considered at the next meeting.

(5) The Commission should meet at least once a month, on the second Wednesday. In the earlier stages, more frequent meetings would be necessary and these will be decided upon from time to time. Some of the meetings of the Commission may be held outside Delhi when discussions with representatives of States and non-officials may also be held. During its tenure, the Commission should make it a point to pay one visit to every State and some of its Members should visit at least every major Union Territory.

(6) The Commission should contact prominent educationists, high level officials interested in educational problems, educational associations and learned bodies, etc. in all parts of the country, and they should be requested to send replies to the questionnaire or to submit Memoranda. In some places, special groups have been formed to study educational problems with a view to giving evidence before the Commission. This trend should be encouraged.

(7) The Chairman was requested to discuss matters relating to the Education Commission with State Governments, Universities, etc., whenever he went out on tour for other work also. The same request was also made to Secretary(Edn).

(8) When some Members of the Commission go outside the country, they should be requested to collect data needed for the work of the Commission and the Ministry of Education should be requested to provide the necessary facilities for the purpose.

(9) It was suggested that the desirability of a visit to some other countries, particularly those in Asia, by some Members of the Commission, should be examined. It was felt that the necessary assistance for such visits would be available without much difficulty if programmes about it could be prepared sufficiently in advance. It was, therefore, decided that this matter should be discussed again at the next meeting.

(10) As a general rule, interviews should be held only with persons who have submitted Memoranda or replies to the questionnaire.

(11) The proposal to hold group discussions on important topics was approved.

(12) It was decided to organise all the studies required for the work of the Commission as early as possible. Case studies of various types should also be organised. The assistance of all existing organisations, and in particular, the National Council of Educational Research and Training, should be sought for this purpose. The Commission should also have a Research Unit and a Statistical Wing directly

under it, in addition to some research assistance which should be made available to each Member of the Commission. Adequate funds for all these studies should be provided.

(13) Each full-time Member of the Commission should be requested to assume responsibility for certain fields of study for each of which he would act as a Convenor. Those members of the Commission who are interested in the field should also be associated with him. The distribution of work so made should be circulated to all Members for information.

(14) The Commission should have the advice of some eminent persons such as psychologists, sociologists and statisticians in its work. The Chairman was requested to examine this matter and to take necessary action at an early date.

(15) It would be of great advantage if the Commission as a whole would meet in some place outside Delhi for about a week when all the Members would stay together and intensively discuss the problems before it. The Chairman was requested to organise one or more such meetings at the appropriate time. In addition, it will be necessary for all the Members of the Commission to work full time for 2 or 3 months towards the end when the Report would be finalised.

Item 2 - Fourth Five Year Plan

The question about the impact, if any, which the Commission would like to make on the Fourth Five Year Plan and the provision of financial resources required for implementing the recommendations of the Commission was then taken up for consideration. The following decisions were taken :-

(1) It may be difficult for the Commission to finalise even an interim report in such time as would influence materially the allocations to be made for education in the Fourth Five Year Plan.

(2) The Commission should not, therefore, concern itself materially with the formulation of the Fourth Five Year Plan, unless its opinion is asked on some specific proposal by the Government of India.

(3) It may be difficult, after the Fourth Five Year Plan is finalised, to modify it radically enough to provide all the funds required for implementing the recommendations of the Commission. The Ministry of Education should, therefore, be requested to provide a fairly large sum in the Centrally-sponsored sector and to earmark it for implementing the recommendations of the Commission. A similar request may also be made to the State Governments.

Item 3 - Staff of the Commission

The proposals regarding the staff of the Commission were approved and it was decided to request the Ministry of Education to place a sum of Rs. 8,00,000 at the disposal of the Commission and to authorise the Chairman to create such posts, below the rank of a Deputy Secretary, as may be deemed necessary for its work from time to time. (For details please see Annexure I).

Item 4 - Appointment of Advisers to the Commission

The question of appointing advisers to the Commission was considered. It was felt that there should be a few top level advisers to the Commission in different fields, but that their number should be very small. It was also agreed that the matter should be discussed at the next meeting in detail.

Item 5 - Programmes of Consultants and Members of the Commission from abroad

(1) It was decided to invite the following persons as Consultants to the Commission :-

1. Dr. John Guy Fowlkes
2. Dr. F. Cyril James
3. Dr. John Fischer.

(2) Professor J.A. Moser has suggested that it may be possible for him to come to India for three weeks towards the end of December or for four weeks in the March/April recess. It was decided that he should be requested to spend four weeks in India in the March/April recess.

(3) The proposal regarding his visits to India made by Mr. Elvin (He will pay the first visit from January 4 to 12th 1965; a second visit from 29th March to 11th April; and third and a longer visit sometime between July and September) were agreed to.

(4) The proposals made by Sir Willis Jackson regarding his visits to India (He will visit India from January 2-12, 1965; and again for about two months towards the end of 1965) were agreed to.

(5) The proposal made by Mr. Jean Thomas for his visits to India (He will visit India for three months early in 1965 and again for three months late in 1965 or early in 1966) were agreed to.

Item 6 - Constitution of Task Forces

It was decided to constitute 12 Task Forces. (For details see Annexure II).

Item 7 - General Discussion

On a suggestion by Prof. M.V. Mathur, the Indian members had made a few general observations on the tasks before the Commission and the manner in which they should be approached. It was decided that the gist of this important discussion should be included in the proceedings (Annexure III).

Item 8 - Miscellaneous

The following communications from the Ministry of Education were read and recorded :-

- (1) Letter no.F.2-15/64-Estt. I of 21.9.64 regarding terms and conditions of the appointment of members, etc. (Annexure IV).
- (2) Letter No.F.(9)-B/64 dated 19.9.64 regarding sanction to an advance of Rs. 3,40,000 from the Contingency Fund (Annexure V).

Item 9 - Date and Venue of the Next Meeting

It was decided that the next meeting of the Commission should be held in the Conference Room of the University Grants Commission, New Delhi, at 10.30 A.M. on 16th October, 1964. The meeting would be continued on the 17th, if necessary.

The meeting then terminated with a Vote of Thanks to the Chair.

ANNEXURE I

Financial Implications of the Staff Proposals

| S. No. | Post and Scale of Pay | Total No. required | No. already sanctioned | Additional requirement | Average monthly cost per post | Total cost per post | Remarks |
|--------|--|--------------------|------------------------|------------------------|-------------------------------|---------------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. | Deputy Educational Adviser (Rs. 1100-50-1200-60-1800) | 3 | 1 | 2 | 1670 | 5010 | It is proposed to place School, Higher & Tech. Education in charge of one D.E.A. each. |
| 2. | Dy. secretary (Rs. 900-50-1250) | 1 | 1 | - | 1258 | 1258 | To be in overall charge of Administration and also some technical work. |
| 3. | Assistant Educational Adviser (Rs. 900-50-1250) | 7 | - | 7 | 1258 | 8806 | One each for the Technical Unit under Member-Secretary, Statistical Unit and Task Force on Teacher, New Techniques of Teaching, Science Education, Adult Education & Agricultural Education. |
| 4. | Librarian Grade I (Rs. 350-900) | 1 | -* | 1 | 760 | 760 | |
| 5. | Research Officer Grade II (Rs. 400-25-500-30-680) | 1 | - | 1 | 669 | 669 | |
| 6. | Asstt. Education Officer (Rs. 400-680) | 3 | - | 3 | 669 | 2007 | Two for Statistical Unit and one for Library-cum-Documentation Centre) |
| 7. | Section Officer (Rs. 350-900) | 1 | - | 1 | 784 | 784 | |
| 8. | Private Secretary (Rs. 400-680) | 1 | -** | 1 | 669 | 669 | For the Chairman |
| 9. | Investigators Senior Grade (Rs. 325-15-475-20-575) | 4 | - | 4 | 554 | 2216 | Only 2 of these will be new posts |
| 10. | Research Assistant Grade I (Rs. 325-15-575) | 5 | - | 5 | 554 | 2770 | 3 of these will work with 3 DEAs, 4th with Member-Secretary and the 5th with Man-Power Task Force. |

* 1 Post of Librarian-cum-Statistician in the scale of Rs. 210-425 has been sanctioned at present.

** 1 post of Stenographer Grade I in the scale of Rs. 350(400)-25-650 has been sanctioned at present.

| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
|---|----|----|----|----|-----|-------|---|
| 11. Receptionist (Rs. 325-15-475) | 2 | - | - | 2 | 450 | 450 | Two will be ultimately required; for the present, 1 post will be filled up. |
| 12. Artists (Rs. 335-15-485) | 2 | - | - | 2 | 501 | 1002 | |
| 13. Sectt. Assistant (Rs. 210-530) | 3 | 1 | - | 2 | 454 | 1362 | |
| 14. Stenographer Grade II (Rs. 210-530) | 23 | 4 | - | 19 | 475 | 10925 | |
| 15. Accountant-Cum- Cashier (Rs. 210-530) | 1 | 1 | - | - | 454 | 454 | |
| 16. Upper division Clerks (Rs. 130-300) | 3 | 2 | - | 1 | 305 | 915 | |
| 17. Lower Division Clerks (Rs. 110-180) | 9 | 2 | - | 7 | 198 | 1782 | 4 for office and 5 for typing pool |
| 18. Staff Car Driver (Rs. 110-180) | 1 | - | - | 1 | 185 | 185 | |
| 19. Gestetner Operator (Rs. 110-3-131) | 1 | 1 | - | - | 168 | 168 | |
| 20. Daftry (Rs. 70-1-85) | 1 | - | - | 1 | 120 | 120 | (2 for office; and 6 for six whole- |
| 21. Peon (70-1-85) | 12 | - | - | 12 | 120 | 1440 | (part-time members & 4 for D.E.As. and other officers. |
| 22. Farash (Rs. 70-1-85) | 1 | - | - | 1 | 120 | 120 | |
| 23. Sweeper (Rs. 70-1-85) | 2 | - | - | 2 | 120 | 240 | |
| 24. Chowkidar (Rs. 70-1-85) | 1 | - | - | 1 | 120 | 120 | |

TOTAL

Rs. 44,232 or Rs. 44,000

or Rs. 7,92,000 for 18 months or

Rs. 8 lakhs in round figures
for the entire period.

8

ANNEXURE II

TASK FORCES

The Commission as a whole will constitute a Task Force to deal with over-all problems such as the national pattern of education, objectives of educational development, education and social reconstruction, education and cultural renaissance, education and productivity, and place of science and technology in education. It will also coordinate the thinking of the different Task Forces on such aspects as Art Education, Women's Education, Curriculum, medium of instruction, production of literature in all the modern Indian languages which will be discussed by more than one Task Force as significant aspects of the problems assigned to it.

2. There would be 12 Task Forces as shown below:-

I. School Education: This Task Force will deal with problems of school education.- pre-primary, primary, middle school and secondary. It will also deal with problems of gifted children and of children needing special care.

Shri J.P. Maik would be the Convenor of this Task Force. He will be assisted by (a) Shri A.R. Dawood for Secondary Education and (b) Miss S. Panandikar for pre-primary education.

II. Higher Education: This Task Force will deal with problems of higher education and research (excluding scientific research which is assigned to a separate Task Force). It will also deal with Commerce and Management Education. Special attention will be paid to the development of collegiate education. Since separate task forces have been constituted for professional, vocational and technical education and agricultural education, this Task Force will deal only with such general aspects of these problems as are essential for taking an integrated view of its field and may, wherever necessary, coordinate its work with these two Task Forces.

Shri K.G. Saiyidain would be the Convenor for this Task Force.

III. Professional, Vocational and Technical Education: This Task Force will deal with problems relating to professional, vocational and technical education at all stages. This will include professional, vocational and technical education at the University stage (excluding agricultural, commerce and management education at the university stage) and all vocational and technical education at the school stage (excluding agricultural education).

Dr. T. Sen would be the Convenor for this Task Force.

IV. Agricultural Education: This Task Force will deal with problems of agricultural education (which would include forestry, animal husbandry and allied subjects) at all levels and agricultural extension and research.

Dr. B.P. Pal would be the Convenor for this Task Force.

V. Adult Education: This Task Force will deal with problems of adult education including liquidation of illiteracy, continuation education, workers' education, public libraries and all agencies of informal education. Special emphasis will be placed on the education of women.

Dr. W.S. Jha would be the Convenor for this Task Force.

VI. Science Education: This Task Force will deal with science education at all levels and the development of

scientific research.

Dr. D.S. Kothari would be the Convenor for this Task Force.

VII. Teacher Training and Welfare: This Task Force will deal with problems relating to teachers, such as, qualifications, remuneration, old-age benefits, recruitment, training - pre-service and in-service, conditions of service and professional organisations. Special attention will also be paid to the preparation of University teachers.

Miss S. Panandikar would be the Convenor for this Task Force.

VII. Student Welfare: This Task Force will deal with problems relating to students, such as, assistance to students, scholarships, character building and discipline (with special reference to moral and religious education and co-curricular activities).

Shri A.R. Dawood would be the Convenor for this Task Force.

IX. New Methods and Techniques in Education: This Task Force will deal with new methods and techniques in education, such as, correspondence courses, programmed learning, broadcasting, films, television and other audio-visual aids. Special emphasis will be laid on evolving techniques suited to our own conditions.

Dr. V.S. Jha would be the Convenor for this Task Force.

X. Manpower Aspects of Educational Development: This Task Force will deal with such problems as assessment of manpower needs, programmes of training the manpower required for different sectors of development, population growth and its implications for education and employment, and educated unemployment.

Shri R.A. Gopaldaswani would be the Convenor for this Task Force.

XI. Educational Administration: This Task Force will deal with matters relating to educational administration, such as, the role and functions of the Central Government, State Governments, Local Bodies and Voluntary organisations and their mutual relationships; community participation; organisation of State Education Departments; recruitment and training of administrative personnel; supervision and inspection of schools; problems of personnel relations; encouragement of talent in administration; and administrative difficulties created by political pressures and interference.

Shri P.N. Kirpal would be the Convenor for this Task Force.

XII. Educational Finance: This Task Force will deal with problems relating to financing of education at all stages and at all levels. It will place special emphasis on a study of education as investment and also be in charge of costing the recommendations of the Commission.

Prof. M.V. Mathur would be the Convenor for this Task Force.

- 10
3. Each Task Force is expected to take an integrated view of its field and its relationships with other fields. For instance, problems relating to the education of girls and women, education of the backward classes, physical education and sports, student welfare, identification of talent and its development, curricula with special reference to the study of languages, media of instruction, teaching of science, methods of teaching, examination reform, art education, etc. are to be dealt with, to the extent applicable, by each group within its own field.
 4. Where the work of a Task Force impinges upon the work of other Task Forces, the Convenors concerned would get in touch with each other and co-ordinate their thinking and programmes.
 5. In the course of discussions of these Task Forces, issues may arise which may require the setting up of new Task Forces. These matters may be dealt with as and when they arise.
 6. Each Task Force will have the freedom to appoint sub-groups (consisting of one or more persons) to go into the details of important and special aspects of the problems referred to it.
 7. Each Task Force will consist of (i) a Convenor, (ii) at least one other Member of the Commission, and (iii) about six other experts associated for the purpose. These experts may be changed from time to time, if the Convenor so thinks it necessary.

All Convenors were requested to make proposals regarding the composition of their Task Forces for consideration of the Commission at its next meeting.

8. The following are some of the problems which each Task Force may consider :-

- (1) The major problems within its field;
- (2) The studies to be undertaken;
- (3) Questionnaire to be issued;
- (4) Persons to be contacted through the Questionnaire;
- (5) Persons whose evidence is to be taken;
- (6) Group-discussions to be held;
- (7) Tours and visits needed;
- (8) Special papers to be prepared and the persons who could be entrusted with the work; and
- (9) Such other relevant issues.

The target for each Task Force should be to prepare a working paper on these or other allied issues and place them before the first meeting of the Task Force, which should be convened towards the end of October or early in November 1964.

9. The Task Forces should cover the entire field allocated to them, however, broadly, and present a preliminary report to the Commission before the end of December 1964.

11

ANNEXURE III

Gist of discussion held on 4th September 1964 regarding the tasks before the Commission and the manner in which they should be approached.

On a suggestion made by Prof. M.V. Mathur it was decided that each Member should state briefly his concept of the work before the Commission and the type of report it should ultimately produce. The following is the gist of the discussion.

1. Prof. M.V. Mathur:

(a) The terms of reference to the Commission are so wide that it will neither have the time nor the energy to address itself to every problem or even every aspect of the major problems. The Commission should, therefore, try to identify the crucial factors or the significant levers of educational development and concentrate its attention on them.

(b) The Government Resolution appointing the Commission refers to the new social order which we desire to create in the country. The Commission should examine this problem in greater detail, try to conceptualize the new social order that we need - it has to be a sort of planned society - and the type of education we need for its creation and maintenance.

(c) It is not necessary to take a very long look ahead. We should confine our attention to the foreseeable future, say, a generation.

(d) Although we have talked a good deal about the improvement of quality, we have not been able to make any significant dent on this problem in the post-Independence period. The improvement of quality has, therefore, to be specially emphasized, especially at the post-primary stage. A substantial proportion of the available financial resources should be earmarked for qualitative improvement of education. This may, for instance, be done by placing the funds in the centrally sponsored sectors or in some other suitable manner.

(e) We must discover real talent in society - irrespective of the caste, colour, race, religion or sex - and support it to the full. For this purpose,

we must have a programme of scholarships and combine it with the establishment of a selected number of good, high quality institutions at all levels.

(f) We must also give more attention to the relationship between education and employment. Educated unemployment is increasing at a frightening rate and the problem is far too serious to be ignored.

(g) The recruitment for Government services - Government is the largest potential employer of talent and will become increasingly so in the future - should be made at a fairly early stage, say, at the end of the secondary school. This is probably the most effective way to check the mad rush to the Universities which is such a characteristic feature of our educational development at present.

(h) Education is a State responsibility. The extent to which and the manner in which the constitutional provisions would have to be amended for creating a national system of education should receive special attention.

(i) The technological take-off - both in industry and agriculture - has to be preceded by the economic take-off. The vital role of education in this process should be examined and highlighted.

2. Shri R.A. Gopaldaswani:

My interest in the Commission may be summed up in two phrases: (1) pupil-enrolment planning and (2) education-employment coordination.

With regard to the first, pupil-enrolment planning, it may be pointed out that population is growing rapidly from year to year. Fortunately, public expenditure is also increasing from year to year and at a rate much larger than that of the increase in population. In the last few years, the hunger for education has increased so greatly that the enrolments are increasing at every stage and a point has now been reached when the rate of increase in pupil-enrolment is even outstripping the rate of increase in educational expenditure. There is also a good deal of indiscriminate expansion in pupil-enrolment, particularly at the secondary and university stages. Consequently, the standards of education are being adversely affected and the wastage and frustration arising from the system is on the increase. The State Governments are, however, unable to resist the political and social pressures which lead to this indiscriminate and rapid increase in pupil-enrolment. It should be a special responsibility of the Commission to so educate public opinion that the State Governments will be strengthened to control pupil enrolments in accordance with pre-determined policies.

Regarding the second, education-employment coordination, it may be pointed out that there is an obvious limit to the amount of what may be called 'academic' education, which is intended mainly for promoting the cultural development of the country. In addition to this, we need a very large expansion of specific employment-preparatory education which has to be planned carefully and which is to serve as a link between school and

life. This employment-preparatory education has to be planned and controlled, not only in respect of overall numbers, but also with regard to the recruitment to each particular category of employment. It is the second important responsibility of the Commission to assist in evolving proper policies in this field.

3. Dr.V.S. Jha:

(a) The main problem before the Commission is to suggest a pattern of national education which is specially designed to serve the objectives elaborated in the Government Resolution. However, in addressing ourself to the task, it will be necessary to interpret 'national' education in the context of the challenges of international life of which we are a part. To this end, therefore, the Commission will have to redefine the objectives of educational development and also indicate the needed development of the educational system, quantitatively and qualitatively. It should also indicate the finances required for such development in order that the country may have some idea of the sacrifices needed if good education is to be provided in near future.

(b) In a scheme of national education provision will be necessary to enable the talented youth to get the best education of the type suited to him. At the same time provision should exist for educational facilities for all so long as they wish to profit by it. This leads to the problem of adult education in all its varieties which will need special emphasis in a scheme of national education. Adult education does not mean only the liquidation of illiteracy. Education is a process which continues throughout life. As time passes on, therefore, continuation education would be needed increasingly by larger numbers of people and the plan prepared by the Commission should make adequate provision for this.

(c) The test of an educational system is ultimately the quality of men and women it produces. We have, therefore, to emphasize this aspect which includes, not only the imparting of information, or the teaching of certain skills, but also the building up of character.

(d) The key factor in successful implementation of any educational reform is the teacher. The quality of the person of the teacher, his academic depth, his professional ability, his personal character and his philosophy of life. One of the main tasks before the Commission will be to ensure that we have such teachers in sufficiently large numbers and to this end recommend measures necessary to bring the existing teachers under the right influence and to reorient teacher training.

(e) Education must train the highest leadership in all fields of thought and action. This can only be done in universities or other institutions of a similar status. The development of higher education is, therefore, to be specially emphasized.

(f) This is an age of science and technology. One of the main tasks of the Commission will be to see that the youth of the country is inspired by the scientific, technological revolution and at the same time trained to meet the challenges which it occasions.

4. Miss S. Panandikar:

(a) All educational reconstruction will also have to be looked at from the point of view of the teacher. This is generally ignored and the Commission may, therefore, highlight it to the extent possible.

(b) Standards of education have now fallen to a point where the educational process has become useless - classes have become abnormally large and the preparation of teachers is often extremely inadequate. Other conditions of good education are also becoming less common. It is essential to take immediate steps to prevent this deterioration in standards.

(c) It is essential to provide, as a measure of priority, a minimum education for every citizen. The programmes for this should be highlighted.

(d) Admission to educational levels, beyond this minimum to be provided for all children, should be based on some sort of a selection. The principle of such selection, its procedures and administrative machinery should be carefully thought out.

(e) Teacher preparation is extremely important and a co-ordinated approach has to be made to study the problem at all levels.

(f) A determined effort has to be made to maintain a fairly large number of institutions of high quality in all parts of the country and at all levels so that they will ultimately help in raising standards all round.

5. Shri A.R. Dawood:

(a) One of the most important points which the Commission should study is to find out why the recommendations of the earlier Commissions have not been carried out. Most of these were very good recommendations and yet they have remained unimplemented. Such a study can show us the dangers which nullify all efforts at educational improvement and also enable us to put forward a programme which would be more realistic and implementable.

(b) There is often a trend to make unhealthy compromises for sake of so-called 'unanimity'. We begin by saying that there must be a unanimous decision. To secure it, we frame our recommendations in such a way that everyone subscribes to them. This happens, not because of any change of heart on the part of anyone, but because the recommendation is worded so ambiguously as to support every kind of practice and each different view point. For instance, there are very sharp differences of opinion as to the point where the study of English should begin and whether the study of Hindi should begin before that of English or afterwards. All such differences are resolved by the adoption of a recommendation which says that "teaching of both English and Hindi should begin at an early stage". Such ambiguous recommendations should be avoided. We should strive for unanimity. But where such unanimity is not possible, the fundamental principles should never be compromised.

(At this stage, Shri Gopaldaswami added that, where we cannot have a unanimous conclusion, it may be worthwhile to state every point of view and the reasons in this support).

6. Dr. B.P. Pal:

(a) Agricultural education is extremely important and it will have to be highlighted in the report of the Commission.

(b) There is a general complaint that products of agricultural colleges do not go back to land. This is so, not only in India, but in other countries also.

(c) Extension work is very necessary for the development of agriculture. But it has its own limitations. The quality of our village level workers leaves much to be desired.

(d) Adult education is very important. Development of agriculture has suffered largely because the farmers are illiterate and essentially conservative.

(e) We need a large number of agricultural teachers and other types of agricultural workers. The problems relating to their recruitment, training, etc. will have to be considered.

(f) Research in agriculture has yet to be developed very considerably.

(g) We must try to maintain a few good institutions to serve as peaks of excellence. They will ultimately help in raising standards all round.

(h) One of the main difficulties of students at present is that they do not have adequate command over English language. This creates many problems especially because English has to continue as the medium of instruction at the post-graduate and research stages.

(i) There are certain important fields in agriculture to which students are not attracted. Some methods will have to be found to overcome this difficulty.

7. Shri P.N. Kirpal:

(a) The report of the Commission should be a 'classic' document in the educational history of this country. In my opinion, a classic is something which continues to inspire people for a long time and yet remains a practical guide for day-to-day actions.

(b) The Commission will have to address itself to the educational problems of a developing economy. Its report would, therefore, be of use, not only to us, but also to other developing countries.

(c) In trying to visualise the new social order which we want to create in India, the Commission should also address itself to the wider questions of the world society of which India is a part. For instance, we may consider how wars could be avoided by suitably educating the people and by promoting better international understanding.

(d) Our educational system suffers from large wastages at every level. The causes of this wastage and their remedies will have to be highlighted.

(e) The report of the Commission has to be comprehensive and has to deal with all aspects of education in a properly co-ordinated manner. At the same time, it should highlight the priorities and the sectors which need larger attention and a greater allocation of funds.

(f) The report should be divided into three parts. The first part should deal with the orientation of the educational system. It should give the historical background of the educational development in the country, especially in the post-independence period; it should then analyse the present situation and also look forward to the needs of the new social order we hope to create. The second part should discuss the major principles involved, such as overall objectives of educational development (and also the objectives specific to each separate level such as elementary, secondary or university), the content of education, the role of the teacher and all problems relating to them, (viz. remuneration, general education and professional training and the adoption of new techniques of teaching.) In the third part, we should deal with problems of organisation, priorities and financial resources.

8. Shri K.G. Saiyidain:

(a) The point made by Prof. Mathur that we should not go into too many details is quite valid and we should concentrate our attention on a few major issues only.

(b) We should concentrate on the production of people who would be able to play their part effectively in national reconstruction. From this point of view, the quality of education is of extreme importance.

(c) The Commission should address itself to the question of standards. It should determine whether the standards have fallen and if so, for what reasons. Our main attempt in the immediate future should be to raise standards all round.

(d) The main weaknesses of our educational system which are basically responsible for all our failures are two: (i) the quality of personnel recruited for educational development has been, on the whole, mediocre or poor; and (ii) the significance of educational development has not been adequately realised and the needed financial allocation have never been made so far.

(e) In no country of the world are there so many castes amongst teachers as in India and no where are their conditions of work so unsatisfactory. These problems will have to be boldly tackled.

(f) Good education can never be cheap. The country has not realised this truth as yet; and we must make an effort to convince the people that the only way to good education is to make adequate sacrifices for it.

(g) It would be desirable for the Commission to adopt the more fundamental approach of devising a pattern of education which would try to produce persons of the highest quality and competence without worrying too much about the type of jobs they may have to take up. Finding of suitable jobs for educated persons is most important but should not be regarded as the determining factor in designing a sound type of education. We should envisage the possibility that properly educated persons will to some extent be able to create openings for themselves through their own initiative and ingenuity.

(h) Secondary education has not been emphasized adequately. It is the products of the secondary schools who are needed in large numbers and who can serve as a link between the highly trained professional leaders on the one hand and the unskilled and semi-skilled workers on the other. The failure to develop secondary education has been a major cause of our educational weakness all round and the Commission will, therefore, have to highlight the development of secondary education adequately.

9. Shri R.R. Singh:

(a) For proper planning of education, we have to coordinate needs with available resources. The preparation of a good and workable educational plan needs, on the one hand, educators who are cost-conscious and, on the other, planners and financiers who realise the value and significance of education.

(b) The report of the Commission should give us a grand design of education which should gradually unfold itself in the years to come.

(c) I agree that quality is important but to some extent, expansion is also unavoidable. We shall, therefore, have to strive for a proper balance between the two.

(d) The morale of the teachers is probably at the lowest ebb at present. This is a very disturbing factor and the Commission should earnestly consider all problems relating to teachers - their social status, remuneration, general education, training, service conditions and morale.

(e) The Commission should give the country a system or philosophy of education.

10. Shri K.L. Joshi:

(a) There are various reasons for which the recommendations of earlier Commissions have not been implemented. The first is that the financial implications of these recommendations were not generally worked out. The second is that the recommendations were often contradictory. Thirdly, the realistic and practical aspects of the problem were not always taken into consideration. A study of the reasons why the recommendations of the earlier Commissions have not been implemented is important and it may give some valuable guide-lines for the work of this Commission.

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(b) Owing to educational expansion and the need to reconstruct it, the load on educational administration has increased beyond imagination. The Education Departments are not adequately equipped for these tasks. An improvement of administration is, therefore, essential and the Commission should highlight this problem.

(c) This is the first Commission which will have the experience of planned development of education. It should, therefore, carefully study the techniques of planning.

(d) The problem of the pay-structure of teachers is very important and will have to be carefully examined.

11. Shri J.P. Naik:

(a) The Commission has to produce an integrated plan - integrated in two ways: it must be integrated within education and deal with all aspects of educational development at all levels; and secondly, it must be integrated with the social, cultural, political and economic development of the country. Such a plan has never been prepared in the past and it is the most challenging and difficult task set for this Commission.

(b) We have really no worthwhile philosophy of education. We have adopted certain phrases like democracy, socialism, secularism, etc. which are but imperfectly understood. It is, therefore, essential to produce a working philosophy of education which will relate educational programmes to the creation of the new social order we have in view. This will include, not only a statement of objectives of educational development, but their break up into curricula and programmes of action at all stages of education and in all types of institutions.

(c) We have emphasized too much on history and philosophy in the past; we should now emphasize the techniques of development, particularly of planned development. For instance, a good technique for qualitative improvement would be a pincer movement - to improve middle schools to throw up good students and to develop the post-graduate stage to throw down good teachers.

(d) The three areas which are most neglected in the reports of the earlier Commissions are educational planning, educational administration and educational finance. For instance, we have not been able to define precisely the roles and the mutual relationship of the Central and the State Governments, local bodies, and private organisations. We have never studied the proper techniques of administration or given adequate thought to problems of cost. These matters should be highlighted in the Commission's Report.

(e) The one glaring weakness of Indian education in the past has been the failure to relate education to productivity. The experiment of basic education made only a crude beginning in this direction. We will now have to examine the problem far more comprehensively.

In fact, the chances of the report being implemented are in direct proportion to the extent to which we can relate education to productivity.

(f) The ultimate development of the country will have to be a coordinated picture of three important plans - family planning, educational reconstruction and economic development. Such an integrated plan will have to be implemented at three levels - the central level, the state level and the local (or district) level. In each district there should be a statutory authority whose responsibility it is to develop these coordinated plans in such a way that, within a generation, it would be possible to provide an adequate job to every individual who might remain within the district and to train some individuals for every job which is needed to secure development of the district. Similar plans at regional and national levels will also have to be prepared and implemented. The Commission should concentrate its attention on the working out of the details of such implementation techniques.

12. Chairman:

(a) Education is vital for survival. We live in an extremely competitive world at present and a point has been reached where only that country which has an adequate number of properly educated persons can hope to survive. This really includes everything and shows why education has to be emphasized: it is the most essential condition of our very survival.

(b) It has also been shown that the transformation from an illiterate society to an educated society, which means a viable and surviving society, can be brought about in one generation. We should try to do the same thing.

(c) Science has also shown that quality and cheapness can go together. In fact, the most important problem in the educational reconstruction of developing countries is to secure quality at a comparatively small cost. This needs innovation, experimentation, research, etc. These aspects will have to be emphasized in the report of the Commission.

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ANNEXURE IV

No.F.-2-15/64-Estt.I
Government of India,
Ministry of Education,

New Delhi, the 21st September, 1964
30th Bhadra, 1886

To:

The Accountant General,
Central Revenues,
New Delhi.

Subject: Appointment of an Education Commission - Terms and conditions of appointment of Members etc.

Sir,

I am directed to say that the Government of India have decided to set up an Education Commission to advise the Government on the national pattern of education and on the general principles and policies for the development of education at all stages and in all aspects. A copy of the Government of India Resolution No.F.41-3(3)/64-E.I. dated the 14th July, 1964 announcing the appointment of the Commission is enclosed. The Commission will start work from 1st October, 1964 and will submit its final report as early as possible but not later than the 31st March, 1966. The membership of the Commission will comprise 16 Members of whom one will be a Chairman and 6 whole-time Members including its Member-secretary. The Commission will have a secretariat of its own.

2. I am directed to convey the sanction of the President to the appointment of the whole-time Members including the Member-secretary of the Commission on the following terms and conditions:-

(i) TENURE: The whole-time Members of the Commission will be appointed for a period of 18 months with effect from 1st October, 1964 till 31st March, 1966 or the date of the submission of the final report of the Commission whichever is earlier. The appointment of Member-secretary will take effect from 1st September, 1964 and will continue till 31st March, 1966 or the date of the submission of the final report whichever is earlier.

(ii) PAY: The whole-time Members of the Commission including the Member-secretary will draw a fixed salary of Rs. 2,000/- per month. In the case of Members who are Government pensioners, the entire amount of pension shall be held in abeyance during their tenure as Members of the Commission.

(iii) HOUSE RENT ALLOWANCE: A house rent allowance not exceeding Rs. 600/- per mensem shall be allowed to the whole-time Members including the Member-secretary subject to the condition that the Member furnishes a certificate that the amount was actually spent on house rent.

(iv) TRANSPORT OF LUGGAGE AND CAR: The whole-time Members including the Member-secretary will be paid actual cost of transport of essential personal luggage and a personal car from the permanent place of residence to New Delhi on assumption of duty and from New Delhi to permanent place of residence on deitting office.

.....2/-

(v) T.A. FOR JOURNEYS CONNECTED WITH THE WORK OF THE COMMISSION:

- (a) The Member (including Member-Secretary) may at his discretion travel by air or by taking a single berth in an air-conditioned or first class compartment while travelling by rail.
- (b) In other respects the members' travelling allowance including daily allowance will be regulated as for officers of first grade.

(vi) TRAVELLING ALLOWANCE FOR JOURNEYS TO HOME TOWN: The members will be entitled to one journey to home town and back at government expense during the entire period of their tenure as Members of the Commission. The travelling allowance will be restricted to actual expenses. No daily allowance for halt at the home town will be admissible.

3. I am also directed to convey the sanction of the President to the creation of the following temporary posts for the secretariat of the Commission with effect from the 1st September, 1964 upto 28th February, 1965 in the first instance:-

| <u>Designation of the post</u> | <u>No. of posts</u> | <u>Scale of pay</u> |
|--|---------------------|--|
| 1. Deputy Secretary to the Commission. | 1 | Rs. 900-50-1250 |
| 2. Deputy Educational Adviser | 1 | Rs. 1100-50-1300-60-1600-100-1800. |
| 3. Accountant-cum-Cashier | 1 | Rs. 210-10-270-15-300-EB-15-450-EB-20-530. |
| 4. Assistant | 1 | -do- |
| 5. Librarian-cum-Statistician | 1 | Rs. 210-10-290-15-320-EB-15-425. |
| 6. U.D.C. | 2 | Rs. 130-5-160-8-200-EB-4-175-5-280. |
| 7. L.D.C. | 2 | Rs. 110-3-131-4-155-EB-4-175-5-180. |
| 8. Gestetner Operator | 1 | Rs. 80-1-85-2-95-EB-3-110. |
| 9. Stenographer Grade I | 1 | Rs. 350(400)-25-650 |
| 10. Stenographers Grade II | 4 | Rs. 210-10-270-15-300-EB-15-450-EB-20-530. |

The expenditure involved will be debitable to the advance sanctioned from the Contingencies Fund of India vide Ministry of Finance (Department of Economic Affairs) No.F.5(9)-B/64-dated 19th September, 1964-

The sanction has been issued in relaxation of the ban on the creation of new posts and necessary approval of the Ministries of Finance and Home Affairs has been obtained vide the Ministry of Finance U.O.No.6153-Edn/64, dated 12.8.64 and U.O.No.7011,Edn/64 dated 17.9.64 and Ministry of Home Affairs U.O.No.6137/64-E.O.II, dated 24.8.1964.

Yours faithfully,
Sd/-N.S.Bhatnagar
Under Secretary to the Govt. of India

ANNEXURE V

IMMEDIATE

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No. F.5(9)-B/64
Government of India,
Ministry of Finance,
(Department of Economic Affairs)

New Delhi, the 19th September, 1964.

To

The Accountant General,
Central Revenues,
NEW DELHI

Subject: Education Commission - Advance from the Contingency Fund of India to meet expenditure on.

Sir,

I am directed to convey the sanction of the President to the grant of an advance of Rs. 3,40,000/- (Rupees three lakhs and forty thousand only) from the Contingency Fund of India to the Ministry of Education to enable them to meet the expenditure on the Education Commission set up by the Government of India.

Necessary Supplementary Grant, in accordance with Rule 8 of the Contingency Fund of India, will be obtained by the Ministry of Education under the relevant new sub-head to be opened for the purpose in Grant No. "9-Education" for 1964-65 in the next session of Parliament.

Yours faithfully,

Sd/-

(R.K. Mukherjee)
Under Secretary to the Govt. of India

CONFIDENTIAL

No. EC/MIN/2

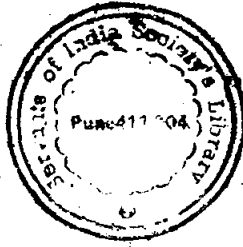
MINUTES OF THE SECOND MEETING OF THE
EDUCATION COMMISSION HELD AT NEW DELHI
ON FRIDAY, 16TH OCTOBER, 1964.

.....

EDUCATION COMMISSION
Government of India
New Delhi.

Minutes of the Second Meeting of the Education Commission held at 11 a.m. on Friday, the 16th October 1964 in the Conference Room of the University Grants Commission.

Present:

1. Dr. D.S. Kothari
 2. Dr. K.G. Saiyidain
 3. Dr. V.S. Jha
 4. Shri A.R. Dawood
 5. Shri P.N. Kirpal
 6. Shri R.A. Gopaldaswami
 7. Dr. B.P. Pal
 8. Dr. T. Sen
 9. Prof. M.V. Mathur
 10. Shri J.P. Naik
- Chairman
- 
- Member-Secretary

Miss S. Vanandikar could not be present as she was joining with effect from the 19th October, 1964.

Shri K.L. Joshi, Secretary, University Grants Commission, was present by special invitation.

Item No.1: Minutes of the first Meeting.

The minutes of the first meeting held on 2nd October, 1964 were confirmed.

Item No.2: Note on Problems of University Education

The note on the problems of university education prepared by Dr. K.G. Saiyidain for the Task Force on Higher Education was discussed and generally approved subject to the following observations:

(1) It was felt that the problem of the medium of instruction at the university stage was extremely important and that it had to be discussed in the context of the general problem of teaching languages at all stages of education. It was, therefore, decided that the secretariat should prepare a preliminary note on the subject and circulate it to the Members as early as possible. The work done on the problem by the Madras State should be specifically referred to in this note. The Commission should then hold a special meeting for a day or two to discuss the language problem.

(2) The problem of evolving a suitable pattern for the new universities that are being established should also be examined.

(3) The work done by the University Grants Commission should be evaluated and proposals to strengthen and expand the role of U.G.C. in the development of higher education in the country should be formulated.

(4) The problem whether education should or should not be included in Concurrent List should be examined by the Task Force on Educational Administration.

(5) The Task Force should carefully consider the report of the Sapru Committee which is shortly being released.

1. Shri J.P. Naik - Convenor
2. Miss S. Panandikar
3. Shri A.R. Dawood
4. Dr. Raja Laxmi, Head of the Child Study Unit, NCERT
5. Shri H. Radhakrishna, Secretary, Akhil Bharatiya Sarva Seva Sangh, Varanasi.
6. Shri D.R. Mankad, Secretary, Gangajala Vidya Peeth, Aliabada, Jamnagar.
7. Shri K. Kuravilla, Jacob, Principal, Hyderabad Public School, Begumpet, Hyderabad.
8. Dr. G.S. Khair, Principal, Anath Vidyanthi Vastai Griha, Poona.
9. Shri K.L. Gupta, Principal, Higher Secondary School, Brindabad (U.P.).
10. Shri P.N. Mathur, Banasthali Vidyapeeth, Banasthali (Rajasthan).

A member for the education of the Handicapped children should be added to the Task Force later on when problems relating to handicapped children would be taken up for study.

Item No.7: Working Groups on Evaluation:

It was decided that the problem of evaluation at all stages of education should be examined in detail. The following three working groups were set up for the purpose:

(a) Working Group for the School Stage

1. Shri A.R. Dawood - Convenor
2. Shri J.P. Naik
3. Dr. R.H. Dave, DEFSE
4. Prof. C.D. Beshande, Director of Education, Maharashtra
5. Shri L.L. Joshi, Chairman, Board of Secondary Education, Rajasthan.
6. Shri S.D. Pant, Chairman, Board of Intermediate and High School Education, U.P.
7. Shri V.B. Desai, Deputy Director of Education in-charge of Examinations, Mysore.
8. Dr. Taylor, Vice-Chancellor, Gauhati University.

(b) Working Group for Teacher Training:

1. Miss S. Panandikar - Convenor
2. Shri J.P. Naik
3. Dr. R.H. Dave, DEFSE
4. Dr. K.G. Desai, Principal, A.G. Teachers' College, Ahmedabad.
5. Dr. V.B. Taneja, Principal, Training College, Kurukshetra.
6. Prof. H.M. Datta, B.R. Training College, Agra.
7. Dr. Harper, Psychological Institute, Allahabad.
8. Shri B.V. Bapat, Principal, Tilak College of Education, Poona.
9. Shri P.D. Sharma, Vice-Principal, Regional College of Education (NCERT).

(c) Working Group for the University Stage:

1. Dr. K.G. Saiyidain - Convenor
2. Dr. V.S. Jha
3. Dr. A.C. Joshi, Vice-Chancellor, Punjab University.
4. Dr. Taylor, Vice-Chancellor, Gauhati University
5. One other Vice-Chancellor
6. A representative of the U.G.C.

7-8 Two Principals of Colleges - one on the Arts side and one on the Science side.

9. Dr. Hans Simons

10. Shri J.P. Naik

11. Dr. R.H. Dave

Item No.8: Working Group on Curriculum.

The proposal made by the Member-Secretary that a Working Group should be set up to examine the problem of curriculum at the school was approved in principle. The Chairman was requested to finalise the composition of the Working Group, which should work in close collaboration with the Department of Curriculum, Textbooks and Methods of the NCERT.

Item No.9: Task Force on Manpower Aspects of Educational Development.

It was decided that the Task Force on Manpower Aspects of Educational Development should consist of the following:-

1. Shri R.A. Gopaldaswani - Convenor
2. Shri J.P. Naik
3. Shri M.V. Mathur
4. Dr. T. Sen.
5. Shri Ranchor Prasad, Director of Manpower, Ministry of Home Affairs.
6. Shri V.R.K. Tilak, Deputy Director, Directorate General of Employment & Training.

Item No.10: Task Force on Science

The following Task Force on Education, Science and Research was constituted:-

1. Dr. D.S. Kothari - Convenor
2. Dr. B.P. Dal
3. Dr. A.C. Joshi, Vice-Chancellor, Punjab University, Chandigarh.
4. Dr. R.N. Rai, Department of Science Education, NCERT, New Delhi.
- 5-7. Three Schools Teachers or Headmasters to be added.
8. Dr. R.D. Peshwade, University Grants Commission.
9. Shri T.C. Menon, Department of Science Education, NCERT.

Item No.11: Task Force on Technical Education.

The following Task Force on Technical Education was constituted to begin with:

1. Dr. T. Sen - Convenor
2. Shri R.A. Gopaldaswani
3. Shri G.K. Chandiramani
4. Shri Dogra, Indian Institute of Technology, Delhi.
5. Dr. H.C. Visheshwarayya, Indian Standards Institution, Delhi.
6. Principal, S.C. Sen, Delhi Polytechnic, Delhi.
7. Dr. Kelkar, Indian Institute of Technology, Kanpur
8. Mr. Garde, Principal of Regional Engineering College, Rajasthan.
9. Col. S.G. Tendse, Directorate of Training and Employment, New Delhi.

Item No.12: Task Force on Agricultural Education.

The following Task Force on Agricultural Education was constituted:

1. Pr. B.P. Pal - Convenor
2. Dr. A.B. Joshi, Dean and Deputy Director (Education), Indian Agricultural Research Institute, New Delhi.
3. Dr. Ananta Rao, Dean, U.P. Agricultural University, Pant Nagar.
4. Prof. V.P. Dandekar, Professor-in-Charge, Centre for Advance Study in Agricultural Economics, Gokhale Institute of Politics & Economics, Poona.
5. Dr. S. Krishnamurty, Director of Agriculture, Madras.
6. Dr. S.N. Mehrotra, Deputy Secretary, Education Department, U.P., Lucknow.
7. Pr. Amir Ali, Jania Millia, New Delhi.
8. Dr. K. Kanungo, Director, National Cooperative College and Research Institute, Poona.

Item No.13: The visit of Lord Robbins.

The Commission noted that Lord Robbins had kindly agreed to visit India for a few days and discuss problems of higher education with the members.

Item No.14: Budget Estimates of the Commission.

The following budget estimates of the Commission were approved and the Member-Secretary was authorised to forward them to the Ministry of Education:

| S.No. | Sub-head etc. | Budget Provision for 1964-65 | Budget Provision for 1965-66 |
|-------|---------------------------------------|------------------------------|------------------------------|
| 1. | F.7(12)(1)-Pay of Officers | 1,08,724 | 3,49,601 |
| 2. | F.7(12)(2) - Pay of Establishment | 57,146 | 2,52,912 |
| 3. | F.7(12)(3) - Allowances and Honoraria | 2,09,915 | 11,84,126 |
| 4. | F.7(12)(4) - Other charges | 1,26,000 | 2,63,000 |
| Total | | 5,01,785 | 20,49,640 |

Item No.15: Expenditure on Consultants from Countries other than the U.K. and U.S.A.

by
The offer made/UNESCO to meet the expenditure on Consultants to the Commission from countries other than the U.K. and the U.S.A. was noted with thanks (reference letter No. ED 29/20723 dated 23rd September, 1964, from Dr. Malcolm S Adiseshiah, Deputy Director General, UNESCO, to Shri T.N.Kirpa

Secretary, Ministry of Education).

Item No.16: Next Meeting

It was decided that the next meeting of the Commission should be held on 11th, 12th & 13th November, 1964 at New Delhi.

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Selected Agenda Papers of the First
and Second Meetings.

Minutes of the Informal Meeting of the Indian Members of the Education Commission held in the Conference Room of the University Grants Commission on 4th September, 1964

Present:-

- 1. Dr. D. S. Kothari ... Chairman
- 2. Shri A. K. Dawood
- 3. Shri R. A. Gopaldaswami
- 4. Dr. V. S. Jha
- 5. Shri P.N. Kirpal
- 6. Prof. M. V. Mathur
- 7. Dr. B. P. Pal
- 8. Kumari S. Panandikar
- 9. Shri K. G. Saiyidain
- 10. Dr. T. Sen
- 11. Shri J. P. Naik ... Member-Secretary

The following persons were present by special invitation:-

- 1. Shri R. R. Singh,
Joint Secretary,
Ministry of Education
- 2. Shri K. L. Joshi,
Secretary,
University Grants Commission

The following officers of the Commission were also present:-

- 1. Dr. M. D. Paul
- 2. Shri S. Venkatesh

2. Welcoming the Members the Chairman said that the informal meeting had been convened to discuss preliminary issues regarding the organisation of the work of the Commission which had been set a difficult and challenging task. The discussions and decisions at this meeting would enable preliminary steps to be taken to start the work of the Commission when it assumes office on 1st October, 1964.

3. There was a suggestion that the inaugural function of the Commission, which has now been fixed for 16th October, may be advanced to the 2nd October. After discussion, it was agreed that the matter should be left for decision by the Chairman and Secretary (Education) in consultation with the Union Education Minister.

Item I Government Resolution Setting up the Commission

The Government Resolution No.F.41-3(3)/64-E.1 dated 14th July, 1964 setting up the Commission was then taken up for discussion. The Chairman informed the Members of the following developments that had since taken place:-

- (i) Dr. Shumvosky of U.S.S.R and Dr. Ihara of Japan have been appointed as Members of the Commission in consultation with Unesco.
- (ii) Lord Robbins has expressed his interest in the work of the Commission and has tentatively agreed to come to India for about a week to discuss problems of higher education with the Commission.
- (iii) Negotiations are going on to secure the services of Dr. J.J. Capelle, Director-General of Organisation and Curricula, National Ministry of Education, France; Dr. S. Dedijer, Director, Institute of Theoretical physics, University of Lund, Sweden; and Prof. C. A. Moser, Professor of Social Statistics, London School of Economics, as consultants to the Commission.

The Resolution does not define, in detail, the terms of reference to the Commission and merely states that it will "advise Government on the national pattern of education and on the general principles and policies for the development of education at all stages and in all its aspects." While welcoming this flexible statement it was also agreed that the Commission should, at its next meeting, formulate its own detailed terms of reference as a basis for organising its programme.

There was also general feeling that the problems of adult education are very important and should be highlighted in the Report of the Commission. Whether this would need an amendment in the Resolution was a point which the Chairman was requested to decide in consultation with the Ministry of Education.

The Commission has also been authorised to submit interim reports from time to time, if it so desires. It was felt that such reports would be of two types:-

- (a) Reports on matters specifically referred to the Commission by the Ministry of Education for advice; and
- (b) Reports on subjects which, in the opinion of the Commission, need immediate implementation.

By and large, it was felt that the Commission should concentrate on preparing its main Report and that interim reports may be taken up only when absolutely necessary.

Item 2 Press Reactions to the Appointment of the Commission

The note prepared by the Information Officer of the Ministry of Education was recorded. It was felt that the / continuous contact with the Press, as this would Commission should maintain a/considerably assist in its work. From this point of view, it was decided that the Chairman should convene a Press Conference, a little after the inaugural function, and explain the programme of the Commission with a view to eliciting the maximum possible public cooperation.

Item 3 Preliminary Issues Regarding the Procedure to be Adopted by the Commission and the Organisation of its Work.

The note on the subject prepared by the Member-Secretary was discussed and the following decisions were taken:-

(I) It is necessary to examine the educational problems of each individual State. For this purpose, the Member-Secretary should prepare a Memorandum on the educational problems in each State for the information of the Members. The proposal that the State Institutes of Education should organise a Seminar of leading educationists in the State to discuss the problems of education in India in general and those of the State concerned in particular was also approved, as these would be of great help to the work of the Commission. It was, however, felt that in all such studies, we should not lose sight of the main objective of the Commission, viz., to take a 'national' look at the educational problems.

(2) It was decided that the Commission should put out a statement of major areas of interest on which the opinion of the public may be elicited. It should have a suitable preamble from the Chairman. In addition, detailed questionnaires may be prepared on special problems and circulated to selected groups of persons and institutions.

(3) The first three months (October to December, 1964) should be devoted to intensive studies of problems and the tours of the Commission should begin from January, 1965.

(4) The Commission should divide itself into a number of 'Task Forces', depending upon the major problems identified for its study. Each 'Task Force' should consist of one or more Members of the Commission and a number of high level experts, specially coopted for the purpose. Each 'Task Force' should be provided with competent and adequate secretariat. The Member-Secretary was requested to informally contact the Members of the Commission and prepare a document which would identify the main problems for study, the 'Task Forces' to be set up, their composition and terms of reference this should be considered at the next meeting.

(5) The Commission should meet at least once a month, on the second Wednesday. In the earlier stages, more frequent meetings would be necessary and these will be decided upon from time to time. Some of the meetings of the Commission may be held outside Delhi when discussions with representatives of States and non-officials may also be held. During its tenure, the Commission should make it a point to pay one visit to every State and some of its Members should visit at least every major Union Territory.

(6) The Commission should contact prominent educationists, high level officials interested in educational problems, educational associations and learned bodies, etc.

in all parts of the country, and they should be requested to send replies to the questionnaire or to submit Memoranda.

In some places, special groups have been formed to study educational problems with a view to giving evidence before the Commission. This trend should be encouraged.

(7) The Chairman was requested to discuss matters relating to the Education Commission with State Governments, Universities, etc., whenever he went out on tour for other work also. The same request was also made to Secretary (Education)

(8) When some Members of the Commission go outside the country, they should be requested to collect data needed for the work of the Commission and the Ministry of Education should be requested to provide the necessary facilities for the purpose.

(9) It was suggested that the desirability for a visit to some other countries, particularly those in Asia, by some Members of the Commission, should be examined. It was felt that the necessary assistance for such visits would be available without much difficulty if programmes about it could be prepared sufficiently in advance. It was, therefore, decided that this matter should be discussed again at the next meeting.

(10) As a general rule, interviews should be held only with persons who have submitted Memoranda or replies to the questionnaire.

(11) The proposal to hold group discussions on important topics was approved.

(12) It was decided to organise all the studies required for the work of the Commission as early as possible. Case studies of various types should also be organised. The assistance of all existing organisations, and in particular, the National Council of Educational Research and Training, should be sought for this purpose. The Commission should also have a Research Unit and a Statistical Wing directly under it, in addition to some research assistance which should be made available to each Member of the Commission. Adequate funds for all these studies should be provided.

(13) Each full-time Member of the Commission should be requested to assume responsibility for certain fields of study for each of which he would act as a Convener. Those members of the Commission who are interested in the field should also be associated with him. The distribution of work so made should be circulated to all Members for information.

(14) The Commission should have the advice of some eminent persons such as psychologists, sociologists, and statisticians in its work. The Chairman was requested to examine this matter and to take necessary action at an early date.

(15) It would be of great advantage if the Commission as a whole would meet in some place outside Delhi for about a week when all the Members would stay together and intensively discuss the problems before it. The Chairman was requested to organise one or more such meetings at the appropriate times. In addition, it will be necessary for all the Members of the Commission to work full-time for 2 or 3 months towards the end when the Report would be finalised.

Item 4 To consider the Question of Inviting Memoranda from Institutions and Individuals

This was postponed to the next meeting.

Item 5 Preparation of a Perspective of Educational Development in India (1950-80)

It was agreed that a comprehensive document which would set forth a perspective of educational development in India to cover the first three Plans and to look ahead to the next three would be useful to the Commission, as a basis for discussion and for identifying and pursuing further the various problems involved. The Member-Secretary was, therefore, requested to prepare such a document as early as possible and place it before the Commission.

Item 6 Staff

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The proposals for the staff of the Commission, as prepared by the Member-Secretary, were discussed and the following decisions were taken:-

(1) The exact requirements of the staff could be determined only after the problems to be studied in detail are identified and the different 'Task Forces' have been set up. It was, therefore, decided that, for this purpose, a Committee should be set up consisting of the Education Secretary, Shri R. A. Gopaldaswami and the Member-Secretary. The Committee should work out the details of the staff required as early as possible.

(2) In order to provide adequate assistance to the Commission, it will be essential to have more staff at higher levels.

(3) A certain amount of flexibility is necessary with regard to staff. The Ministry of Education should, therefore, be requested to place a lump sum amount at the disposal of the Commission and to authorise it to create such posts as may be necessary from time to time.

Item No.7 - Fourth Five Year Plan: The question about the impact, if any, which the Commission would like to make on the Fourth Five Year Plan and the provision of financial resources required for implementation of the recommendations of the Commission was then taken up for consideration.

The following decisions were taken:-

(1) It may be difficult for the Commission to finalise even an interim report in such time as would influence materially the allocations to be made for education in the Fourth Five Year Plan.

(2) The Commission should not, therefore, concern itself materially with the formulation of the Fourth Five year Plan, unless its opinion is asked, on some specific proposals, by the Government of India.

(3) It may be difficult, after the Fourth Five Year Plan is finalised, to modify it radically enough to provide all the funds required for implementing the recommendations of the Commission. The Ministry of Education should, therefore, be requested to provide a fairly large sum in the Centrally-sponsored sector and to earmark it for implementing the recommendations of the Commission.

The meeting was then adjourned to 11 a.m. on 5th September, 1964, to discuss some broad ideas regarding the work of the Commission.

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Minutes of the Second Informal Meeting of the Indian Members of the Education Commission held at 10 a.m. on Wednesday, 30th September 1964 at the Conference Room of the University Grants Commission, New Delhi.

Present

1. Dr. D. S. Kothari - Chairman
2. Shri R. A. Gopaldaswami
3. Dr. V. S. Jha
4. Shri P.N. Kirpal
5. Shri K. G. Saiyidain
6. Prof. M.V. Mathur
7. Dr. B. P. Pal
8. Dr. T. Sen
9. Shri J. P. Naik - Member Secretary

Shri A. R. Dawood and Miss S. Panandikar sent letters regretting their inability to attend which were read and recorded.

The following persons were present by special invitation:-

1. Shri R. R. Singh
2. Shri K. L. Joshi.

The following officers of the Commission were also present:-

1. Dr. M. D. Paul
2. Shri S. Venkatesh.

2. The draft minutes of the first informal meeting held on 4th and 5th of September, 1964 were confirmed, after incorporating the suggestions made by Shri K. G. Saiyidain and Dr. V. S. Jha.

3. The constitution of Task Forces as well as the broad procedure to be adopted by them was discussed and approved as shown in Annexure I.

It was also decided that the preliminary reports of the Task Forces should be available to the Commission by the end of December 1964.

4. The proposals regarding the staff of the Commission were approved and it was decided to request the Ministry of Education to place a sum of Rs.8,00,000 at the disposal of the Commission and to authorize the Chairman to create such posts, below the rank of a Deputy Secretary, as may be deemed necessary for its work from time to time.
5. The question of appointing advisers to the Commission was considered. It was felt that there should be a few top-level advisers to the Commission in different fields, but that their number should be very small. It was also agreed that the matter should be discussed at the next meeting in detail.
6. The proposal made by Dr. T. Sen for holding a group-discussion on technical education was approved in principle. The details should be worked out further in consultation with the Task Force on Technical Education.
7. The letter No.308/DHC/64 dated 11-9-64 from Shri Kewal Singh was considered and it was decided that Prof. C. A. Moser may be invited to spend four weeks in India during March/April recess as proposed by him.
8. The proposals regarding his visits to India made by Mr. Elvin (He will pay the first visit from January 4 to 12th, 1965; a second visit from 29th March to 11th April; and third and a longer visit sometime between July and September) were agreed to.
9. The proposals made by Sir Willis Jackson regarding his visits to India (He will visit India from January 2 to 12, 1965; and again for about two months towards the end of 1965) were agreed to.
10. It was decided to invite the following persons as Consultants to the Commission:-
 1. Dr. John Guy Fowlkes
 2. Dr. F. Cyril James
 3. Dr. John Fischer, President of Teachers College, Columbia University.

11. The proposal made by Mr. Jean Thomas for his visits to India (He will visit India for three months early in 1965 and again for three months late in 1965 or early in 1966) were agreed to.

12. The following communications from the Ministry of Education were read and recorded:-

(1) Letter No.F.2-15/64-Estt. 1 of 21-9-64

re: terms and conditions of the appointment of members, etc.

(2) Letter No.F.(9)-B/64 dated 19-9-64

regarding sanction to an advance of Rs.3,40,000 from the Contingency Fund.

The meeting then terminated with a vote of thanks to the Chair.

A NOTE ON TASK FORCES

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The Commission as a whole will constitute a Task Force to deal with over-all problems such as the national pattern of education, objectives of educational development, education and social reconstruction, education and cultural renaissance, education and productivity, and place of science and technology in education. It will also coordinate the thinking of the different Task Forces on such aspects as Art Education, Women's Education, Curriculum, medium of instruction, production of literature in all the modern Indian languages which will be discussed by more than one Task Force as significant aspects of the problems assigned to it. In addition, there would be 12 Task Forces as shown below :-

I. School Education: This Task Force will deal with problems of School education - pre-primary, primary, middle school and secondary. It will also deal with problems of gifted children and of children needing special care.

Shri J.P. Naik would be the Convenor for this Task Force. He will be assisted by (a) Shri A.R. Dawood for Secondary Education, and (b) Miss S. Panandikar for pre-primary education.

II. Higher Education: This Task Force will deal with problems of higher education and research (excluding scientific research which is assigned to a separate Task Force). It will also deal with Commerce and Management Education. Special attention will be paid to the development of collegiate education. Since separate task forces have been constituted for professional, vocational and technical education and agricultural education, this Task Force will deal only with such general aspects of these problems as are essential for taking an integrated view of its field and may, wherever necessary, coordinate its work with these two Task Forces.

Shri K.G. Saiyidain would be the Convenor for this Task Force.

III. Professional, Vocational and Technical Education: This Task Force will deal with problems relating to professional, vocational and technical education at all stages. This will

include professional, vocational and technical education at the University stage (excluding agricultural, commerce and management education at the University stage) and all vocational and technical education at the school stage (excluding agricultural education).

Dr. T. Sen would be the Convenor for this Task Force.

IV. Agricultural Education: This Task Force will deal with problems of agricultural education (which would include forestry, animal husbandry and allied subjects) at all levels and agricultural extension and research.

Dr. B. P. Pal would be the Convenor for this Task Force.

V. Adult Education: This Task Force will deal with problems of adult education including liquidation of illiteracy, continuation education, workers' education, public libraries and all agencies of informal education. Special emphasis will be placed on the education of women.

Dr. V. S. Jha would be the Convenor for this Task Force.

VI. Science Education: This Task Force will deal with science education at all levels and the development of scientific research.

Dr. D. S. Kothari would be the Convenor for this Task Force.

VII. Teacher Training and Welfare: This Task Force will deal with problems relating to teachers, such as, qualifications remuneration, old-age benefits, recruitment, training - pre-service and in-service, conditions of service and professional organisations. Special attention will also be paid to the preparation of University teachers.

Miss S. Panandikar would be the Convenor for this Task Force.

VIII. Student Welfare: This Task Force will deal with problems relating to students, such as, assistance to students, scholarships, character building and discipline (with special reference to moral and religious education and co-curricular activities).

Shri A. R. Dawood would be the Convenor for this Task Force.

IX. New Methods and Techniques in Education: This Task Force

will deal with the new methods and techniques in education, such as, correspondence courses, programmed learning, broadcasting, films, television and other audio-visual aids. Special emphasis will be laid on evolving techniques suited to our own conditions.

Dr.V.S. Jha would be the Convenor for this Task Force.

X. Manpower Aspects of Educational Development: This Task Force will deal with such problems as assessment of manpower needs, programmes of training the manpower required for different sectors of development, population growth and its implications for education and employment, and educated unemployment.

Shri B. A. Gopaldaswami would be the Convenor for this Task Force.

XI. Educational Administration: This Task Force will deal with matters relating to educational administration, such as as, the role and functions of the Central Government, State Governments, Local Bodies and voluntary organisations and their mutual relationships; community participation; organisation of State Education Departments; recruitment and training of administrative personnel; supervision and inspection of schools; problems of personnel relations; encouragement of talent in administration; and administrative difficulties created by political pressures and interference.

Shri P.N. Kirpal would be the Convenor for this Task Force.

XII. Educational Finance: This Task Force will deal with problems relating to financing of education at all stages and at all levels. It will place special emphasis on a study of education as investment and also be in charge of costing the recommendations of the Commission.

Prof.M.V. Mathur would be the Convenor for this Task Force.

3. Each Task Force is expected to take an integral view of its field and its relationships with other fields. For

instance, problems relating to the education of girls and women, education of the backward classes, physical education and sports, student welfare, identification of talent and its development, curricula with special reference to the study of languages, media of instruction, teaching of science, methods of teaching, examination reform, art education, etc. are to be dealt with, to the extent applicable, by each group within its own field.

4. Where the work of a Task Force impinges upon the work of other Task Forces, the Convenors concerned would get in touch with each other and coordinate their thinking and programmes.

5. Each Task Force will have the freedom to appoint sub-groups (consisting of one or more persons) to go into the details of important and special aspects of the problems referred to it.

6. Each Task Force is expected to examine the whole field referred to it and submit a comprehensive report thereon to the Education Commission. This may, however, be attempted in two Stages:-

(a) The first stage should come to an end by December 1964 when the Task Force would submit a preliminary report to the Commission.

This report would deal with such matters as the following:-

- (1) Identification of the major problems within its field;
- (2) The studies to be undertaken;
- (3) Questionnaire to be issued;
- (4) Persons to be contacted through the Questionnaire;
- (5) Persons whose evidence is to be taken;
- (6) Group-discussions to be held;
- (7) Tours and visits needed;
- (8) Special papers to be prepared and the persons who could be entrusted with the work; and
- (9) Other relevant issues.

(b) The second and the final report, which will have to incorporate all the studies made by the Task Forces and cover all its final recommendations on its terms of reference would be submitted to the Commission by the end of August 1965.

7. Each Task Force will also work in close collaboration with

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the Task Force on (1) Administration and (2) Finance with a view to studying two specific issues, viz., (a) the implementation of its recommendations, and (b) the costing of its proposals. Similarly, each Task Force will also have to work in close collaboration with the Task Force on Teachers and Students to the extent necessary.

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Financial Implications of the Staff Proposals

| S. No. | Post and Scale of Pay | Total No. re-quired | No. already sanc-tioned | Addl. re-quire-ment | Average monthly cost per post | Total cost per post | Remarks |
|--------|--|---------------------|-------------------------|---------------------|-------------------------------|---------------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. | Deputy Educational Adviser (Rs. 1100-50-1800-60-1800) | 3 | 1 | 2 | Rs. 1670 | Rs. 5010 | It is proposed to place School, Higher & Tech. Education in charge of one D.E.A. each. |
| 2. | Dy. Secretary (Rs. 900-50-1250) | 1 | 1 | - | 1258 | 1258 | To be in overall charge of Administration and also some technical work. |
| 3. | Assistant Educational Adviser (Rs. 900-50-1250) | 7 | - | 7 | 1258 | 8806 | One each for the Technical Unit under Member-Secretary, Statistical Unit and Task Force on Teacher, New Techniques of Teaching, Science Education, Adult Education & Agricultural Education |
| 4. | Librarian Grade I (Rs. 350-900) | 1 | * | 1 | 760 | 760 | |
| 5. | Research Officer Grade II (Rs. 400-25-500-30-680) | 1 | - | 1 | 669 | 669 | |
| 6. | Asstt. Education Officer (Rs. 400-680) | 3 | - | 3 | 669 | 2007 | Two for Statistical Unit and one for Library-cum-Docummentation Centre) |
| 7. | Section Officer (Rs. 350-900) | 1 | - | 1 | 784 | 784 | |
| 8. | Private Secretary (Rs. 400-680) | 1 | ** | 1 | 669 | 669 | For the Chairman |
| 9. | Investigators Senior Grade (Rs. 325-15-475-20-575) | 4 | - | 4 | 554 | 2216 | Only 2 of these will be new posts |
| 10. | Research Assistant Grade I (Rs. 325-15-575) | 5 | - | 5 | 554 | 2770 | 3 of these will work with 3 DEAs, 4th with Member-Secretary and the 5th with Man-power Task Force. |

* 1 Post of Librarian-cum-Statistician in the scale of Rs. 210-425 has been sanctioned at present.

** 1 post of Stenographer Grade I in the scale of Rs. 350(400)-25-650 has been sanctioned at present.

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| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
|-----|---|----|----|----|-----|-------|--|
| 11. | Receptionist (Rs. 325-15-475) | 2 | - | 2 | 450 | 450 | Two will be ultimately required; for the present, 1 post will be filled up. |
| 12. | Artists (Rs. 335-15-485) | 2 | - | 2 | 501 | 1002 | |
| 13. | Sectt. Assistant (Rs. 210-530) | 3 | 1 | 2 | 454 | 1362 | |
| 14. | Stenographer Grade II (Rs. 210-530) | 23 | 4 | 19 | 475 | 10925 | |
| 15. | Accountant-Cum- Cashier (Rs. 210-530) | 1 | 1 | - | 454 | 454 | |
| 16. | Upper Division Clerks (Rs. 130-300) | 3 | 2 | 1 | 305 | 915 | |
| 17. | Lower Division Clerks (Rs. 110-180) | 9 | 2 | 7 | 198 | 1782 | 4 for office and 5 for typing pool |
| 18. | Staff Car Driver (Rs. 110-180) | 1 | - | 1 | 185 | 185 | |
| 19. | Gestetner Operator (Rs. 110-3-131) | 1 | 1 | - | 168 | 168 | |
| 20. | Daftry (Rs. 70-1-85) | 1 | - | 1 | 120 | 120 | (2 for office; and 6 for six whole-time members & 4 for D.E.As. and other officers.) |
| 21. | Peon (70-1-85) | 12 | - | 12 | 120 | 1440 | |
| 22. | Farash (Rs. 70-1-85) | 1 | - | 1 | 120 | 120 | |
| 23. | Sweeper (Rs. 70-1-85) | 2 | - | 2 | 120 | 240 | |
| 24. | Chowkidar (Rs. 70-1-85) | 1 | - | 1 | 120 | 120 | |

TOTAL

Rs. 44,232 or Rs. 44,000

or Rs. 7,92,000 for 18 months or

Rs. 8 lakhs in round figures
for the entire period.

A note on Problems of University Education

The object of this Note is to draw the attention of the group to some of the important problems in the field of University education to which we will have to give careful consideration. I shall neither try to make the list of problems exhaustive nor attempt to offer solutions which should really emerge as a result of cooperative thinking and objective study of relevant data. The temptation to do so is great but it is advisable to resist it at this stage so far as possible. The problems are so many that part of our business would be to see that we do not miss the total picture in the plethora of details. I trust that members of the group will feel free to suggest any important problems that may have been inadvertently omitted.

2. I think we should start with taking note of the widespread criticism that the standards of University education in India have been going down alarmingly - both in respect of intellectual achievements and training and of discipline. This is generally taken to be valid and justified criticism whatever the reasons or apologies that may be offered for the situation. I am on the whole inclined to agree with the trend of this criticism on the basis of what I have seen of the students being turned out, of the reports of their examiners and interviews and the accounts of their 'disciplinary achievements' as they appear in the newspapers etc. Also, from a study that I conducted recently to assess the opinion of university teachers and administrators about the existing situation (I may be able to circulate extracts from it, in due course, for the perusal of my colleagues). In fairness, however, to the situation, it must be admitted that it is not possible to say off-hand how wide-spread is the reported deterioration of standards in academic learning and character and whether this is applicable to all classes of students - good, bad and indifferent. It is a

point for consideration whether we can organize some kind of assessment, perhaps on a pilot project basis, to enable us to visualize the size and intensity of the problem and locate the weakest points to which attention must be given on a priority basis.

3. Having made this precautionary statement, I feel free to confess that there are many facets of the situation which give room for anxious thought. Whatever the results of the assessment suggested above - if a reasonable technique can be worked out for the purpose - there are undoubtedly numerous weaknesses in our colleges and universities, which this Commission, the Ministry of Education, the Universities, ~~themselves~~ as well as Government must cooperate to set right. Whatever their nature - administrative, financial or connected with curricula and methodology - all of them have an adverse effect on the quality and standard of education imparted. The central concern in our thinking should, therefore, be: what can we do to improve quality and raise standards? Even if, in the case of primary and secondary education, a case could be made out for placing emphasis on quantitative expansion and quality being soft-peddled for the present on the plea of inadequate resources etc.. no intelligent and sensitive person, conscious of all the issues involved, could make out a case for perpetuating the present low standards and thus courting the risk, amongst other things, of giving the country a low quality of leadership, intellectual and moral, which may lead it to disaster. A lucky and unique combination of circumstances has so far enabled us to weather many storms and to win a certain measure of stability at home and status abroad - the most important of these being a galaxy of leaders of unusual calibre vouchsafed to us by Providence during the last hundred years. But it would be a fatal mistake to make lucky chance the arbiter of our destiny. We should concentrate not only all our available material resources but also all the resources of our creative thinking to developing a pattern

of higher education which would provide high quality leadership in the various fields of national life - intellectual, practical, artistic, technological, social and moral. A people can, one presumes, exist without it but one would doubt whether such existence is worth while.

4. This is a very difficult and complex - undertaking, Let us not make the mistake of belittling the difficulty. It involves not only a radical and effective reform of higher education but also, inevitably, a reconstruction of education at lower levels - primary and secondary. It is, therefore, an advantage that this Commission has been invited to survey all stages of education and it is to be hoped that the different groups dealing with them will keep in touch with one another and the Commission, as a whole, will, naturally, ensure a proper coordination and integration of proposals. Apart from this internal integration - without which no lasting results can be achieved - it would also be necessary, in the broader perspective of National Planning, to integrate the objectives of education with the economic, technological and social objective of planning so as to inculcate in our educated young men and women the vitalizing sense of social purpose and worthfulness and to enable them to utilize their trained talents both for individual fulfilment and social service. The Commission - in fact educationists as a whole - would not be directly concerned, to any appreciable extent, with the formulation of policies in this wider field. It is, however, essential for the concreteness and sanity of their thinking and the effectiveness of their schemes so that they should be conscious of these broader implications and relationships and work not in an academic vacuum but in a vital social context.

5. What are the various issues that are involved in this

problem of raising the quality of education? I would refer to them below not necessarily in any order of priority but as they occur to me, with the prefatory remark that they are all inter-connected, directly or indirectly, and their full impact can only be felt if we make a many-fronted attack on the problem.

(a) Admission of students:

Till recently, it was not governed by any rational well thought out considerations. In the early stages, any one who could afford to pay the fees was entitled to admission; later when the pressure of numbers increased and there was not enough seats, two criteria generally operated. Either some arbitrary standard of marks obtained in the High School Examination was laid down as a minimum condition or the influence of prestigious recommendations and pressures was used to secure admission. Sometimes, the latter consideration outweighed the former. More recently, 'democratic pressure' has increased and the claim is often made that it is (almost) the 'birth-right' of every student, who has passed the High School Examination, to find admission in a college. In the capital city of Delhi, for instance, where the educational facilities on the whole are more ample than in many other cities, frantic efforts are made, year after year, to find accommodation for the rapidly increasing number of students - not in response to any rationally thought out policy but to agitation and political pressure. It is not suggested that the remedy of the situation is to restrict admission haphazardly or irrationally or to take into account the expanding needs of the country for highly educated persons. No one has, however, been able so far to argue the case convincingly that, in an economy of scarcity like ours, it is an advantage to provide higher education to students who lack either the capacity or the willingness to profit from it. In spite of the efforts made by the U.G.C. and individual colleges and

universities, my impression is that quite a large proportion of students in these institutions are just wasting their time because they have nothing else to do or because they can afford to do so. It is possible that more could be made of some of them if the conditions of work were favourable. But under existing conditions of overcrowding at least in urban areas, they only queer the pitch for the more promising students, by increasing staff-students ratio and lowering standards of teaching. The result of such haphazard admissions, often made without regard to adequate staff, buildings, equipment and other essential amenities, is seen not only in the depressing examination results year after year, involving enormous human and material wastage, but in breakdown of students' morale and discipline, the growing sense of frustration and social revolt, and apathy and irresponsibility on the part of the teachers. There have been some studies of this problem in India which may be found useful by members, including 'Access to Higher Education', sponsored by Unesco, which has examined this problem in depth. In any case, it is quite clear that, unless a policy is laid down to ensure that obviously unpromising students are denied admission and those who persistently refuse to work earnestly and honestly are eliminated, no durable foundations can be laid for real improvement. The group may consider what positive and practical measures should be taken for the purpose and how public opinion and Government policies can be educated to appreciate this view.

(b) Search for talent:

What has been said under (a) above is as it were the negative side of the picture. The positive side is that we should make a genuine search for talent and make it possible, so far as we can, for every student of promise,

capable of profiting from higher education, to find the requisite facilities for the purpose. To ensure this, the net must be flung as wide as possible at the school stage and suitable selection procedures should be devised to pick out promising students and afford them necessary financial assistance and good conditions of work which would enable them to make the best of their gifts. Scholarships, stipends, books, residential facilities, stimulating contact with good teachers, the quiet, educative influence of a pleasant environment will all come into it. Even more wasteful than trying to provide higher academic education for poor students, ultimately incapable of responding to it, is to leave out in the wilderness talented students who lack the financial resources or are geographically far removed from centres of higher education. These have to be sought out with care and educated with solicitude so that their talents may be used in the service of the country. If this can be achieved, half the battle of raising academic standards will be won.

(c) Selection of Staff:

The greater part of the other half of the battle is the recruitment of the best available teachers, the provision of training and orientation facilities for them, the offer of reasonably good salary scales and related amenities and a persistent effort by the administration and the faculty cooperatively to create good and stimulating conditions of work, physical as well as psychological and intellectual. What can we expect, in reason, from teachers who are economically so harassed that they must eke out some extra money by taking private tuitions or writing cram books and are even unable to buy any books for private study? Or from teachers who lose all their enthusiasm and integrity of purpose because the administration is rigid or the Principal is unimaginative or colleagues are cynical and indifferent? The Problem is at least twofold. What to do with teachers

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already in service - some of them with many years of worth to their credit (or discredit) - who are set in their ways and usually find it very difficult to turn over a new leaf? Secondly, how to ensure that the newly recruited teachers are properly oriented to their work? I would not, however, despair of the former, because many of them can be aroused from their apathy or indifference through an imaginative and human approach, through understanding their material and psychological difficulties and through adopting measures to improve professional efficiency. So far as the new teachers are concerned, it is necessary to insist on high standards of qualifications, to make suitable and adequate arrangements for early professional orientation, to accord recognition to fine quality of work both in teaching and research, to provide adequate library and laboratory facilities, to ensure proper social status for them and generally to go all out for encouraging and rewarding merit. A Principal who lacks this quality and is mostly concerned with maintaining his administrative dignity and authority or is patently or insidiously jealous of the ability and brilliance of his junior colleagues or cannot adjust himself to the reasonable individual needs of such colleagues is unworthy of his position. He has no business to be where he is. A good deal can be said conversely of the duties of the staff. But the point I am concerned with making here is that it is essentially the Principal's responsibility to get the best worth out of his colleagues and to provide the necessary conditions for the purpose.

(d) Conditions of Service:

Arising out of what has gone before is the whole question of the salary and conditions of service for university teachers. A good deal of thought has been given to this matter in recent years and, thanks to the initiative

of the U.G.C., some improvement has been made. It would be a good thing to have a short report prepared showing both the progress made, during the last two decades, and the position of teachers vis-vis other services requiring similar qualifications. Since quality is the essence of the contract in this field and men of good intellect and character are even more urgently needed than elsewhere, there is no justification for rating teachers lower in financial terms than civil servants working, say, in the police or revenue or judicial departments or technical professions. And to put it mildly, there is some justification for rating them higher. Otherwise, it would be difficult to attract the best talent to the teaching profession - it would naturally gravitate to lucrative fields. This is not to imply that the mere other more/improvement of salary scales can make for better teaching or standards - many other things have to be done simultaneously, as indicated above - but if the scales are weighted on the other side, we shall start with a handicap. Barring exceptions, we shall have to make do with the disheartened 'left-overs' of other more lucrative professions and services.

In addition to examining suitable salary scales - starting on the principle that wherever there is discrimination against teachers in this respect (as is the case in many States) it must go - we should also define other ancillary benefits which should be provided uniformly - pension, provident fund, insurance, sabbatical leave for study and research or other approved purpose, medical facilities etc. We should certainly insist on exacting high standards of work from them and refuse to tolerate slackness and indifference. But we should be equally concerned about improving conditions of work and social status.

(d) Research facilities:

Special reference might be made to the provision of adequate facilities for research which are still inadequate

and ill-organised in many universities and sometimes almost non-existent. There are many issues involved in this matter about which we will have to take a position. What is the relationship and respective importance of research and training? In some Universities in the world, no promotion is given unless a teacher regularly publishes some research papers or books. 'Publish or perish'. Teaching is apt to be considered comparatively unimportant. Is that a right policy? (Personally I do not think so. In my opinion, in the present situation in India, a good teacher is at least as important as a research scholar) Also some very good teachers may not be mentally capable of doing research work of high quality and originality, though they can make very valuable contribution otherwise to the life of the university. Both types need to be encouraged but even the good teacher should carry on some research or advanced studies not necessarily for the sake of taking a doctorate or publishing the results for the enrichment of knowledge but to keep his mind alive and vigorous and strike sparks in his students. For the benefit of all teachers, particularly those who have the requisite talent and inclination for research, Universities must provide generous library and laboratory facilities, give them sufficient leisure for doing their own research and guiding research and afford them facilities to come into contact with other outstanding workers in their special fields inside the country and abroad. The niggardly policy which usually governs teachers' attendance at academic conferences and associations partly because of the meagre travelling expenses involved - needs to be considered. Also to encourage fruitful inter-University contacts, arrangements should be made for exchange of brilliant teachers between various Universities as visiting lecturers and professors. This would be both a recognition of merit and a challenge - particularly for junior men - to show what they are capable of doing. The comparatively small expenditure involved.

could be easily met by the U.G.C.

(e) Establishment of good working conditions:

Given good teachers and promising students, who are not unduly worried about financial problems and are assured of receiving proper encouragement, the stage would be set for attempting some real improvement in university education. The next thing is to ensure that proper working conditions are established, in order to eliminate the great deal of wastage of time, energy and enthusiasm which goes on in most institutions. Some of these conditions are physical, some psychological and some pedagogic. Amongst the first is the provision of good libraries, laboratories and adequate teaching and residential accommodation for students and faculty. In spite of the recent improvements in this regard that have been brought about through the financial assistance of the U.G.C., the conditions are still far from satisfactory. Moreover, the impact of the assistance given by the U.G.C. has been felt more in the universities than in 1500 or more colleges. It is not necessary to dilate on these conditions or their effect on teaching - anyone conversant with education in colleges is only too painfully aware of them. We should try and form some idea, possibly on a random sample basis - unless the information can be gathered from the materials available in the U.G.C. and the Ministry - how acute are the shortages and what is the minimum extent of their needs which must be met to enable them to carry on their work under tolerable conditions. A scheme could then be formulated showing the financial implications of the proposals and stages in which they could be implemented. This is, however, one side and the comparatively easier side of the picture - the provision of facilities. The other, more difficult side is to ensure that full advantage is taken of these facilities. This is the educational problem which involves, amongst other things, teachers who have a love for scholarship, and research and the capacity to share it with their students,

stimulating teaching techniques which would lead to the proper use of the library and the laboratory and a pattern of examination which call for wide, discriminating and intelligent reading rather than the rote memorization of a text book or lecture notes or (worse still) 'market notes' on text-books. Similarly, the provision of residential facilities - which is necessary and useful in any case, considering the conditions in which a majority of students live - cannot yield its full results unless the students' hostels are built up into communities of eager scholars, learning to live and work together and organizing a large range of social, academic and cultural activities under sympathetic supervision. The mounting sense of fanaticism and resentment in youth against society, lack of interest in work and even acts of indiscipline and violent lawlessness - of which one finds heart-breaking reports in papers every day - are often the result of the hollow, unsatisfactory life that students lead from day to day in which there is neither the compelling sense of purpose nor the releasing joy of living. Only a sense of present dissatisfaction confronting a sense of haunting apprehension about the future. To this the general state of affairs in the adult world, as they see it around themselves or as mirrored in the newspapers, adds the corroding sense of cynicism. Unless our institutions offer both academic challenge and personal satisfaction and they are accepted by students as dynamic agencies leading to the possibility of a better life, they cannot expect to make any healthy impact on their mind or character or personality. These are by no means original ideas or suggestions but that does not make them less true. It should, therefore, be the primary concern of every institution, taking precedence over every thing else, to produce healthy working conditions, which would, in due course, develop into strong traditions, where working to the best of one's ability would

be the norm and failure to do so would be an unusual aberration. Some good Colleges have shown that this is not an impossible objective to achieve. While every sympathy and understanding should be extended to students and their personal difficulties and problems considered with care and solicitude, it must be made clear beyond the shadow of any doubt that neither persistent academic indifference and slackness nor hooliganism will be tolerated under any circumstances. It is neither in the interest of the individual students nor of society. Such a policy would bring the educators into clash - at least in the beginning - with parents, political pressure groups, influential individuals, even the administration but there is no midway house between academic integrity and educational disaster. I cannot suggest no easy way out of the difficulty but this is a matter to which the group should devote careful thought and make suggestions which would not only strengthen the hands of teachers - which are in all conscience, very weak at present - but also win over to some extent the understanding cooperation of the other groups involved - students, parents, political parties, administration etc. I suggest that it would be worth while at some stage to invite a select group of intelligent and responsible students from the Universities to discuss this problem with them in a tactful and friendly manner and to elicit suggestions from them as to how this problem can be tackled. Also, their reaction to some ideas and suggestions that we may have in mind. For instance, would it be worth while and practicable to establish some standing councils of students in each university to advise or deal with these acts of indiscipline and related matters?

(f) Encouragement of Creativity:

Special attention will have to be paid to the cultivation of creativity, in teachers and talented students, without which neither high quality research nor the life of the mind, in

general, can be developed. A good deal of work has been done in this field (Vide Harold Rugg; Imagination; Brunner: The left Hand etc). Indian Universities will have to give serious thought to the problem of developing conditions in which the gift of creativity can best unfold itself. It is realised, of course, that, where the spark does not exist, it cannot be artificially kindled but, in our educational system, there are many conditions under which it is often killed. This may be due to lack of encouragement or pressure of routine work or absence of stimulating intellectual contacts or failure to provide the leisure and solitude in which creativity comes to grip with itself. Even if it is found in very few individuals, it is of the highest significance because, in the final analysis, all great intellectual and artistic achievements - inside and outside the University - depend on it and no nation can afford to ignore this infinitely precious source of inspiration. We should consider what the Universities can specifically do in this field, apart from the general improvement of working conditions which is necessary for every student and every teacher.

(g) Improvement of teaching Methods and Techniques:

This is a problem to which, to the best of my knowledge, very little attention has been paid in our Universities. It has been assumed that any one who has taken his Master's degree till recently even in a third division - is good enough to teach in a college. This is an unwarranted assumption. Apart from other larger issues, it means that every new entrant has to learn even the mechanics of his business through the costly and time-consuming process of trial and error. Teaching in colleges has been identified far too long with lecturing and note taking and, in the case of sciences, some usually uncreative and unstimulating laboratory work. There is urgent need for experiments in new methods and techniques which will provoke independent study, thoughtful work in libraries and

laboratories, training of the mind in the objective assessment of data, and the capacity to form dispassionate judgement on controversial issues. These qualities are important not only intellectually but also socially and are the bases for the proper functioning of democracy. Moreover, there are new media of teaching developed in recent years - audio visual media like radio, television teaching machines etc - of which increasing use is being made in some countries. I would not suggest that we either should, or can afford to, utilize them on a large-scale but we should consider how far they can be helpful in our situation. Where high teaching talent is scarce, it may even be a source of economy to make first class lectures, demonstrations etc available to students (and teachers) on the tape or through radio and television on a large scale. Side by side with the emphasis on better teaching methods and releasing students from the tyranny of unpromising practices, we must remember that one of the highest qualities of a good teacher is scholarship and the capacity for continuous intellectual growth. This means that not only should we initially recruit teachers of high qualifications but also provide for them opportunities, through conferences, seminars, workshops, summer courses etc to keep their interest and enthusiasm fresh and to profit from contact with the best scholars in their fields. Scholarship combined with a freshness of approach to the problem of communicating knowledge can raise the whole tone and quality of teaching.

(h) Problems of the Curriculum:

This is a very large field, involving many issues. In some ways, the proper approach to these problems is the central concern of the University faculties - the enlargement and modernization of the curricula, the integration of studies, the elimination of dead lumber, the introduction of general education, the search for points of emphasis, the working out

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of interdisciplinary approaches etc. We cannot obviously do for the Universities what each one of them must do - and go on doing - for itself but we can lay down broadly objectives and principles and perhaps suggest suitable machinery for implementation. Special attention will have to be paid to higher education for rural areas.

(i) Production and availability of books:

Closely connected with what we have discussed above is the problem of making good books available as fully and freely as possible to both teachers and students. This involves, apart from the establishment of well-stocked and carefully selected libraries - to which reference has been made already - making books available at cheap prices, within the reach at least of comparatively well-to-do students, some work has been done recently in this field largely through understanding reached with some foreign publishers. This needs to be enlarged and broadened imaginatively, in cooperation, both with good Indian and foreign publishers, so that prices which are still quite high can be brought down further. Also, in all colleges and universities, there should be Text-book Libraries - interpreting text-books in a broader sense - where students who cannot buy books of their own can read under pleasant, unharrassed conditions. The cost of such a programme as well as its techniques should be carefully worked out. I have no idea off-hand of the former but, if this involves the expenditure of a few crores of rupees, it will be eminently worth while. A single hydro-electric project costs perhaps a hundred times more. This project, which aims at the irrigation of the minds of all students in the collegiate stage is to my unorthodox mind not less important. This should also cover the question of producing really good original books and translations in various Indian languages.

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(j) Medium of Instruction:

We will also have to consider, in the light of the constitutional directives as well as various surveys of the linguistic situation in the country, the difficult problem of the medium of instruction at this stage. We have to take two fundamental considerations into account simultaneously, which to some extent appear to be incompatible. On the one hand, there is the demand, with adequate justification, that teaching at all stages should be carried on in the students' mother tongues, when they happen to be reasonably well developed. On the other hand, there are obvious dangers associated with using many different media of instruction in the Universities of the country, thus compartmentalizing its intellectual life and scholarship and making the inter-change of students and teachers from region to region next to impossible. Also, there is a school of thought which advocates that, as soon as English is replaced, its place should be taken by Hindi so as to have a single medium in higher education. Apart from the fact that there are several States which are strongly opposed to this solution, many persons who favour Hindi, hold the opinion that it has not yet developed sufficient intrinsic strength and does not possess enough literature in all fields of knowledge to be able to perform this function effectively. To this objection, the answer has been given - which also has weight - that, if a language is not afforded the opportunity to grow in the university atmosphere and to be used as a medium, how can it be expected to generate the necessary strength and richness? There is yet another school of thought which, in view of all these difficulties and differences, would like to see English continued indefinitely in its present position, without perhaps realizing that one cannot keep the language of administration and higher thought distinct from the language (or languages) of the people - at least not in this age of democracy and mass pressures. I am stating the problem but not offering any

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solution. But we shall have to discuss it dispassionately and with due regard to all the factors involved and make up our mind both about its short-range and long-range solution and see whether, for instance, the co-existence of English and Hindi (or regional languages) is possible to some extent and how a transition can be brought about smoothly and gradually without upsetting the apple cart in the process. Since English is likely, in any case, to be studied as a language in the collegiate stage, the question of ensuring reasonable minimum standards of efficiency in it is also involved in this debate.

(k) The Reform of the Examination System:

Methods of assessment are important not only because they can give a correct idea of the quality and achievement of students but also because they have, particularly in India, a direct bearing on methods of teaching and learning and standards of work. There is a good deal of critical material available in the country challenging its validity, its lack of objectivity, its stress on wrong aspects of teaching. Less work has, however, been done in the actual reconstruction of its pattern, though many useful suggestions have been made and some of them have been carried out in certain colleges and universities. The criticism continues but the system, on the whole, continues to hold its own. We should have a broad survey carried out of the progress so far made and of the major problems that remain to be tackled. In its contemplated reconstruction, I suggest we emphasize at least the following five factors:

- (i) How can examinations cease to be the dominating factor in teaching and stress in education shifted from 'passing' in them to learning, scholarship and development of mind and personality?
- (ii) How can their pattern be modified so that they exercise a beneficial and liberalizing influence on teaching practices instead of the baneful and restricting influence as they often do now?

- (iii) How can they be made broad-based so that they will provide a more comprehensive assessment of a student's quality and promise instead of being largely a test of rote memory?
- (iv) How can their validity and objectivity be improved?
- (v) What can be done to minimize the large percentage of failures which occur in all examinations, involving incalculable waste of national resources - human and financial.

There are many other factors involved but I am referring here to a few of the obvious and urgent issues. Perhaps the National Council could be invited to prepare a paper which will summarize the present stage of opinion and knowledge and crystallize issues for the consideration of the group and the Commission.

(1) Problems of administration:

The effective implementation of any schemes is largely a matter of honest, intelligent and forceful administration. At all levels of education, our administrative system has been unequal to the new demands and pressures made on it. In the case of the Universities, there have been difficulties and complaints of all kinds - unsuitable and politically pressured election of Vice-Chancellors and other university officers, the unreliable conduct of examinations, the inefficient running of University offices, the inadequate supervision of students and lack of attention to their genuine and pressing needs, favouritism in the selection of staff etc. There are colleges and universities which are more or less above board in this regard but there are many more which suffer from these evils and handicaps in a measure which is effectively calculated to defeat their basic purposes and raison d'etre. The study that I carried out recently to ascertain the reaction of University men and women themselves to the existing situation showed that many of those who replied were deeply concerned about this stage of affairs. Here again measures have been taken in some Universities, either at the instance of the U.G.C. or of some enlightened Vice-Chancellors, to check such practices

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and improve the efficiency and integrity of administration. But a good deal remains to be done and the Commission will have to make courageous and practicable proposals for the purpose after taking into account all the relevant facts of the situation. I doubt whether it will be possible or necessary for us to examine all the University Acts, Statutes etc but we should certainly draw attention pointedly to the main difficulties that are being encountered and formulate broad principles and measures that can be adopted to improve matters.

(m) Expansion of University education:

This is a very complicated problem because it must balance a variety of considerations which do not pull in the same direction. As discussed with reference to students' admission, there is on the one hand the democratic pressure for throwing open the university gates as widely as possible. There is the increasing need for trained manpower as well as for qualified leadership in all walks of life which would also appear to pull in the same direction. Even compared to the size of the country, it would be difficult to argue that we have too many students receiving university education. On the one hand, there is the inescapable problem of quality which cannot be reconciled with haphazard quantitative expansion, particularly when the total resources available are rigidly limited and every increase in numbers means further dilution of standards - due to unfavourable student-teacher ratio, insufficient equipment and residential facilities, poor Libraries and Laboratories and, to some extent, fall in the quality of staff available for recruitment. Every time that a new University is opened - and they have been increasing in number much faster than before independence - they either take away good or distinguished teachers from existing Universities or make do with comparatively junior or inferior persons even for their higher posts. This is perhaps even truer of subjects in the fields of Arts and Humanities where

the Universities are not turning out a sufficient number of first class men and women who are prepared to go into the teaching line. The urgent demand for qualitative improvement, and the limitation of funds would, therefore, appear to demand a slowing down of the tempo of expansion, to prescribe ceilings of enrolment beyond which Colleges and Universities should not normally go unless they are fully equipped to meet the needs of the increased enrolment. The group and the Commission should carefully formulate a policy to guide the growth of existing Universities and define the conditions under which new Universities should be established.

(n) Education on the Concurrent List:

This question has already been under the consideration of the Ministry and the Government of India as a whole. The present position of the Central Government in this respect is somewhat anomalous. Apart from Central institutions for which it has direct responsibility and such tenuous hold as the objective of 'maintaining and coordinating standards' gives it over institutions of higher learning, it cannot make a great deal of impact on Colleges and Universities in the States, even if it had enough resources, technical competence and imagination to do so. The U.G.C. has been given certain functions and powers and, in an advisory capacity, the Inter-University Board, the Vice-Chancellors' Conference and the Central Advisory Board can be of some assistance. But if a bold policy of reform is to be followed and some reasonable parity of standards and working conditions is to be established, the hands of the Central Government need to be strengthened. For this purpose, we need to consider the desirability of placing higher education, i.e., all education beyond the secondary stage, on the concurrent list. This will not by itself

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solve all, or even many, problems but it will clear the way towards the adoption of a clearer and more coherent policy and not leave questions of national importance to purely regional or local discretion. It is also to be hoped that this will help to strengthen the autonomy of the Universities against political and bureaucratic interference to which they are often subjected at present.

K.G. Saiyidain
29.9.1964.

EDUCATION COMMISSION
GOVERNMENT OF INDIA

II Meeting
Item No. 3

Subject: Tour Programme of the Education
Commission.

We have to prepare for the tours of the Education
Commission right from now.

It is suggested that the tours of the Commission
may begin in December and that they should be completed,
barring an exception or two, by the end of April. This
will give the Commission enough time for further studies
and work after the visits are over.

The following programme is suggested for the
consideration of the Commission :-

| <u>Month</u> | <u>States to be visited</u> |
|--------------|---|
| December | Rajasthan and U.P. |
| January | Punjab and Bihar |
| February | Assam, West Bengal and Orissa |
| March | Madhya Pradesh, Gujarat and Maharashtra |
| April | Andhra Pradesh, Mysore, Madras and Kerala. |
| June or July | Jammu and Kashmir. |

The general proposal is that we should do two
States in December, two in January (because some time
would be taken by the Science Congress), three each in
February and March and four in April. If, for any
reason, any of these States cannot be done within the
time proposed above, they should be visited later
along with Jammu & Kashmir in either June or July.

It is proposed that we should plan to spend
about six days in each State. A broad indication

of this programme is given below :-

- (a) First Day - Discussions with the Chief Minister, Education Minister and the officers of Education and other concerned Departments.
- (b) Second Day - Discussions with (1) Vice-Chancellors and teachers of Universities, (2) Headmasters and teachers of secondary schools, (3) students.
- (c) Third and Fourth Days - Discussions with (1) representatives of local bodies, (2) organisations of teachers and (3) non-official educationists.
- (d) Fifth and Sixth Days - These should be reserved for visits to selected institutions by individual Members of the Commission. An attempt should be made to visit as many institutions as possible.

The above is only a broad outline. A detailed programme for the visit to each State will be drawn up in consultation with the State Government concerned and it may have to be varied, if necessary, to meet the desire or convenience of the State Government.

It is proposed that there should be very careful preparation before a visit to State is arranged. It would include the following:-

- (i) The preparation of a detailed memorandum on

the education in the State. This would be prepared and circulated to the Members of the Commission in advance so that the problems to be discussed in detail with the representatives of the State Government and the non-official educationists in the area could be identified.

(2) A note on the memoranda received from officials and non-officials in the State concerned.

(3) A list of persons to be interviewed.

(4) A list of institutions to be visited.

It is also proposed that the Secretariat of the Commission should prepare a careful document on each State containing -

(a) the preliminary note prepared for the Commission;

(b) A paper on the memoranda received from officials and non-officials in the State;

(c) A gist of the discussions held and the evidence recorded; and

(d) A report on the institutions visited.

After the recommendations of the Commission are finalised, we should also try to see how these recommendations would apply to the State concerned and what their implications would be. This would be a valuable exercise which could also be included among these documents. A good ~~Brochure~~ brochure on the educational problems in each State would thus be compiled and it might be considered for publication later as Appendix to the Report of the Commission.

One point to be considered in this context is that the Commission should not accept invitations to lunches and dinners. As a rule, they consume a lot of time and lead to no fruitful results. Besides, they would not appear

in proper taste in the present food situation in the country. Instead of this, I propose that all members of the Commission should stay together so that all the time available (including lunch and dinner times) could be utilised for discussions within the Commission.

J.P. NAIK
Member-Secretary.

EDUCATION COMMISSION

Subject:- Sociology of Education in a Modernising Society.

One important area which the Commission will have to study is the sociology of education in a modernising society like ours. Very little work is done so far in India in the field of sociology of education. In fact, education in our country has mostly been confined to pedagogy and classroom teaching and has never come in close contact with allied disciplines like sociology. It is, therefore, proposed that the Commission should make an effort to bring education and sociology together.

A tentative plan has been drawn up for this purpose in collaboration with Dr. M.S. Gore, Director, Tata School of Social Sciences, Bombay, Dr. I.P. Desai, Head of the Department of Sociology, M.S. University, Baroda, and Dr. S.N. Ranade, Principal, Delhi School of Social Work. It may be briefly described as follows :-

(1) In the first week of December 1964, an exploratory seminar will be organised in the Tata School of Social Sciences, Bombay. About 20-25 persons would be invited to this Seminar consisting of sociologists, anthropologists, philosophers, historians and educationists. The theme of the Seminar would be: "Sociology of Education in a Modernising Society, with special reference to India".

(2) The discussions will centre-round the following main issues :-

(a) Sociology in a modernising society.

(b) An evaluation of the social changes that have occurred in India during the last 200 years, with special reference to the role of education.

(c) The type of social order which we visualise and its implications for reconstructing education during the next three plans.

(3) It is expected that at this Seminar, the main areas of study will be identified and a concrete programme of action for the next 8-9 months would be prepared. This will consist of (a) preparation of thematic papers on selected topics and (b) organisation of some investigations and studies. The work of organising the studies and investigations as well as the preparation of the thematic papers would then be distributed among the participants or other persons competent to deal with them.

(4) A small steering committee would also be formed at the Seminar to keep in touch with the work and to see that it develops according to the programme.

(5) By about August or September 1965, the persons who have prepared the papers or carried out studies would meet again and discuss the issues involved. They would then prepare a report for submission to the Commission relating to (a) the type of social changes that have to be brought about in our social order and (b) their educational implications for the next three Plans or so. This report, along with the thematic papers and studies underlying it, would form a useful document which the Commission may consider, while finalising its recommendations, between October and December 1965. It may also be published separately as a self-contained document and as an Annexure to the Report of the Commission.

I know the persons mainly concerned with this programme - Dr. M.S. Gore, Dr. I.P. Desai and Dr. S.N. Ranade, for a number of years. They are very serious minded competent persons who are earnest about this task and I have no doubt that they will make a very good job of this and that their labours would be of great use to the Commission.

The matter is placed before the Commission for approval.

J.P. NAIK
Member-Secretary.

EDUCATION COMMISSION

Subject:- Task Force on Educational Administration

I propose that the Task Force on Educational Administration should consist of 7 persons, as shown below, in addition to the Convener and such Members of the Commission as may desire to participate in it :-

1. Shri V.D. Sharma, Education Secretary, Rajasthan.
2. Shri J.D. Sharma, Director of Public Instruction, Punjab.
3. Shri A.C. Deve Gowda, Retd. Director of Public Instruction, Mysore, and now Director, DEPSE in the N.C.E.R.T.
4. A representative of the Indian Institute of Public Administration (to be appointed in consultation with the Director, Shri J.N. Khosla).
5. Dr. S. Misra, Director of Public Instruction, Orissa.
6. Shri G.A. Mukhtar, Retd. Educational Adviser, J. & K.
7. Dr. Rudradutt Singh, Head of the Research Project on Panchayati Raj Institutions in the I.I.P.A.

P.N. Kirpal
Member
Education Commission.

EDUCATION COMMISSION

Item No.VI
II Meeting.

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Sub: Task Force on School Education

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I propose that the Task Force on School Education should consist of the following :-

1. Member-Secretary .. Convenor.
2. Miss S. Panandikar.
3. Shri A.R. Dawood.
4. Dr. Raja Laxmi,
Head of the Child Study Unit,
N.C.E.R.T.
5. Shri H. Radhakrishna,
Secretary, Akhil Bhartiya Sarva Seva
Sangh, Varanasi.
6. Shri D.R. Mankad,
Secretary, Gangajala Vidya Peeth,
Aliabada, Jamnagar.
7. Shri Kuruvila Jacob,
Principal, Hyderabad Public School,
Begumpet, Hyderabad.
8. Dr. G.S. Khair,
Principal, Anath Vidyanthi Vastai Graha,
Poona.
9. Shri K.L. Gupta,
Principal, Higher Secondary School,
Brindaban (U.P.)
10. A member for the education of the
handicapped children would be added
later when these problems would be
taken up for study.

In view of the very large area to be covered by the Task Force, it will be necessary to appoint Special Working Groups for Secondary Education, Elementary Education, pre-Primary Education and Education of the Handicapped Children. Proposals for this will be made later on.

J.P. NAIK
Member-Secretary.

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EDUCATION COMMISSION

Subject:- Working Groups on Evaluation

The subject of evaluation or examination reform is of very great importance. It is a major area to which the Commission will have to address itself. I feel that work on this problem has to be started as early as possible so that definite studies and projects would be ready for the consideration of the Commission by about June next year. I, therefore, suggest that we should set up immediately three Working Groups on Evaluation - one for School Stage, one for Teacher Training and one for University Education.

The Member-Secretary and Dr. R.H. Dave, who is Head of the Evaluation Unit in the NCERT, will be members of all the three Working Groups and will take necessary steps to coordinate their thinking.

The Group for the School Stage may consist of the following:-

1. Shri A.R. Dawood - Convenor
2. Member-Secretary
3. Dr. R.H. Dave
4. Dr. C.D. Deshpande,
Director of Education, Maharashtra.
5. Shri L.L. Joshi,
Chairman, Board of
Secondary Education, Rajasthan
6. Shri S.D. Pant,
Chairman, Board of Intermediate
and High School Education, Uttar Pradesh
7. Shri V.B. Desai,
Deputy Director of Education in-charge
of Examinations, Mysore.
8. Dr. Taylor,
Vice-Chancellor, Gauhati University.

The Group for Teacher Training may consist of the following :-

1. Miss S. Panandikar .. Convenor
2. Member-Secretary
3. Dr. R.H. Dave
4. Dr. K.G. Desai,
Principal, A.G. Teachers College,
Ahmedabad.
5. Dr. V.B. Raneja,
Principal, Training College,
Kurukshetra.
6. Prof. H.M. Datta,
B.R. Training College, Agra.
7. Dr. Harper,
Psychological Institute,
Allahabad.
8. Principal B.V. Bapat,
Tilak College of Education,
Poona.
9. Shri P.D. Sharma,
Vice-Principal,
Regional College of Education,
NCERT.

Proposals for the constitution of the Group for the University stage may also be considered on the above lines. It may consist of :

1. Shri K.G. Saiyidain .. Convenor
2. Dr. A.C. Joshi,
Vice-Chancellor, Punjab.
3. Dr. Taylor,
Vice-Chancellor, Gauhati.
4. One other Vice-Chancellor.
5. A representative of the U.G.C.
6. Two Principals of Colleges - one on the Arts side and one on the Science side.
7. Member-Secretary.
8. Dr. R.H. Dave.

The matter is placed before the Commission for consideration.

J.P. NAIK
Member-Secretary.

EDUCATION COMMISSION

80
Item No. 8
2nd meeting.

Subject:- Working Group on Curricula

One of the important problems which the Commission will have to consider is the revision of curricula at the school stage. We have to take an integrated view of the entire curricula from grade I of the Primary stage to grade XII or the last year of the School course (including Pre-University, where it exists). A large number of intricate problems are involved, as discussed in paragraphs 18 to 31 of my note on 'A National System of Education for India (II)' which has already been circulated. I, therefore, propose that the Commission may set up a Working Group for Curricula at the School stage.

The Department of Curriculum, Textbooks and Methods of the National Council of Educational Research and Training should provide the secretariat for this Working Group. A good deal of work has already been done in the Department and it has also a fair measure of the expert staff required. If the work is started immediately, I feel that it may be possible to produce a basic document for the consideration of the Commission by about June next year.

The composition of the Working Group would be finalised after the proposal has been approved by the Commission in principle. It may be broadly stated, however, that the membership of this Group will be largely selected from the Working groups that have been proposed for School Education (and its sub-groups) and Evaluation.

J.P. Naik
Member-Secretary.

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THIRD MEETING
of the
EDUCATION COMMISSION

Minutes & Agenda
Papers

(11th to 13th November, 1964)



EDUCATION COMMISSION
GOVERNMENT OF INDIA
UNIVERSITY GRANTS COMMISSION BUILDING
NEW DELHI-1

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THIRD MEETING
of
The Education Commission
Minutes & AGENDA
PAPERS.

(11 - 13 November, 1964)

EDUCATION COMMISSION
GOVERNMENT OF INDIA
UNIVERSITY GRANTS COMMISSION BUILDING
NEW DELHI-1.

Papers Of The Third Meeting of the
Education Commission.

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The following four papers which were included in the agenda of the third meeting have been published separately and have, therefore, been excluded from this volume:-

- (1) A National System of Education for India - A study of educational goals.
- (2) A National System of Education for India - Pattern of School and College Classes, Curriculum and Methods of Teaching and Evaluation.
- (3) A National System of Education for India - Enrolment Policies.
- (4) A National System of Education for India - Teachers.

CONFIDENTIAL

No.EC/MIN/3

MINUTES OF THE THIRD MEETING OF THE
EDUCATION COMMISSION HELD AT NEW DELHI
ON 11TH, 12TH AND 13TH NOVEMBER, 1964.

EDUCATION COMMISSION
Government of India
NEW DELHI

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EDUCATION COMMISSION
Government of India

Minutes of the third meeting of the Education Commission held on 11th, 12th and 13th November, 1964, in the Conference Room of the University Grants Commission, New Delhi.

FIRST AND SECOND SESSIONS

Present

1. Dr. D.S. Kothari ... Chairman
 2. Shri A.R. Dawood
 3. Shri R.A. Gopaldaswami
 4. Dr. V.S. Jha
 5. Miss S. Panandikar
 6. Dr. K.G. Saiyidain
 7. Dr. T. Sen
 8. Shri J.P. Naik ... Member-Secretary
- Shri P.N. Kirpal, Prof. M.V. Mathur and Dr. B.P. Pal

could not attend as they were out of India.

The Associate Secretary of the Commission and its officers, and Shri K.L. Joshi, Secretary, University Grants Commission, were also present by special invitation.

The following decisions were taken :-

1. The minutes of the second meeting of the Commission held on 16th October, 1964, were confirmed with corrections suggested at the meeting.

2. The paper on "A National System of Education in India -I" prepared by the Member-Secretary was discussed in detail. It was agreed that a committee consisting of Dr. K.G. Saiyidain, Dr. V.S. Jha, and the Member-Secretary should prepare a brief draft statement on the objectives of educational development based on this paper and the discussions held at the meeting. The draft should be placed before the next meeting of the Commission for

approval and should then be circulated to all members of the Task Forces.

The meeting then adjourned to 11 A.M. on 12th November, 1964.

THIRD AND FOURTH SESSIONS

The Commission met again on 12th November, 1964 in the Conference Room of the University Grants Commission, New Delhi. The attendance was the same as on the 11th instant.

I. Recommendations of the Committee of Members of Parliament on Higher Education: These recommendations were considered and the following tentative decisions were recorded:-

Recommendation No.1: This was broadly approved and the Task Force on Higher Education was requested to work out the details of the proposal.

Recommendation Nos.2 & 3: Broadly approved.

Recommendation No.4: This was broadly agreed to. It was also decided that the problem of grant-in-aid is extremely important and should be examined in detail by the Task Force on Educational Finance.

Recommendation No.5: Broadly approved.

Recommendation No.6: This was broadly approved with three reservations: (a) in the opinion of the Commission, the remuneration of teachers in general, at all levels and in all types of institutions, needs improvement; (b) the pay scales are inadequate, not only in aided colleges, but also in several government institutions; and (c) the problem of grant-in-aid to private institutions is of very great importance if adequate remuneration is to be ensured to teachers in these institutions. These problems

should, therefore, be examined by the Task Forces on Teachers and Educational Finance.

Recommendation No.7: Broadly approved.

Recommendation No.8: This was broadly approved subject to the observation that the efficiency of secondary education, in its own turn, would depend on that of elementary education.

Recommendation Nos.9 & 10: Broadly approved.

Recommendation No.11: This was broadly approved. The Commission, however, felt that a wide number of subjects are covered in modern technological institutions and Agricultural universities, and that it would not be quite proper to designate them as 'single-faculty' universities or institutions.

Recommendation No.12: Broadly approved.

Recommendation No.13: This was broadly approved subject to the recommendation that there is need to explore methods by which the discussion between universities and State Governments could be made more effective. This point should be examined by the Task Force on Higher Education.

Recommendation No.14: The Commission was of the view that the age of entry was a very important point and that it should be examined in detail by the Task Forces on School Education and Higher Education.

Recommendation No.15: This was broadly approved subject to the reservation that it would not be quite proper to say that institutions conducted by the Centre are necessarily a model to others. It was felt that, in certain crucial sectors of Manpower it would be necessary to put the whole programme on a national basis - as aspect of the problem which should be examined further by the Task Force on Manpower. The Commission also suggested that the details of the important proposal contained in this recommendation should be further examined by the Task Force on Higher Education.

Recommendation No.16: This was broadly approved and it was suggested that the matter should be examined further by the Task Forces on Adult Education and Higher Education.

II. Some Aspects of the Development of Elementary Education:

The papers on the Educational Revolution by Dr. Peter F. Drucker and Human Resources Development Planning in Modernising Economies by Prof. F.H. Harbison were then taken up for consideration. After a general discussion on some of the issues raised, discussion centered round the following passage:

"Nearly all modernising countries have rejected the idea of gradual elimination of illiteracy; they are determined to have universal primary education in record time. This must be accepted as a major objective in any programme of accelerated development. But, in many countries, and particularly those in Africa and parts of Asia, universal primary education cannot be achieved in the next 10 to 15 years if the educators insist on the same teacher-student ratios and teacher qualifications as those in the advanced countries. For the most part the developing countries are being forced to sacrifice quality for quantity in their mass attack upon illiteracy.

It is unquestionably true that the cost of primary education must be held down; otherwise it will consume most of the resources which are more urgently needed for secondary and higher education. Most of the developing countries currently spend less than 4 per cent of national income per annum on formal education of all kinds, and, in view of competing demands for funds for development purposes, it is doubtful whether many of them will be able to raise this to 5 or 6 per cent. in the next decade or two. And the need for high-level manpower is such that most modernising countries will have to devote well over two-thirds of total educational expenditure to secondary and post-secondary institutions.

Consequently, developing countries should concentrate their attention on finding new technologies of education which can be utilised effectively by large numbers of teachers who themselves have had little more than primary education and which can multiply the strategic services of a very small group of more highly trained personnel. The application of new teaching techniques - visual aids, programmed learning, instruction by radio and television, revised and simplified curricula and texts - offer a real challenge both to the developing countries and to the assisting countries. The discovery of new technologies for primary education will be given much more serious effort once it is understood by politicians, planners, educators and

outside experts alike that under conditions of accelerated growth it will be impossible to raise substantially either the pay or the qualifications of teachers in the near future.

The main purpose of primary education is to make people literate and to prepare them to participate more effectively as citizens in the modernising society. It is not and should not be vocational education, and indeed most educators in advanced as well as under-developed countries are united in opposing such an orientation. It must, however, provide a means of selecting and preparing those who proceed to secondary-level education."

The thesis put forward by Harbison in this passage was broadly agreed to and the following tentative conclusions were reached :-

(1) For the next 10-15 years, India has to face a situation in which a rapid expansion of facilities for elementary education had to be provided while at the same time, the costs per pupil in elementary education had to be held down in order that adequate resources should be available for secondary and higher education.

(2) This could be done by securing larger and effective pupil-teacher ratios through the adoption of the double-shift system in classes I and II and the provision of part-time instruction in the age-group 9-14 and especially 11-14.

(3) More attention should be given on the development of proper techniques for the management of large classes and for preparing teachers for the same.

(4) In view of the urgent need to maintain standards, however, no classes should have more than 45 pupils on rolls and not more than 35 on rolls when it is working under a double-shift system.

The meeting then adjourned to 10 A.M. on the 13th November, 1964.

FIFTH AND SIXTH SESSIONS

The Commission met again on 13th November, 1964 in the Conference Room of the University Grants Commission, New Delhi. The attendance was the same as on the 12th instant. The Chairman, however, could not be present in the Fifth Session held in the morning.

2. The decision taken have been briefly summarised below :-

(1) It was decided that Dr. W.C. Smith, Mr.J.J. Capelle, Dr. Oscar Bardecci and Mr. G. Tobias should be invited as Consultants to the Commission.

(2) The proposals regarding the Task Forces and Working Groups on Finance, Adult Education and Teachers were approved.

(3) The following papers were noted :-

(i) An editorial in the HINDU, Madras, dated 25th October, 1964, on College Entrance.

(ii) Bio-data of Prof. S.A. Shumovsky.

(iii) Letter from the British Council regarding Consultants and Members of the Education Commission, subject to further follow-up work in the light of the discussion.

(iv) Directive issued by the Ministry of Education to the National Council of Educational Research and Training.

(4) The proposals for the Commission's visit to Rajasthan were approved.

(5) It was decided that the Task Forces may invite eminent persons for consultation from time to time. It was further agreed that we might invite Professor D. R. Gadgil for advice on general educational planning and finance.

(6) Paper by Dr. Drucker: The points raised in this paper were again briefly discussed and it was tentatively agreed that -

- (i) the philosophy underlying the paper should be utilised appropriately while drafting the report of the Commission;
- (ii) the targets of educational development suggested by Dr. Drucker suit an industrialised society and should be regarded as goals to be aimed at in the development of education in India; and
- (iii) suitable adjustments will have to be made in the transitional period of the next 15-20 years when the traditional society in India is being converted into an industrialised society.

3. Pattern of School and College Classes: The paper on this subject prepared by Shri K.L. Joshi was discussed for most of the morning session and throughout the afternoon session. As the discussion could not be completed, it was decided to discuss the topic again at a subsequent meeting. In the meanwhile the following broad conclusions emerged.

(1) The most important point to be emphasized was, not the pattern, but the raising of the standards. The pattern should be regarded merely as a means to an end.

(2) There has been so much disturbance and vacillation of policy with regard to the pattern of school and college classes that the Commission will have to proceed very cautiously and carefully in this matter.

(3) There should be a fairly uniform standard of attainment at the end of the school stage in all parts of India. This may be defined as the school leaving or G-standard. The Task Force on School Education should examine the standards at present reached in the different States at the matriculation level and ascertain the extent to which they are

are comparable. It should also try to lay down the standard to be reached at the end of the school stage in future on a uniform basis for the country as a whole.

(4) The concept of standards is not static. It has to be essentially dynamic and a mechanism has to be built into the educational system itself to see that the standards are raised adequately from time to time and that they compare favourably with international standards.

(5) There will have to be a gap between the end of the school leaving stage and the entry upon the degree course. That such a gap (which will attempt an intensive preparation for the university course) is needed was unanimously agreed to. But there was no final decision regarding its duration.

(6) It would also be necessary to define a fairly uniform standard of attainment for the country as a whole at a suitable higher stage beyond the school leaving certificate. This may be done either at the entry to the university stage or at the B.A. stage - the latter being a better point for determination of common standards of attainment.

(7) The situation in India is essentially pluralistic. Moreover, we shall be passing through a stage of transition during the next ten years. Whatever pattern is ultimately devised, it should have a fair amount of elasticity if it is to be effective and cause the minimum of dislocation.

(8) The programme to be developed regarding the pattern of school and college classes will have to be considered separately for each State in view of local conditions.

It was decided that a revised paper should be prepared in the light of the discussion and it should be brought up for a second round of discussions very soon.

4. It was decided that the next meeting of the Commission should be held on 9th, 10th and 11th December 1964 at New Delhi.

The meeting then terminated with a vote of thanks to the Chair.

Third Meeting of the
Education Commission.

AGENDA PAPERS.

REORGANISATION OF SECONDARY EDUCATION ON
A 12-YEAR (10 + 2) SYSTEM

By

K.L. JOSHI

The Coordination Committee of the Panel on Education of Planning Commission which met on the 19th and 22nd August 1960, recommended setting up of an Expert Committee to be appointed by the Ministry of Education to examine and review the position of the pattern of secondary education. They pointed out that the 12 year course was recommended by the Sadler Commission and the University Education Commission and that the 11 year course of school education introduced during the last 7 years had been accepted as an "ill-considered compromise".

The position will be clear from the following explanation :

2. The Sadler Commission 1919 had recommended that the University should give up intermediate classes as they were inappropriate to the organisation of the university. "What was at first a convenience has become an anachronism". The main recommendation, therefore, was that the intermediate classes were really part of the secondary education and there should be two examinations, the matriculation examination and the intermediate examination in arts, science, commerce, etc., for those going up for different faculties in the universities. This recommendation of the Sadler Commission was accepted by the Uttar Pradesh State so far as school education was concerned. The other recommendation of the Sadler Commission was about the introduction of a three-year degree course after the intermediate stage. This part was not implemented by the Uttar Pradesh Government and the Second Deshmukh Committee which examined the problem of 3-year degree course in the universities of Uttar Pradesh stated that the three-year degree course could be implemented after the intermediate

- 12 -

stage, as it was not necessary to disturb the secondary education pattern of U.P. which has been there for more than 40 years and which is on educational grounds quite justified. U.P. is nearly one-sixth of the country, its population being 17.5% of the total population of the country. In this State, the 12 year schooling is already there and no cost is involved. The cost is only for the three-year degree course at the university stage for which some provision has been made in the third plan, but it may not be adequate.

3. The Sargent Report in 1944 made the recommendation about the 11 years of secondary education and this was implemented only in Delhi territory. The other States and Universities had resisted the three-year degree course after the higher secondary from 1944 to 1950. Bombay University even went so far as to recognise the higher secondary students of Delhi as equivalent to their matriculation, as in both the cases 11 years schooling was meant. Even now they continue to do the same. The recommendation was not popular with the educationists. This is evident from the correspondence between Delhi University and other Universities and State Governments between 1944 and 1947 now in the Archives Department.

4. The University Education Commission Report (1949) recommended the same way as Sadler Commission of having a three-year degree course after the intermediate stage and establishment of intermediate colleges as in the U.P. The two stages, matriculation and intermediate, were included in the 12 years schooling.

5. The Secondary Education Commission (1953) recommended like the Sargent Report a three-year degree course after 11 years of higher secondary education. However, there was confusion in this report which is obvious if we compare what has been stated at pages 16 and 31 of the report.

It is stated on page 16 that the University Education Commission recommended that the standard of admission to the course in the university should correspond to the present intermediate examination after 12 years of study at school and intermediate college. On page 31 it has been stated "we have, therefore, come to the conclusion - which also tallies with the view of the University Education Commission in this recommendation - that it is desirable to abolish the present intermediate stage, to increase the period of secondary education by one year and to plan the three-year degree course at the university stage". It will be seen that this view actually does not tally with the recommendation of the University Education Commission or the Sadler Commission. Moreover the pattern of school education indicated by the Mudaliar Commission was 7+4 or 8+4 but the Central Advisory Board of Education changed it 8+3. This further created confusion which was resolved at the C.A.B.E. meeting 1954 by a statement that there should be an 11 year course of secondary education followed by a three-year degree course. This has been described by the Co-ordination Committee of the Panel on Education of Planning Commission presided over by Dr. C.D. Deshmukh as an "ill-considered compromise".

6. The report of the study by an International Team (1954) which was meant to make suggestions in regard to the implementation of the recommendations of the Secondary Education Commission stated at pages 58-59, after examining the pattern of organisation in different countries that it was desirable to keep the organisation flexible and "wherever possible should be encouraged to convert themselves into higher secondary schools, as a four-year secondary education will provide a more complete secondary education and prepare students for university education". They also recommended an institution of junior

colleges like the one in America and Japan to be developed for pupils who wish to continue their education after high school or higher secondary school, but are not thinking of higher university studies. The note on junior colleges may be seen in the Appendix.

7. The point for consideration is that historically the matriculation and intermediate stages are the accepted pattern in the country for the last 100 years and it should not be organisationally difficult to fall into that pattern as it exists in U.P. today. Therefore, 12 years of education which would include intermediate course and establishment of junior colleges or intermediate colleges for the purpose should not be organisationally difficult or even costly. Besides, the three-year degree course has been implemented in several universities and it has only to be super-imposed on a school education upto the intermediate standard.

8. This problem was further examined very thoroughly in the Report of the Pakistan Commission on National Education (1959) and they recommended that the duration of the secondary education should be of 12 years and its stages should be four classes I to V being primary education, VI to VIII middle, IX to X secondary, and XI to XII Intermediate or higher secondary.

9. The Rao Committee for Commerce education appointed by the then Ministry of S.R. & C.A. in their report in June 1961 expressed the view that commerce as a subject should not be introduced early in the multi-purpose or higher secondary schools, unless the students had a command over general knowledge and particularly over languages. They said "vocationally it is quite unsound to introduce commerce in the 9th class as suggested by the Secondary Education Commission and whatever be the legitimacy of introducing technical stream or the scientific stream

or the social study stream in the secondary education we think that the students wanting to take up a career in commerce should have a strong basic study in elementary knowledge before they start specializing either for a vocation or a profession". Commerce as a group, according to them should be taught only after the 10th class or matriculation.

Probably what they said about commerce is equally true of other subjects like science, technical education, etc. The Madras State in their syllabus for re-organised secondary education have not made science as elective or optional. They have made it compulsory for all students upto the 10th class in a comprehensive course.

The view, it appears, is gaining ground that the 10th class or matriculation is a stage in the educational ladder after which there could be specialisation or diversification in technical or professional subjects.

10. The advantages of the 10+2 system are as follows:-

(a) It will not be difficult for any State to fall into this pattern from the point of view of organisation and even the cost involved would not be much, particularly because only 20% of the existing high schools have been converted into higher secondary schools.

(b) At the end of the 10th class, i.e., the matriculation or the S.L.C. stage, a student could join the polytechnic, the craftsmen course, commercial course, government service, etc. This will be best served by the proposed institution of junior colleges explained in the Appendix.

(c) Those who want to go in for the intermediate stage will be generally for university education in humanities, science, commerce, engineering, medicine, or agriculture, as pointed out by the Sadler Commission.

This will be a rational way of organisational pattern as recommended by the Pakistan Commission also.

(d) The main point of Deshmukh Committee on Compulsory National Service was that students should reach the stage of maturity for university work at about the age^{of} 18. This was the recommendation of the Radhakrishnan Commission also on the basis of their findings in the countries, where a student entered the university career at the age of 18 or 19. They mentioned particularly the U.K., U.S.A., Germany, France and Switzerland, where 12 years of schooling was necessary before the student entered a university. The Deshmukh Committee said that a year of national service could be integrated in the 12 years course but this point needs further examination if a 12 year secondary education system is to be implemented.

11. The Co-ordination Committee of the Panel (August 1960) further pointed out "that the conversion of high schools into higher secondary schools had only advanced to the extent of about 20% in the second plan and it was proposed to make progress to the extent of 50% in the third plan (now this is estimated to be about 20% only in the Third Plan.) Thus, the present was felt to be the most appropriate opportunity for making a change so as to have a three-year degree course after 12 years of schooling bringing the standard of secondary education upto the present intermediate examination".

12. This was further considered by the University Grants Commission at a meeting on the 9th September, 1960, and they reported the same feeling and hope that a Committee appointed for this purpose should make the necessary recommendations.

13. The appointment of such a Committee need not be linked up with the need for provision of additional costs

for an additional class, that is, adding the 12th class to 11th class, because the 10 plus 2 years secondary education pattern is not just adding one more year to the 11 years of higher secondary course. It implies a point of divergence at the end of the 10th or matriculation class and gives an opportunity to students to get into these professions for which they have an aptitude. Actually, if all students were to go to the 11th class and after-wards to the university the cost of both the higher secondary school and the university education is likely to be more than the cost involved in the pattern of education where a large number of students will have an opportunity to get into the new institution of the type of a junior college explained in the appendix. However, this aspect has to be examined in details by the Committee itself. A point to be noted is that in all this organisation, the constlier element was the introduction of a 3 year degree course for which the estimate of the First Deshmukh Committee was 25 crores through the Second and Third Plans. This provision has already been made and the 3-year degree course has come to stay in all the universities except the Universities of U.P. and Bombay. But in all universities since higher secondary education is hardly 20%, the pattern of classes is 1+3 instead of 2+2, class 1 being the pre-university one. The cost has increased in having preparatory classes for engineering and medical students, whether they are in the existing colleges or attached to engineering colleges. The whole question of cost has, therefore, to be examined in greater details.

14. There is another point to be considered. In some cases, it has been found that the students of the pre-university class get better type of education than the students of the 11th class in the higher secondary schools. This is because there is better college atmosphere for the type of education

given to the students of the age group, better library facilities, better equipment and better teachers. It has also been noticed that the successful progress of the higher secondary schools has been retarded during the last seven years on account of paucity of the M.As and M.Sc. teachers for the 11th class in most of the States, while these are available as lecturers in the pre-university classes. It will be seen that it is impossible to persuade a good second class M.A. or M.Sc. to be a teacher in the higher secondary school, because he prefers to be a lecturer in the college, even in an intermediate college. The intermediate colleges in the U.P. do not have this difficulty though very often the lecturers are not highly qualified, but they possess a Master's degree and the best of them have incentives that if they have merit they can be later lecturers in the degree colleges. For a teacher of higher secondary school, such incentives are lacking. There are many cases where from the intermediate colleges lecturers have gone into the degree colleges. There are practically no cases where teachers of the higher secondary schools have been able to seek a promotion as lecturers in the degree colleges.

In Delhi State it was noted that the students of the higher secondary schools were better than those who were in the pre-university classes of the various colleges. However, this is not a correct sample because the best of students went to the higher secondary schools and those who failed to show the academic merit took up the high school examination of the Delhi Board. Those went further to the pre-university classes as well as good many students who had passed the Punjab University Matriculation Examination. The conclusion that higher secondary school student is a better type of student than the pre-university student will not be correct. Against this the evidence that has been there in the Nagpur University indicates that the

pre-university students fare better than the higher secondary school students. However, this aspect also needs to be examined in greater details.

15. At the present moment, Maharashtra, Gujarat, U.P. and Madras are not likely to fall into the pattern of higher secondary education. Most of them except U.P. have introduced the 3 year degree course but that has only meant, breaking up the present pattern of Arts and Science education of 2+2 into 1+3. In some universities students go for medical and engineering courses after the first year in science of the 3 year degree course which they equate to intermediate science. All kinds of confusions have arisen because of the abolition of the intermediate examination which was an entrance qualification for professional courses. Moreover, there is no evidence yet to show that these are difficulties only of the transitional stage and this question also needs to be examined.

16. The other States, particularly M.P. and Rajasthan, would also fall more easily in the 10 plus 2 pattern of secondary education. Madras, Andhra, Kerala and Mysore as well as Bombay and Gujarat have a 11 year high school education system leading up to matriculation stages but Kerala has made this 11 year course system into 10 year course by compressing the first 8 classes into 7 classes with a view to introducing higher secondary education of the 11th class after the 10th class. They have now introduced a two year junior college or intermediate stage after the 10 year school stage. The Madras State, however, have found difficulties in this re-organisation and they have also proposed that during the Third Plan they will suspend the 11th class and they would like to have breathing space for deliberations and re-thinking regarding the pattern of secondary education in relation to the university. They

have now reviewed the old system of 11 years of high school education.

17. It is, therefore, suggested that this question should be examined by the Education Commission in all its implications and while the Madras and Kerala States have considered the matter on administrative and financial grounds, the educational implications of the problem, as indicated in the Rao Committee on Commerce Education, Pakistan Report of the Commission on National Education, the recommendation of the Co-ordination Committee of the Panel on Education in Planning Commission, the recommendations of the Sampurnanand Committee, etc., should be considered as early as possible. It is also necessary to examine this problem, particularly with reference to the increasing numbers of students in the high schools for whom it is desirable that there should be 2 stages of diversification and choice of career - one at the matriculation stage and the other at the intermediate stage. One disadvantage of a five-year course in engineering after the higher secondary education is that a student has to decide immediately after his higher secondary examination whether he goes in for engineering or science or arts subject. Very often he takes up the engineering course and regrets later that he was better fitted for doing the science course or even an arts course. The other system where elimination of students is done at the matriculation stage and the intermediate stage or the junior college terminal stage, would give better opportunities for students to decide their career for themselves and also for vocational guidance.

18. Changing economic structure and concept of manpower requirements would indicate a constant watch on the system of education. The objectives of an educational system have to be redefined in terms of manpower requirements as we progress. Perhaps, this is the most opportune time to examine this aspect as it is only at this stage that we

are able to foresee the large economic growth in the Fourth, Fifth and subsequent plans. The adjustments for these changes are mostly reflected in the educational needs for the age group 15+ to 18 and the establishment of Junior Colleges as explained in the enclosed appendix I. Appendix II is a paper on Junior Colleges and Training of Manpower.

19. Extracts from the different authorities in this connection are enclosed in Appendix III. These are as follows:-

1. Extracts from the Sadler Commission Report 1919.
2. Extracts from the University Education Commission Report 1949.
3. Recommendations of the Education Panel of Planning Commission 1960.
4. Recommendations of the Sampurnanand Committee 1962.
5. Recommendations of the All-India Secondary Teachers' Federation Seminar 1962.
6. Recommendations of the Vice-Chancellors' Conference 1962.
7. Recommendation of the State Education Ministers' Conference 1963.
8. Dr. G.S. Mahajani's recommendations at the Principal's Conference (U.G.C.) on the 8th and 9th May, 1964.

APPENDIX I

JUNIOR COLLEGES - THEIR OBJECTIVES
FUNCTIONS AND CHARACTERISTICS

Junior Colleges in the U.S.A.

The Junior College Movement has spread in the U.S.A. since the beginning of the century. In the year 1900 about 8 colleges were established with an enrolment of 100. These became 610 in 1940 with an enrolment of 2,36,162 and in 1956-57 there were 652 Junior Colleges with an enrolment of 8,69,720 students, according to the Junior College Directory published by the American Association of Junior Colleges in 1958. Of the 652 institutions reported in 1956-57, 58% were public and 42% private. However, the enrolment in the public Junior Colleges was about 89%.

Of this enrolment, 4,28,511 were students of the first two years of the four-year degree college known as freshmen and sophomores. The other 4,41,209 students were special or adult students many of whom attended the colleges as part-time pupils, and they belonged to the ages from 16 to 60 at least in some of the institutions according to Lemay Johnson in publication "The Public Junior College" of the National Society for the Study of Education, 55th Year Book, - Part I, 1956.

2. This institution has progressed in the U.S.A. on account of certain special circumstances. In 1947, the Commission on Higher Education appointed by President Truman after estimating that at least 49% of the population had the ability to complete 14 years of institutional education i.e. 12 years of schooling and 2 years of junior college instruction with a curricula that should lead either to gainful employment or further study, said that "as one means of achieving the expansion of educational opportunity and the diversification of educational offerings it considers necessary, this Commission recommends, that the number of community colleges

(i.e. junior colleges) be increased and that their activities be multiplied."

3. Since 1947 many of these junior colleges have been known as 'community colleges' and various types of colleges are included under this head, as, for example, a junior college, a seminary, a technical institution, a teachers college and a community college. These have all been listed in the Junior College Directory. The main idea is that it is an institution of higher education which gives two years of work equivalent in pre-requisites, scope and thoroughness to the work in the first 2 years of a college as defined elsewhere by the American Council on Education or two years of training in pre-professional and professional work. It is, therefore, an institution to meet the higher educational needs of a community in which it is located including preparation for university and general education for those who are not going to university or specialised preparation for particular occupations and appropriate courses of college grade for adults in the community. The community college occupies a place of increasing importance in the system of higher education in the U.S.A. As the numbers of youth and adults who aspire for higher education grow, a mounting proportion may well find considerable opportunities in these local two-year institutions.

4. This problem is now important in India, particularly when we talk of limitation of numbers to universities and colleges. What is it that the students at the matriculation level read when their number is 10 lakhs today and is expected to be more than 15 lakhs by the end of the Third Plan, out of whom about 50% are expected to qualify? Answer to this question is that majority of them are anxious to go in for higher education unless

some of them enter into suitable occupations. Educationally or psychologically this is a tender age of 16 or 17 and those who qualify can claim to have a right for facilities of higher training or education. On the other hand, mere passing an examination of the Board of Secondary Education very often does not, in many cases, bring the student to a level at which he could benefit by college education. He would very often go to other form of training, if there was scope for the purpose and sufficient employment opportunities. The rising numbers will go on further increasing as the lower level of education at the elementary and secondary stage further broadens.

5. This was also the point in the minds of the educationists of the U.S.A. when they thought of the device of the Junior College or the Community College. In this college, the students get an opportunity for further education in various branches of learning. It provides terminal general education for those who cannot or should not go to higher levels of training and also develops lines of some professional training in various branches of vocations and occupations.

Intermediate Colleges in India

6. The Intermediate college which was recommended by the Sadler Commission in 1919, was very much a college of this type but has to be considerably broadened in conception and scope now and in order to fit it with the broad concept of the Junior College.

The Report of the Commission on National Education of the Government of Pakistan 1959 realised this and they recommended the immediate establishment of intermediate or higher secondary schools after the 10th class or matriculation stage and it is understood that there would be number of junior colleges now in different parts of the country.

7. In India, this question had come up at the time of the Sadler Commission and the only State that established intermediate colleges was the U.P. which has about 800 intermediate colleges today. However, the main idea of a developing economy and the requirements of training in different occupations were probably not seen in the establishment of these institutions. Separate institutions, therefore, happen to be established at the post-matriculation stage during the last 10 years. Two of these are the polytechnics and the trade schools for craftsmen. The one trains for the technician and the other for the skilled worker. There are in India today about 200 polytechnics with an annual intake of 25,000 students and there will be 263 polytechnics with an annual intake of about 37,000 students by the end of the Third Plan. The number of industrial training institutes which is 167 today with an admission capacity of 42,000 will rise to 318 with an admission capacity of 1 lakh by the end of the Third Plan.

8. It will be seen that even by the end of the Third Plan only a lakh of students can be diverted to the trade schools and about 40,000 to polytechnics out of about 8 lakhs who will pass the matriculation and equivalent examination. Thus, the problem of 6.60 lakhs of students will always be there as to what they should do. It can be assumed that about 4 lakhs of these would go to the colleges in the pre-university classes. But the remaining 2.6 lakhs cannot all be found employment. Even all these 4 lakhs of students should not normally go to the colleges according to some educationists. At this stage it would appear necessary to make provision of an institution of the Junior College type which will cater to the requirements of the age group 16-18.

9. Some of the Junior Colleges in the USA also attach

one or two lower classes of high schools to the colleges. It is possible to have different patterns of the same type in India once the principle of having junior colleges has been accepted.

Functions of a Junior College

10. The following main functions of a junior college have been mentioned by the various authorities discussing the question of junior colleges (e.g. L.L. Medsker 'The Junior College - Progress and Prospect, 1960; R.R. Fields 'Community Colleges in the U.S.A.', an article in the year Book of Education 1959, London):-

- (i) Providing terminal curricula of two years and less in length,
- (ii) Providing curricula preparatory to advanced under-graduate 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,
- (v) Offering a wide range of general and special courses for adults.

Characteristics of a Community or Junior College

11. The community or junior college is a comprehensive institution and in a sense it is a multi-purpose 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 vocations or occupations such as accounting, engineering, teaching, nursery and hundreds of other courses of the same type for the age-group 16-18 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 established in the U.K. It caters to the requirements of students who seek careers in business and industry. In oil regions, for example, the junior colleges may develop

courses in oil technology and other colleges may have programmes of electronic technologies. Number of colleges in the U.S.A. offer two year courses in agriculture, construction, technology, dental hygiene, dental laboratory technology, drafting, forestry, journalism, diesel engine mechanism, recreation, fashion design, photography, chemical technology or hotel management, etc. There is an extensive list of these vocations in some colleges at New York or Los Angeles. 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 a short time duration on home and family life, consumer economics, psychology of personality and nuclear physics. The second characteristic of the Junior College is its accessibility to a wide range of students nearer home. It is cheaper for the student to attend this college and part-time attendance is encouraged through offering of evening classes. The third characteristic of the community college is that it is community-centred, it is locally supported and locally controlled and the population is proud of this institution. Very often this leads to introduction of some unique programmes to meet local needs. Both human and physical resources of the community are utilised in enriching the campus and learning opportunities. This leads to an understanding of social and economic problems in the community and generally heightens the interest of the local citizens in the educational programmes. The community college in its turn serves the community in many valuable ways in addition to offering the normal courses. A college faculty represents an unusual resource in that they bring to bear on the community problems, their knowledge and scholarship in different fields. The college campus is an essentially community resource for cultural, recreational and civic needs.

12. A community or junior college is dedicated to life long education. It not only renders educational services to the community but since it holds the community as a whole, it leads to planning and coordination of educational opportunities to the end of the community betterment. This really makes for the comprehensiveness of the institution.

13. Lastly, the community college is adaptable, in the sense that by introducing higher education for adults and aspiring to serve the community needs in various educational fields, the colleges adapt themselves to different local needs and range of individual differences among its students by introducing vocational programmes, evening courses for adults, short courses for special purposes, workshops, clinics, work experience programmes, etc.

Junior Colleges in Japan

14. The other country which has introduced the junior colleges is Japan. It will be seen, according to the publication "Education Japan 1959" of the Ministry of Education, Japan, there were in 1959, 62 two-years junior colleges, 98 three-year junior colleges, 124 four-year universities, and 64 universities catering to medicine and dentistry courses, 30 graduate schools for Master's courses and 50 postgraduate schools for Doctorate courses. According to the new education system in Japan revised after the war higher education organs have been classified into three groups, viz: Junior Colleges, four-year universities and graduate schools.

Junior Colleges in Japan were first founded as a sort of emergency measure. Schools which were not qualified to become universities due to lack of facilities were made into junior colleges with two-years courses for temporary convenience. But these colleges have now assumed

importance as educational institutions with specific functions. The junior colleges in Japan are run very much on the same lines as the American institutions, but they have developed some of their own characteristics.

The need for Junior Colleges in India

15. The junior college happens to be a unique feature in the U.S.A. for the last 60 years; but it has been there in India in the form of Intermediate Colleges, Polytechnics, trade schools and various forms of post-matriculation professional training. In that sense the new junior college or community college will not be entirely a novel feature for Indian conditions. The scope and functions of such an institution will have to be defined, the objective being to help the students of the age group 15 + to 18 particularly; to equip those of them who are intellectually advanced with knowledge and maturity to enable them to be eligible for the benefits of college or university education both in the liberal as well as professional courses. Secondly, it will mean a terminal course for a number of students taking up professional and semi-professional subjects in relation to occupations and employment opportunities. Thirdly, it will make a centre for the community for further education or adult education programmes. It will be in that sense a real community college and it is possible to have one such college for five to ten community blocks according to the school going population in the blocks. This would appear to be both an educational and social need.

JUNIOR COLLEGES AND TRAINING OF MANPOWERBY
K.L. JOSHI

Nearly 85% of the students admitted to the universities today are in the pre-university classes after having finished a school course of 10 years in Punjab, U.P., West Bengal, Rajasthan, Kerala or 11 years as in Gujarat, Maharashtra, Madras, Orissa, Bihar, Assam and Andhra. In the either case, the attainment of the students is of the old matriculation standard. The remaining 15 per cent students go from the Higher Secondary stage to the Three-Year Degree course. Of the 15 lakhs students that would appear in 1963-64 for the school-leaving examinations, nearly 85 per cent are of the matriculation level. 7½ lakhs of them qualify for either a job or entrance to colleges or polytechnics or training schools or Industrial Trade Institutions (I.T.Is.). What happens to 7½ lakhs of students is explained in the following table :-

Position of High/Higher School Leavers - 1963-64

| 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. Teacher Training Schools | 40,000 | 1358 |
| 5. P.U.C. | 2,50,000 | 1300 |
| 6. Ist year of Intermediate course | | |
| 1000x90 = app. | 90,000 | 950 |
| 100x60 = app. | 6,000 | 60 |
| 7. Ist year of 5 years Engineering Course. | 4,000 | 117 |
| 8. Ist year of 3-year Degree Course | 50,000 | |
| 9. Employed | 1,00,000 | |
| 10. Unemployed or seeking jobs | 1,10,000 | |
| Total:- | <u>7,50,000</u> | |

2. The above table indicates a rough pattern of what happens to students who qualify themselves from school-leaving examination. These figures may have a margin of 10-15 per

cent error in relation to actual figures as the precise figures for the current year (1963-64) are yet to be available.

3. The criticism is in regard to 2.5 lakhs who join the P.U.C., 4,000 who join the 1st year of the 5-year engineering courses and 50,000 who join the 1st year of the 3-year Degree Course, which comes to about 3 lakhs. The criticism is somewhat of this kind. of the 2.5 lakhs who join the P.U.C., about 50,000 have no aptitudes for Higher Education and about 1 lakh are ill-prepared for the course on account of their previous schooling. In the same proportion, the other students mentioned above are also either ill-prepared or unable to benefit from the courses undertaken. It is suggested that a course of one year does not prepare the students for university career later and the same is true of those who take up the 1st year of the 5-year engineering courses where the failure is very large.

4. The Vice-Chancellors of the universities are concerned about the material they received in the universities, and general criticism is that it is raw, immature and unable to benefit by being exposed to a free academic atmosphere.

It was for this purpose that the Vice-Chancellors' Conference on October, 11, 1962, recommended:

"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 two year intermediate course plus a three-year degree course or 11 year school course plus one year pre-university course plus a three year degree course or a 12 year school course plus a three-year degree course. It was, however, felt that a 10 year school course plus two-year intermediate course plus a three-year degree course had certain distinct advantages as the two

year inter-mediate course could be devoted to a proper preparation for the university education."

JUNIOR COLLEGES

5. Perhaps a remedy for such a course would be the establishment of Junior Colleges on an experimental basis in the Fourth Plan. The leadership in this has to be taken by the universities who are concerned with the kind of material they have to deal with in higher education courses as the Vice-Chancellors have said that they would like well-prepared students for the courses of higher education. This machinery would help them to do so.

6. In a sense our 318 Industrial Trade Institutions, 263 polytechnics and 1300 and odd teacher training schools are Junior Colleges in the sense in which they have been defined in the U.S.A., but the programme of diversifying courses after the school leaving stage and before the students go in for higher education in the universities will take 10 years of proper planning. As the general trend of secondary education experts is also to make the 11 years school into 12 years, and the Vice-Chancellors also agree to this, we have to make a beginning towards this type of organisation in the Fourth Plan covering a period of next 10 years for a total integration. The functions of a Junior College of the type indicated will be mostly to provide pre-university courses of 2 years in arts, science of a general nature along with some of the General Education courses, to prepare the students widely for the specialised, liberal and professional courses of education later, and secondly to provide certain semi-professional and professional courses of 1 year, 2 years or 3 years duration in relation to trade occupations where such trade personnel training is necessary - the majority of new types of occupations being generated by our developing economy. Thus, the following would be the main functions of a Junior College :-

1. Providing terminal curricula of two years and less in length;
 2. Providing curricula preparatory to advanced undergraduate education in 3-year institutions and for professional education of 4 years (or more according to the nature of the course) in engineering, medicine, agriculture and other specialities;
 3. Providing general education for all students - terminal and preparatory;
 4. Aiding students to make educational and vocational choices that are consistent with their individual characteristics;
 5. Offering a wide range of general and special courses for adults in evening classes and providing extension courses of the universities.
7. In fact, this becomes a community college of the multipurpose type at the intermediate level. It prepares students upon completing schooling either for higher education or for certain occupations obtained in the economy. Certain technical, vocational and occupational courses, such as accounting, trade training, teaching, nursing and hundreds of other courses of the same type for the age-group 16-18 both for men and women could be provided in these institutions. Some of them could provide a two-years training course for primary teachers. It would be an institute of further education in some way like the U.K. type, but would have more elements of Junior or Community College of U.S.A. or of the Japanese type. It would cater to the requirements of the students who seek careers in business and industry, providing employment to many, and preparing a large number for apprenticeship courses. In the U.S.A., a large number of such colleges offer two-year courses in technology, dental hygiene, dental laboratory technology, drafting, forestry, journalism, diesel engine

mechanism, recreation, fashion, design, photography, chemical technology, hotel management, etc. An extensive list of these vocations could be prepared as is obtained in some of the colleges in New York or Los Angeles. Certain special courses of short duration could also be provided in these institutions as extension courses. Another characteristic of the Junior College is its accessibility to a wide range of students nearer home. Such colleges would be established in smaller towns - one Junior College being established at a place where there are 4 or 5 high schools. For such Junior or Community Colleges with a provision of unique programme to meet the local needs, both human and physical resources of the community could be utilised in enriching the campus and providing a variety of courses where training or educational opportunities are demanded.

8. It is suggested that a provision for some Junior Colleges should be made on an experimental basis in States where they could be provided as 2 or 3 year institutions (some of which would add to them one or two lower classes for the age group 14-18). If they are found successful in the first two years of the Plan, they could be multiplied even during the Plan period. Provision for this can be made out of some portion of what has been provided for Secondary Education and some portion out of the amount for expansion and development of University Education.

EXTRACTS FROM DIFFERENT AUTHORITIES

THE SADKER CINNUSSUIB (1919)

1. "We regard the proposals to institute intermediate colleges as the very pivot of our whole scheme or reform."
2. "The intermediate college must be regarded as fulfilling a double purpose. In the first place, it must provide a training such as will qualify its students for admission to the University, in all its faculties, or into other institutions for higher or technological training. In the second place, it must provide a training suitable for students who, after completing their course, will proceed direct into various practical occupations. As the system develops we should expect to find an increasing number of students entering upon the intermediate course solely with a view to preparing themselves for various practical careers."
3. "One of the most fundamental distinctions between the intermediate college and the present intermediate classes must be that the intermediate college will use the methods of a good school, in classes of reasonable size wherein question and answer will be possible rather than methods of the mass-lecture."
4. "Since a primary aim of the course in the intermediate college is to give the student a liberal education, there must be a common element in all forms which this course may assume. And the most essential part of this common element must obviously be a training in the media of self-expression, and of exact and clear thinking."
5. "We regard the creation of well-organised intermediate colleges-in some cases, with the upper classes of high schools, and in others serving as the crown of all the high schools of their districts - as the

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most immediately valuable reform which can be undertaken in the educational sphere."

The Commission held that intermediate examination should be the qualifying test for entry into a university.

THE RADHAKRISHNAN COMMISSION (1949)

1. "The standard of admission to the university courses should correspond to that of the present intermediate examination i.e. after the completion of 12 years of study at a school and an intermediate college."
2. "In each province a large number of well-equipped and well-staffed intermediate colleges (with classes IX to XII or VI to XII) be established".

THE SECONDARY EDUCATION COMMISSION (1953)

The secondary Education Commission had certain confusing statements as indicated in the report at pages 16 and 31. On page 16, while summarising the recommendations of the University Education Commission they said:

"The Commission which had to report primarily on University Education in India had necessarily to review the position of Secondary Education as well and it made certain notable suggestions. The Commission recommended that the standard of admission to University courses should correspond to that of the present Intermediate examination, i.e. after 12 years of the study at School and Intermediate College. The Commission thought it unfortunate that neither the public nor the Government had realised the importance of Intermediate colleges in the Indian educational system, and remarked that "our Secondary Education remains the weakest link in our educational machinery and needs urgent reforms".

On page 31, they said:

" We have, therefore, come to the conclusion -- which also tallies with the view of the University Education Commission in this connection -- that it is desirable to abolish the present Intermediate stage, to increase the period of secondary education by one year and to plan a three-year degree course at the University stage".

The recommendation is as follows:

"Keeping this broad outline in view, we recommend the following new organisational structure for Secondary Education after the 4 or 5 years of Primary or Junior Basic Education:

- (i) A Middle or Junior Secondary or Senior Basic stage which should cover a period of 3 years:
- (ii) A Higher Secondary stage which should cover a period of four years."

THE PANEL ON EDUCATION OF THE PLANNING COMMISSION (AUGUST 1960)

" The duration of the school course should be 12 years and not 11 years so that the total span of education from primary to higher education level should be 15 years (12+3) instead of 14 (11+3) as it was very desirable that mature students of the age of 18. should go to the university. An argument in support of this was that this had been the recommendation of the Sadler Commission and the University Education Commission and that 11-year course of school education had been accepted as an ill-considered compromise."

THE COMMITTEE ON EMOTIONAL INTEGRATION (DR. SAMPURNANAND COMMITTEE (1962)

1. "We consider that in the over-all interest of

the happiness of the individual and the prosperity of the country, because an individual's emotional life can be properly balanced only when his natural abilities and aptitudes have opportunities for development and use. If education is not planned for the development of the variety of aptitudes and abilities of the pupils and the utilization of human resource for the economic and social progress of the country, there will be increasing wastage of human talent and material resources, resulting in frustration and bitterness - two of the main obstacles to the emotional integration of the country."

3. "It is necessary that there should be more terminal stages in the pattern of secondary education which should be planned in a comprehensive manner recognising

- (a) that education should be provided for different types of aptitudes and abilities
- (b) that pupils should branch off at different terminal stages to enter different walks of life; and
- (c) that at the terminal stages, there should be provision for vocational and semi-vocational training for those who leave school."

4. "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 8-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 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 would include vocational and semi-vocational courses in which the students can specialise on the experience gained at high school."

5. "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 practical 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."

6. "Among the numerous multipurpose courses that may be provided in higher secondary classes and junior colleges are, teacher training for primary school teachers; certificate courses for physical education teachers, art teachers, craft teachers; for automobile mechanics, horticulturists, electric technicians, junior accountants, laboratory

technicians, building maintenance supervisors; courses for catering and dress-making. The number and the types of courses may increase depending on needs. Students from higher secondary courses and junior colleges should be competent to enter many of the public services now open only to those with university degrees."

7. "The technical courses provided in higher secondary classes and junior colleges should be planned in co-ordination with those in polytechnics so that students who wish to proceed to higher technical studies may pursue their preparatory technical studies in the higher secondary classes and junior colleges recognised in the polytechnics for entry at suitable stages."

8. "Junior colleges will be specially useful in areas where high-schools do not have facilities for providing higher secondary classes. Pupils from the neighbouring high schools who want the two-year preparation can join them and not have to go far away from their homes to join the pre-university class of a degree college. Junior colleges can also serve the local community by providing evening 'continuation' courses of different types and duration for cultural enrichment and professional improvement."

9. "The view may be held that the provision of a two-year unit after the high school will prove too expensive, But, as the 10th class in the high school will be a terminal stage, the number of students entering higher secondary class or junior college is likely to be much less than the number that might enter the 11th class if that were the only terminal stage in secondary education. Similarly, when the junior college becomes a useful terminal stage, the indiscriminate rush to universities may be stemmed and more places in colleges released for those best fitted for higher education. We consider, therefore, that the provision of this two-year terminal stage may prove more economical and practicable than the proposal to convert all

high schools to higher secondary schools. The International Team on Teachers and Curricula had also recommended the establishment of junior colleges".

10. " We have devoted a greater part of this section to the pattern of secondary education since it is at this stage that the greatest variations now prevail. Also the pattern of education should, in our opinion, be related to the employment potential in the country. Practically everyone is agreed that the system of education left to us by the British trained our young men and women only for clerical employment in Government offices and that a degree in those days, based on purely academic pursuits was the passport to a post, however pedestrian it was. We have persisted in that sorry approach over these many years and have done nothing to equip our young people with a truly liberal education, coupled with technical or vocational training. Nor can our education, so far, really be said to have inculcated in them the dignity of labour. Unless we gear our education to the employment opportunities the country has to offer, we shall be generating more frustration and consequent indiscipline in the young and any talk of emotional integration will be meaningless. We consider it a basic necessity that the type of education and training programmes we offer our young men and women should take into account the needs of economy and man-power requirements of the country if we are to avoid wastage. We must also ensure that the money spent on education proves a genuine investment."
11. " Before dealing in detail with certain aspects of this stage of education, we consider it desirable to define the period of education designated as "Secondary". At present it is not even clear where the stage of secondary education begins, whether it is after the first five years of primary school or after the VII or VIII standard. As we have said earlier in the Report, it is necessary that the

broad general pattern of education should be more or less the same throughout the country. We are of the opinion that secondary education should be defined as all types of education for pupils beyond the 8-year primary stage upto the age of 18 or the time of joining an institution of higher learning. Secondary education, according to this definition, will include all education

- (a) at the high school stage (standard IX-X) and
- (b) at the higher secondary stage (standard XI-XII)."

12. "Education provided in trade and industrial schools, and apprenticeship courses for the stages, indicated in (a) and (b) including junior technical schools and polytechnics will also be a part of secondary education."

13. "We, therefore, recommend that emphasis should be placed on intensifying vocational and educational guidance services at the secondary stage. This, we feel is necessary because it is essential to ensure that young men and women have sufficient and suitable opportunities of working according to their aptitude and abilities.

THE ALL INDIA SECONDARY TEACHERS' FEDERATION (Seminar on Secondary Education 1962)

"The Seminar was unanimously of the opinion that Eleven Class Higher Secondary School Scheme has failed. It therefore recommends the pattern of 5-3-4 meaning five years of primary education, followed by three years of junior or lower secondary and four years of higher secondary stage. The four-year higher secondary stage is to be subdivided into two stages of 2 years each. The first stage will be basically the continuation of General Education pursued in the Junior High School stage with an attempt at exploration of the individual interests, abilities and aptitudes of children. There will be then terminal points in course of the entire course of Secondary Education- the first one at the end of

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the lower secondary stage, the second one at the end of the first half of the Higher Secondary stage and the third one at the end of the Higher Secondary Stage. For students leaving schools at the first terminal points, there should be some occupational courses of training for two years in the schools where there are arrangements for teaching technical, agricultural or commercial subjects at higher stages. For those who will finish their general education at the next terminal point, i.e. at the end of Class X, there should similarly be two years' of training in various vocational subjects. This training should be so devised as to equip the students with enough skill for employments. For students pursuing occupational courses, technical, commercial and agricultural, there should be one added year to round off their training in the subjects to equip them with necessary skill and knowledge to make them employable as skilled workers in various fields of life. For example, students taking up technical subjects must grow into competent draughtsmen or overseers; of Home Science groups into competent nurses and Gram Sevikas; of Agricultural groups into competent farm managers. This one additional year is therefore meant only for those who would not like to go in for higher education at the colleges and the universities."

VICE-CHANCELLORS' CONFERENCE (Oct. 1962)

"In regard to the total span of education opinion was unanimous in favour of a total span of 15 years for the first degree and 16 years or even 17 for a Technological Degree. The 15 years would be made up of 10 in high schools, 2 in higher secondary school or Junior college and 3 for the degree, whereas in Bombay the total school period was 11 or where conversion of High School into Higher Secondary School had taken place, there should be 1 preparatory year before the Three-Year Degree Course. Opinion was divided in regard to whether the intermediate 2 year should be part of school or

college."

"The Three-Year Degree Course was an improvement on the previous system of confining under-graduate education to a two-year degree course. 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 two-year intermediate course plus a three-year degree course or 11-year school course plus one-year pre-university course plus a three-year degree course or a 12-year school course plus a three-year degree course. It was, however, felt that a 10-year school course plus two year intermediate course plus a three-year degree course had certain distinct advantages, as the two-year intermediate course could be devoted to a proper pre-reparation for the university education."

THE STATE EDUCATION MINISTERS' CONFERENCE (1963)

"A 12-year course of secondary education 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 in all States in the immediate future."

COMMENTS OF DR. G.S. MAHAJANI, VICE-CHANCELLOR, UDAIPUR UNIVERSITY - (Submitted to UGC Principals' Conference on 8th & 9th May, 1964)

Proposal

- "(a) Revive the Intermediate Examination (12-years = 11+1 = 10+2)
- (b) Have a two-year pass course after the intermediate.
- (c) Have a three-year honours course after the intermediate.
- (d) There will be no need to make any haste in converting high schools into higher secondary schools.

This solution meets the following points :

1. Radhakrishnan Commission recommended that "the standard of admission to the universities should be the present intermediate examination, to be taken by a student after completing 12 years of study at a school and at an intermediate college, normally at the age of 18.

This change will mean that students proceeding to a university for a degree course will have the essentials of a good general education and will be more adequately prepared for University work"

2. "The Panel on Education of the Planning Commission were of the view that the duration of the school course should be 12 years and not 11 years i.e. the total span of education from the primary to higher education (first degree) level should be 15 years (12 plus 3) instead of 14 years (11 plus 3), so that mature students at the age of 18 are admitted to universities.
3. "It will be found that while students in most of the advanced countries begin their first degree course at 18+ or 19+, students in India enter a comparable course at 17 or 16 or even earlier.
4. "The present one year pre-university course does not provide a recognised terminal point like the traditional intermediate course. The professional colleges have either increased the duration of their courses or introduced their own pre-professional courses to compensate for the loss of the second years of the old intermediate course
5. "The Government of U.P. propose to introduce the Three-Year Degree Course only after the Intermediate stage which they consider to be educationally a sound policy.
6. "The Bombay University has declined to introduce the new pattern on academic grounds.
The question of instituting an honours course of 3 years duration (after the intermediate) is under the consideration of the Bombay University.
7. "Some educationists have suggested that the duration of the pre-university course should extend over two academic years in order to provide an effective orientation to students for universities and professional courses. The University of Kerala has decided to convert the present one year pre-university course into a course of two years' duration. This will be followed by a three year degree course.

Item No 4
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No: EC/IMFD/I

21st October, 1964

THE EDUCATIONAL REVOLUTION

By

Dr. Peter F. Drucker

An abundant and increasing supply of highly educated people has become the absolute prerequisite of social and economic development in our world. It is rapidly becoming a condition of national survival. What matters is not that there are so many more individuals around who have been exposed to long years of formal schooling - though this is quite recent. The essential new fact is that a developed society and economy are less than fully effective if anyone is educated to less than the limit of his potential. The uneducated is fast becoming an economic liability and unproductive. Society must be an "educated society" today - to progress, to grow, even to survive.

A sudden, sharp change has occurred in the meaning and impact of knowledge for society. Because we now can organize men of high skill and knowledge for joint work through the exercise of responsible judgment, the highly educated man has become the central resource of today's society, the supply of such men the true measure of its economic, its military and even its political potential.

This is a complete reversal of man's history within the last fifty years or so. Until the twentieth century no society could afford more than a handful of educated people; for throughout the ages to be educated meant to be unproductive.

A man who is now chief executive of one of America's largest businesses did not dare admit when applying for his first job, in 1916, that he had an advanced degree in economics. "I told the man who hired me that I had been a railroad clerk since I was 14", he says, "otherwise I would have been turned down as too educated for a job in business". Even in the late twenties, when I myself started, commercial firms in England or on the Continent still hesitated before hiring anyone as a junior clerk who had finished secondary school.

It has always been axiomatic that the man of even a little education would forsake the hoe and the potter's wheel and would stop working with his hands. After all our word "school" - and its equivalent in all European languages - derives from a Greek word meaning "leisure".

To support more educated people than the barest minimum required gross exploitation of the "producers", if not strict rules to keep them at work and away from education. The short burst of education in the Athens of Pericles rested on a great expansion of slavery, the intellectual and artistic splendor of the Italian Renaissance on a sharp debasement of the economic and social position of peasant and artisan.

Idealists tried to break this "iron law" by combining manual work and education - the tradition goes back to the Rule of St. Benedict with its mixture of farmwork and study. It found its best expression in the mid-nineteenth century, in Emerson's New England farmer who supposedly read Homer in the original Greek while guiding a plow. But this, of course, never worked. The Benedictines - imperiling their salvation to the lasting benefit of mankind - very soon left farming to villeins and serfs and concentrated on study. Long before Emerson's death those New England farmers who cared for the plow had left both Homer and New England for the rich soils of the Midwest, while those few who had cared for Homer had left farming altogether to become lawyers, preachers, teachers or politicians. The "iron law" was indeed inescapable as long as manual labor was the really productive labor.

Thomas Jefferson believed in higher education and in equality as much as any American. He considered the founding of the University of Virginia and the

authorship of the Declaration of Independence, rather than the Presidency, his greatest achievements. Yet in his educational master plan he proposed to limit access to higher education to a handful of geniuses. It was obvious that only a few could be spared from manual labor.

Today the dearth of educated people in the formerly colonial areas appears such a handicap as by itself to be adequate condemnation of colonialism and proof of the "wickedness" of the imperialists. But education did not come first in the scale of social needs even fifty years ago; flood control and land boundaries, equitable taxation and improved agriculture, railroads and incorruptible magistrates, all ranked much higher. If the colonial powers were then criticized on the score of education, it was for forcing it on too many, for destroying thereby the native culture, and for creating an unemployable, overeducated proletariat. The educated person was then still a luxury rather than a necessity, and education a preparation for dignified leisure rather than for productive work.

In my own childhood forty years ago, schools still assumed that education was for "nonwork". They preached that the educated man should not despise the honest worker as schools had preached since the days of Seneca in the first century.

The Scale of the Explosion

Thirty years ago only one out of every eight Americans at work had been to high school. Today four out of every five of the young people of high school age in the United States attend high school. Twenty years hence, when today's middle-aged will have retired, practically every working American will be a high school

graduate. We have already passed the halfway mark.

Even greater has been the jump in college and university attendance. Thirty years ago it was still an almost negligible 4 per cent or less of the appropriate age-group. Today the figure is around 35 per cent for the nation; this takes in groups such as the Southern Negro or the Southern "poor white", for whom going to college is still all but unknown. In the metropolitan areas of the country - even in such predominantly working-class cities as Detroit - the figure is nearly 50 per cent. It will, barring catastrophe, be that high for the nation as a whole in another fifteen years. By then two out of every three young Americans in the metropolitan areas will, regardless almost of income, race or sex, be exposed to higher education.

In the American work force of thirty years ago there were at most three college graduates for every hundred men and women at work. There are eighteen today; the figure will be thirty-five, twenty years hence - even if, contrary to all expectations, going to college becomes no more general than it is already among the two thirds of our people who live in metropolitan areas.

On top of all this, adult education is booming. Fifty years ago only those adults went back to school who had been unable to get a formal education as children. Adult education was for the educationally underprivileged - the immigrant from Southern Europe who wanted to learn English or the man who had gone to work at age fourteen and wanted to improve himself. In England adult education was the "Workers Educational Alliance" or the "Home University Library", both offering standard school subjects to workers and clerks. The German Volkshochschule served the same purpose.

Adult education during the last fifteen years has been growing faster in this country than college enrollment. And now increasingly it means advanced education for the already high educated. It is almost routine for the experienced and successful physician to go back to school for advanced training every two or three years. Refresher courses are increasingly demanded of our teachers. Some fifty universities - in addition to a dozen large companies and professional management associations - offer advanced management courses to successful men in the middle and upper ranks of business, who usually already have college if not advanced degrees. Yet before World War II, only two such programs existed, both new, and both struggling to get students.

The educational revolution has been even more explosive in Soviet Russia. Thirty years ago basic literacy was confined to a small minority - had probably fallen even below the low standards of czarist Russia. The educational push hardly began until the mid-thirties. Today, because of Russia's larger population, the proportion of young people in secondary or higher education is still quite a bit lower than in this country, but the absolute numbers are fast approaching ours.

In the total population of the Soviet Union educated people must still be a small group. Few if any of the top people in the Soviet Union have had more than elementary formal schooling; certainly of those over forty in the Soviet Union, even high school graduates are still only a tiny fraction. But in Russia, too, it has become evident that education is the capital resource of a modern, industrial society. We know now that the Russian achievement does not rest on the Communist tenets of "socialist ownership of productive resources," the "dictatorship of the proletariat,"

"collectivization of agriculture" or "national planning". Every one of them has been as much an impediment as a help, a source of weakness fully as much as a source of strength. The achievement rests squarely upon the tremendous concentration of resources, time and effort on producing an educated society.

The two outstanding success stories among small nations, Switzerland and Mexico, have nothing in common save extraordinary educational development. Switzerland is the one European country where secondary education, in the last thirty years, has become almost universal. Mexico is the only country in the world that, since the mid-thirties, has spent no money on defence but has instead made education the first charge on its national income. And is it entirely coincidence that the major countries in the Free World that have found the going the roughest since World War II, Great Britain and France, are also the countries in which the educational revolution has advanced the least, in which the supply of educated people, though of high quality, is today still not much larger proportionately than it was in 1930 or even 1913? In England the supply may well be smaller considering the steady emigration of so many of the highly educated young people.

We are undergoing the educational revolution because the work of knowledge is no longer unproductive in terms of goods and services. In the new organization it becomes the specifically productive work. The man who works exclusively or primarily with his hands is the one who is increasingly unproductive. Productive work in today's society and economy is work that applies vision, knowledge and concepts - work that is based on the mind rather than on the hand.

There will therefore be no permanent oversupply of

educated people. On the contrary, the more there are, the greater should be the demand for them. Educated people are the "capital" of a developed society. The immediate impact of, say, using physicians instead of barbers is to uncover needs, opportunities and areas of ignorance, leading to the need both for more physicians and for more medical and biological research. The same process can be seen in every other field - and with particular force in the economic field of production and distribution. Every engineer, every chemist, every accountant, every market analyst immediately creates the opportunity and the need for more men who can apply knowledge and concepts, both in his own field and all around it.

This may sound obvious. But it is so new that it is not yet recognized. Our accountants, for instance, still base their terms and measurements on the eighteenth-century tenet that manual labor creates all value. They still call it "productive labor"; the work of men of knowledge is "nonproductive labor" or "overhead", a term reeking of moral disapproval. When economists talk of "capital" they rarely include "knowledge". Yet this is the only real capital today. The development of educated people is the most important capital formation; their number, quality and utilization the most meaningful index of the wealth-producing capacity of a country.

The Impact on Society

What is today called "automation", that is the rapid substitution of work by knowledge and concept for work by human hands, is a first impact of the educated society. It is a moot question whether the essence of automation lies in specific machinery and technical ideas or whether it lies rather in basic concepts about the nature of work.

But there can be little doubt that the driving force

in automation is the fact that people who have been exposed to formal schooling for twelve or sixteen years have expectations in respect to work and jobs which manual work, no matter how well paid, does not fulfill. They increasingly demand jobs in which they can apply knowledge, concepts and system. They increasingly refuse to accept jobs in which they cannot apply what they have learned, namely, to work with their minds. They may be satisfied with a job of little skill - and there are a good many semiskilled knowledge jobs - but they expect work that draws on mental rather than manual faculties.

In the United States, where most of the young people in the metropolitan areas go at least to high school, the assembly line is already obsolete. The labor necessary to run it is becoming scarce. Young people with a high school education do not want to work as human machine tools. Moreover, to use people with that degree of education for the semiskilled and unskilled manual jobs of the assembly line would be a gross waste of valuable, expensive and scarce resources.

Tomorrow everybody - or practically everybody - will have had the education of the upper class of yesterday, and will expect equivalent opportunities. Yet only a small minority can get ahead no matter what work they choose. This is why we face the problem of making every kind of job meaningful and capable of satisfying an educated man. This is why the new organization must create an effective relationship of function, rank, rewards and responsibility, not only for its professionals but for all those employed in knowledge jobs.

How new these expectations are is shown in the field of personnel management. Only forty years old - it began in World War I - the discipline is already outdated in its concepts and its assumptions. Its principles, its rules, its practices and procedures all represent a distillation of experience with

unskilled or semiskilled machine workers, largely from the metalworking industries. Today the majority of the personnel employed even in manufacturing industries are no longer of this kind, are rather people doing knowledge work, however unskilled. How far our personnel management theories really applied even to yesterday's machine workers is an open question. For managing tomorrow's employees, the products of the educated society, they are likely to be quite inadequate.

The educational revolution has had an equal impact on the world economy. Educational capacity, as much as natural resources or industrial plants, is becoming a crucial factor in international trade, economic development and economic competition. Educational development, above all, has become a central problem of the poor countries.

Many of these underdeveloped countries spend today a larger proportion of their national income on education than does the United States. Yet where we complain that one fifth of our young people still do not finish high school, many of these countries can barely keep one fifth of their young people in elementary school. They cannot finance the cost of a literate society, let alone that of an educated society.

This educational inequality is a serious international and interracial problem. Its inevitable result is to make inequality greater, to make the rich richer and the poor poorer. Even greater is the danger that it will push poor, underdeveloped countries into the totalitarian camp; for a totalitarian tyranny, so it appears to them, can raise enough money for the rapid development of education even in the poorest. (This is a delusion. Practically all the poor underdeveloped countries are much poorer than Russia was in 1917 and much further behind in education. They are unlikely therefore to repeat her performance in education even by faithfully copying every Russian tenet and action. But this may be found out only when it is too late.)

Here, it would seem, is a highly promising area for international aid and co-operation. There is need - and

opportunity - to help think through the purposes, the structure and the methods of education needed in those countries. Above all there is need for the developed countries, and especially for the United States, to accept a national policy of assisting underdeveloped countries in building education.

The Educational Competition

"The Battle of Waterloo", it is said, "was won on the playing fields of Eton". Perhaps; but no one asserts that it was won in Eton's classrooms. "The Prussian schoolmaster", another saying goes, "defeated France in the War of 1870 that created imperial Germany". But long ago this was exposed as empty boast; the credit belongs to the German railway and the German armaments designers.

With the launching of Russia's Sputnik, however, the old pleasantry became a grim fact. The higher education of a country controls its military, its technological and its economic potential. In an age of superpowers and absolute weapons, higher education may indeed be the only area in which a country can still be ahead, can still gain decisive advantage.

The greatest impact of the educational revolution is therefore on international power and politics. It has made the supply of highly educated people a decisive factor in the competition between powers - for leadership and perhaps even for survival.

The conclusion from this is as simple as it is new: Educational development becomes a priority of national policy.

International leadership is not a matter of power alone. It is as much a matter of policy. Power can never substitute for policy. But purposeful, principled,

courageous policy is a potent substitute for power, has again and again given leadership to a weaker rather than to a stronger nation.

Concern for the quantity of educated people is therefore not enough for a national policy in this age of the educational revolution. Numbers of engineers and scientists, of language students and physicians, are not very meaningful in themselves. It is not even enough that national policy aim at the largest possible supply of highly schooled people. It is not enough, in other words, that the graduates know their engineering, their science, their law, languages or medicine. National policy is only possible if these are also highly educated people - that is, people who can formulate, understand and support purposeful, principled, courageous policies.

This leads us back to education. And indeed the greatest impact of the educational revolution is on education itself. It raises basic questions about the values, the purposes, the structure and the tools of education. On the one hand, education has become the central capital investment, the highly educated people the central productive resources in such society. On the other hand, education, while "higher" and perhaps "highest", can no longer be limited to an elite, but must be general education.

The above article has been taken from the book,
The Landmarks of Tomorrow by Peter F. Drucker
(Harper and Bros., 1959, pp. 114-25).

Quality of the Teachers

At no time in the history of the world has a country faced with the problem of providing education of such magnitude and complexity as post-independence India had to. Social and political pressures forced the pace of education and the country can be justly proud of the quantitative record of educational expansion achieved since Independence.

2. What causes deepest concern is the problem of standards of education - at all stages and in all types of institutions. There are no doubt some institutions in the country which are extremely jealous of their standards. But on the whole the standards which at best were moderate, have rapidly declined and still continue to do so. The deterioration has been greatly accelerated by several factors which are too well known to bear mention. In fact, the fall in standards has even been hailed as a symptom of our liberation!

3. The result has been cruel. More education should not mean worse education. Improvements in numbers and quality are not incompatibles. In the present age, more than ever before, we cannot afford to be out of step with the standards obtaining in other competitive societies. In a shrunken and closely knit world disregard of standards in the educationally advanced societies will not remain long unpunished. We have already had it. Our degrees are looked down upon by most of the countries abroad and our young men and women who go out for advanced studies have to face humiliation and difficulties. Some of the Commonwealth scholarships awarded by India to students from other Commonwealth countries for study in Indian Universities remain unawarded because

they do not attract scholars. I had much unpleasant experience in my last assignment in persuading - Governments of some of the Commonwealth countries to accept degrees of Indian Universities as qualification for service in their countries and one of the governments of a very friendly African country - categorically expressed the view that the degree of Indian Universities was considered to be inferior and therefore unacceptable for appointment to various posts in the country. This is just to illustrate the defeat and humiliation experienced even in situations which could be exploited to our national advantage.

4. All over the world there is a race for improving standards. The Robbins Committee observes -

"Both in general cultural standards and in competitive intellectual power, vigorous action is needed to avert the danger of a serious relative decline in this country's standing."

The Report again reiterates -

"If, as we believe, a highly educated population is essential to meet competitive - pressures in the modern world, a much greater effort is necessary if we are to hold our own."

I am also aware of the spirit in newly developing countries in Africa and other continents. They are reluctant to achieve educational expansion at the cost of standards. We have to ask ourselves the question - What worth is the great educational progress revealed in statistical tables, if the casualty is loss of standards? Would it help us to build up reservoirs of intellectual power to meet the 'competitive - pressures' of international life?

5. A bold decision to stem the rot and to march in step with the progressive countries in the world cannot be delayed. We owe a responsibility to the future of our people and we have to accept the hard

way to meet the challenge. It is not a pleasant task to plan for improvement in standards and for refinement of national tastes and one should not expect much popularity in the present mood of the country. In planning for standards, we have to build in depth and we cannot produce anything dramatic to please. On the contrary, we will have to demand toil and tears.

6. Many factors affect educational standards and there is none of them that can be ignored. But the key to the problem of standard is the quality of the teacher. No educational reform inspired by the most laudable ideals will succeed in the hands of teachers who have not the necessary knowledge, skill, vision and devotion to duty. By 'teachers' I mean teachers at all levels and in all types of educational institutions ranging from the nursery schools to universities and technical colleges as well as the administrators and other personnel required for educational work. The Newsom Report, a report of the Central Advisory Council for Education (England:1063), observes :-

"Whatever happens in schools depends upon men and women who staff them. Imaginative accommodation, modern equipment, skilful organisation, a determined attack on social and economic handicaps all of them are necessary to progress, but the key figure remains the teacher. This fact is confirmed again and again by the remarkable achievements of some schools in the most adverse conditions, and by the evidence that boys' and girls' behaviour, confidence and attitude to work can all be shaped by - successful relations with individual teachers. What ultimately counts is a person."

The task before our administration above all is to create the person.

7. We are all well familiar with poor social and economic status of the teachers in our country. As a rule, he has had poor schooling himself. His

schools and university have not provided him experience of academic depth without which a teacher will fail to kindle and to inspire the spirit of academic adventure. His professional training has been nominal and outmoded. He has not learnt to evaluate social significance of his profession and is, therefore, unconscious of his ultimate responsibilities. He has not had an opportunity to cultivate his professional philosophy and attitudes and he is thus unable to assess educational progress and evaluate its relevance to educational purpose. Teacher training in India is perhaps the weakest link in the educational structure of the country. Except in very exceptional cases of certain very good teacher training centres, teacher training has come to be regarded as a necessary routine and a qualification pre-requisite for confirmation in the professional service. The scope of training imparted in them is formal and uninstructed (and uninspired!) by a sense of purpose. Apart from improving the economic and social status of the teacher, the main problems are -

- (a) to help the teacher take intelligent interest and to acquire academic depth in the subjects which he is required to teach;
- (b) to enable him to acquire knowledge and skill in the use of the best methods and means of teaching;
- (c) to help him to cultivate a sense of professional responsibility and to appreciate the wider social significance of his tasks; and
- (d) to interest him in the strides which are being taken in other parts of the world to better educational standards so that he may feel the spur of international competition.

8. It is a colossal task. The existing personnel must be reschooled and reconditioned. The new entrants to the educational profession must be handled with greater skill than ever before and should

be helped to cultivate proper attitudes and excellence. It also needs to be realised that teacher-training is never complete. The teacher must continue to be subjected to educational influences all through his professional career and kept acquainted with the fast moving trends in the educational field. In brief, the task is to reorient the teacher and to fire him with a sense of purpose.

9. It is necessary, therefore, to re-examine the long neglected field of teacher-training, to overhaul the existing teacher-training machinery and to create a new and a better one, capable of facing the most important challenge to education: betterment of standards. Almost every country in the world, even the most educationally advanced, is concerned with improving the quality of the teacher as a matter of national emergency and directing its best energies to the study of the machinery of training of teachers and other educational personnel. We have to consider how the problem is tackled by other countries. We should seek expert knowledge available in other countries and gain from their rich experience. The problem will justify a careful study at the national level by this Commission. We should accept the position that the task of educational importance above all is improving the quality of the teacher. If the teacher fails - and indeed he is failing - naught else will succeed.

10. I will crave indulgence if I have stated this case rather strongly. I have been connected with all stages of education since long and I have been a witness to what has been happening. I have also first-hand experience of the lot which our graduates and those with post-graduate qualifications have to

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face in different parts of the world. I know how new countries anxious to build up their educational - structure are standard-conscious and the realistic attempts that they are making to ensure the right quality of the teacher. I am naturally anxious that we should face up to the situation with a sense of concern.

11. In this minute I am not raising any issue of which my colleagues on the Commission are not fully conscious. My intention is merely to state the problem as I understand it and to emphasise its determining role in effective implementation of the recommendations of the Commission. In a subsequent minute, I will endeavour to visualise measures which may be adopted to meet the challenge.

V.S. Jha.

EDUCATION COMMISSION
GOVT. OF INDIA

Subject: Recommendations of the Committee of
members of Parliament on Higher Education

Extract from the Report of the Committee
of Members of Parliament on Higher Education, Chapter X.

XXXXX XXXXX XXXXX

We shall now proceed to summarise our main
recommendations to which we have been led by our
study of the problem:-

1. We think that while entry 66 of List 1 gives
exclusive authority to the Union Government to coordinate
and maintain standards it needs to be supplemented by an
arrangement which would enable the Union Government to re-
view the work and purposes achieved by University Enactments
and bring them, where necessary, into conformity with
national requirements. We, therefore, recommend that
Universities and Higher education should be transferred
from the State List to the Concurrent List, retaining
in tact Entry 66 in the Union List. Under this
arrangement the State Governments will continue, as at
present, to be responsible for the maintenance of
universities. We have explained in the Chapter on the
Gujarat University Case the exact import of Entry 66
according to the view taken by the Supreme Court.

2. We have pointed out that the University
Grants Commission is the main agency through which the
Central Government has exercised the obligations
imposed upon it by Entry 66. We are satisfied that
under existing conditions, the University Grants
Commission should have 15 Members, of whom at least
five should be full time Members. It goes without

saying that they should be men of the highest standing in the educational world and we, therefore, recommend that they should be persons of the status of Vice-Chancellors. We have also been forced to come to the conclusion that it is undesirable that a person who is for the time being holding full time appointment as a Vice-Chancellor should be appointed Member of the Commission. We, therefore, recommend that serving Vice-Chancellors should not be appointed as Members of the Commission. Our reason for making this suggestion is that it is undesirable to place a person in a position where he may have divided loyalties. The prestige of the University Grants Commission depends upon its being an independent and impartial body. The composition of the Commission should be such as to give no impression to the public that it is not completely independent.

3. We have emphasised the importance of university education and research. They are vital for our national development. No country can afford to neglect them. Our considered opinion is that the grant for allotment for university education and research placed at the disposal of the University Grants Commission is very meagre, as was emphasized by Dr. Kothari, Chairman of the University Grants Commission in his statement before us. Without committing ourselves to any figure, we are strongly of the opinion that in the Fourth Five Year Plan, a very much larger amount should be placed at the disposal of the Commission.

4. Our enquiry has disclosed that the system of matching grants has not worked satisfactorily. Both State Governments and Universities find it difficult to provide matching funds. We, therefore, do not favour the system of matching grants and feel that depending

on the merits of the case, the conditions of grant should be liberalized.

5. We are strongly of the view that the University Grants Commission should recognize, in consultation with the Universities concerned, more and more institutions, as provided in clause (f) of Section 2 of the University Grants Commission Act 1956, for purposes of financial aid. This will enable institutions which do not at present come within the purview of University Grants Commission Act to come under it.

6. We are distressed to find that the pay scales in aided colleges are grossly inadequate. We, therefore, recommend that steps should be taken to see that more and more colleges adopt the pay scales prescribed by the Commission for affiliated colleges.

7. We have emphasised in our Report how education must be regarded as one integrated whole. Professional education cannot be completely divorced from general education. We, therefore, recommend that professional education including Medical (Basic), Agricultural, Engineering and Law should also come within the purview of the University Grant Commission.

8. A real improvement in University education is not possible without a corresponding increase in the efficiency of our secondary education. We, therefore, recommend that vigorous steps should be taken to improve the quality of secondary education. We refrain from going into further details in this matter as it is not within our purview.

9. Poverty should be no bar to the acquisition of the highest knowledge. It should be possible for common people to start life without avoidable handicaps. Provided a candidate has merit he should be

enabled to join our higher educational institutions. We, therefore, recommend that the number of scholarships and sizarships for university education and research should be considerably increased in institutions of higher education. We attach importance to the question of amount as it should be one which would cover all reasonable expenses of a student.

10. The importance of the education of women cannot be over-emphasized. Women hold the key to the future progress of the country. The number of scholarships and sizarships for higher education for women students should be considerably increased.

11. We are not in favour of single-faculty universities, for neither the literatures, nor philosophies or sciences can be separated one from the other. Nevertheless, we recognise that there is a place in our educational system for institutions of national status specializing in various disciplines in our country. We, of course, assume that there will be no complete divorce in these institutions between the humanities and the sciences.

12. We have examined in our Chapter on the University Grants Commission the working of that body. We have been distressed by the fact that there have been occasions when a State Government has not consulted the Commission before setting up a university. We, therefore, recommend that the University Grants Commission Act should be so amended as to make it obligatory on the part of a State Government to consult the Commission before setting up a new university. We may point out that this change cannot be effected if education is not made a Concurrent subject. Indeed, this is one of our main reasons for recommending

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that education should be brought on the Concurrent List. We feel that University Grants Commission Act should have specific provision which would enable the Commission to consistently refuse to give any financial aid to universities established without its prior consultation.

13. There are agencies at present for consultation between the Universities and State Governments. The time has come now when a convention should be formally established for frequent consultations with State Governments and Universities on all important policy issues. We are in favour of making the Inter-University Board a more effective body and it should more and more be regarded as the spokesman of University opinion.

14. We think that the universities should give attention to the question of minimum age of entry. We think that there should be a minimum age. What that age should be is a matter for the universities to consider and decide. We are also of the opinion that the universities should pursue a common policy in regard to admissions and that admission particularly to professional institutions be based upon merit consistently with due regard to the interests of Scheduled Castes, Scheduled Tribes and other socially and educationally backward classes of society. It would, of course, be the concern of the universities to lay down the tests for merit.

15. One way in which the Centre can play a greater part in promoting higher education is to establish at least one Central Institution of the highest standard in every State to serve as an example to other educational institutions in the State.

16. Our universities have a duty to perform towards those who are not able to complete their education and who desire to have the benefit of higher education. We recommend establishment of morning, evening colleges and correspondence courses for the benefit of those who are unable to pursue regular courses.

Item No: 7

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IIIrd Meeting

EDUCATION COMMISSION
Govt. of India

Subject: Appointment of Mr. Jean Joseph Capelle of France
as a Consultant to the Commission.

Shri P.N. Kirpal, Educational Adviser to the Government of India, has suggested that we should consider inviting Mr. Jean Joseph Capelle of France as a Consultant to the Commission. The bio-data of Mr. Capelle is given below:

1. Date and Place of Birth: 16 March 1909
at Cales (Dordogne)
2. Institutions attended: Ecole Nationale
Superieure des Mines de
Paris,
Ecole Normale Superieure
de Paris,
University of Paris.
3. University degrees: Agrege de Mathematiques

Docteur es Sciences
4. Career:
(1938-1940) Citroen Factory
(1942-1946) Founder of Societe
d'Etudes de l'Industrie
de l'Engrenage a Paris.

Professor at the Faculty
of Sciences, Nancy

(1942-1946) Director, Ecole Nationale
Superieure d'Electricite
et de Mecanique;

(1947-1949) Director-General of Public
Instruction French West
Africa

(1949-1954) Recteur, University of
Nancy

(October
1954) Recteur of the Academie
of French West Africa

October
1954 -
September
1957) Member High Council of
National Education
National Commission for
Unesco
Director General of
Education in French
West Africa.

September
1957)
(1960) Director-General of the
National Institute of
Applied Sciences, Lyon.
Director General of
Organisation and Curricula,
National Ministry of
Education

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5. Works & Publications:

"Generation des Engrenages
par la Methode des Roulettes";
"Theorie et Technologie de l'Engrenage
Hypoid"; "Cours de Resistance des
Materiaux".

Many articles published in
collaboration for specialized
journals.

Distinctions:

Officier de la Legion d'Honneur;
Commandeur des Palmes Academique;
Commandeur de La Couronne de Chene
Prix de Mecanique (Fourneyron),
decerne par l'Academie des Sciences.

Mr. Capelle may not be able to spare more than a
month for the Commission. The exact time of his visit would be
decided later in consultation with him.

The expenditure on this proposal can be met from
the funds assigned for this purpose by UNESCO.

The matter is placed before the Commission for
consideration.

J.P. Naik
Member-Secretary

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EDUCATION COMMISSION
Govt. of India

Subject: Appointment of Dr. Wilfred Cantwell Smith
as a Consultant to the Commission.

It is proposed that Dr. Wilfred Cantwell Smith, who is now the Head of the Centre for Comparative Religions of the Howard University, should be appointed as a Consultant to the Commission.

Dr. Smith is an authority on the sociological - and especially moral of religious problems - involved in the modernisation of traditional societies. These are precisely the problems which we are facing at present, and it is felt that Dr. Smith's advice would be of great use.

The expenditure in this connection can be met by USAID.

The matter is placed before the Commission for consideration.

J.P. Naik
Member-Secretary

Item 6

Third Meeting

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EDUCATION COMMISSION
Govt. of India

Subject: Consultants and Members of the Commission from U.K.

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The following is an extract from a letter received from the British Council:

"Further to our recent telephone conversation about the facilities to be offered to the British Member and Consultants to the Education Commission, I write to confirm that the British Council will be prepared to pay first-class fares between London and Delhi and return in respect of the accredited Member and Consultants.

I regret however that the British Council is unable to commit itself to the payment of any other expenses in respect of the visits to be paid by the British Member and Consultants. When we spoke on the telephone you agreed that you would communicate these decisions to the Education Commission on receipt of a letter from me and that you would let this office know whether these conditions were acceptable to the Commission."

The proposal made by the British Council may be accepted.

J.P. Naik
Member-Secretary

Supp Agenda
IIIrd Meeting

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Education Commission

Subject:- Task Force on Finance

Prof. M.V. Mathur proposes that the Task Force on Finance should consist of as follows :-

1. Prof. M.V. Mathur .. Convenor
2. Shri R.A. Gopaldaswami
3. Shri J.P. Naik
4. Shri K.L. Joshi, Secretary,
University Grants Commission.
5. Dr. D.N. Saxena, Jt. Secretary,
Fourth Finance Commission.
6. Dr. Sadashiv Misra,
Director of Public Instruction,
Orissa.
7. Dr. A. Misra, Principal,
Regional College of Education,
Bhopal.
8. An economist from Delhi University.
9. A representative of the National
Council of Applied Economic Research.
10. A specialist on productivity of
education to be appointed later.

2. The main work of the Task Force will be :

(1) To make a brief review of the evolution of the existing system of financing of education at Central, State and local levels;

(2) To highlight the developments in the field of financing of education (expenditure and sources of finance) on sectoral (University, Secondary, Elementary, Technical, Agricultural, etc.), functional (teachers' salaries, buildings, stipends, etc.), and regional (Central, State and local) basis; analysis of this data could be made management-wise, institution-wise and on per capita and per pupil basis since 1951; the sources of finance will take note of non-cash receipts also; 'unit costing' of important items could be undertaken; a study will be made of the relative importance of

educational expenditure vis-a-vis other heads of expenditure in the Five Year Plans of the Government of India and State Governments;

- (3) To collect information on the more important topics covered in (2) above, with reference to some of the important developed and developing countries of the world and analyse their experience for drawing some useful lessons for our purposes;
- (4) To study the systems of grants for educational purposes from the Centre to the States and from the State Governments to local bodies or private managements;
- (5) To analyse to the extent possible such other financial data as may be needed by other Task Forces; such work will be done in conjunction with the Convenor of the Task Force concerned;
- (6) To do the 'costing' of recommendations of the Commission before these are finalised; such costing could also be done before the final recommendations of other Task Forces are made; and
- (7) To take an overall view regarding the need for and availability of resources for educational programmes for the period to be covered by the Commission, keeping in view the projections of our national income, population and employment opportunities.

3. Studies regarding productivity of education or education as an investment could be undertaken with the help of a specialist.

4. The work load of this Task Force would grow as the Commission's work proceeds; work on items (1), (2), (3) and (4) can get started right now; our Associate Secretary and a visiting Consultant, if available, could help us on item (3); work relating to items (5), (6) and (7) would gather momentum when the tentative recommendations of other Task Forces are available.

5. The matter is placed before the Commission for consideration.

J.P. NAIK
Member-Secretary.

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III Meeting

EDUCATION COMMISSION

Dr. V.S. Jha has suggested the following composition of the Task Force on Adult Education:-

1. Dr. K.G. Saiyidain,
Member, Education Commission, New Delhi.
2. Shri J.P. Naik,
Member-Secretary,
Education Commission, New Delhi.
3. Shrimati Durgabai Deshmukh,
India International Centre, New Delhi.
4. Mrs. Welthy Fisher,
Lucknow.
5. Dr. M.S. Mehta,
Vice-Chancellor, Jaipur University, Jaipur
or Mr. S.C. Datta, Secretary, All India Adult
Education Association, New Delhi.
6. Dr. M.S. Randhawa,
Ministry of Food & Agriculture,
(Department of Agriculture),
New Delhi.
7. Shri Abdul Qadir,
Director General of Employment & Training,
Ministry of Labour & Employment,
New Delhi.
8. Shri G.K. Chandiramani,
Joint Secretary,
Ministry of Education,
New Delhi.
9. Shri A.R. Deshpande,
Adviser (Social Education),
Ministry of Education,
New Delhi.
10. Shri Sohan Singh,
Asia Foundation,
New Delhi.
11. Shri D.R. Kalia,
Director,
Delhi Public Library,
Delhi.
12. Shri K.L. Joshi,
Secretary,
University Grants Commission,
New Delhi.
13. Dr. T.A. Koshy,
Director,
National Fundamental Education Centre,
New Delhi.

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14. Mr. J.M. MacDougall,
Associate Secretary,
Education Commission,
New Delhi.

Secretary

15. Dr. V.S. Jha
Member,
Education Commission,
New Delhi.

Convener

The matter is placed before the Commission
for consideration.

J.P. NAIK
MEMBER - SECRETARY

All Members of the Commission

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Item 4

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Agenda of third meeting

EDUCATION COMMISSION
GOVERNMENT OF INDIA

Letter No. ED29/20732 dated the 21st September 1964
from Unesco addressed to the Chairman, Education Commission.

You will recall that in an earlier letter I had suggested the names of some consultants for the Commission in educational financing and manpower. Since writing at that time, a number of colleagues have returned from their summer vacations and I have been able to consult them further. We now have two more names to suggest whom we think would be best amongst those so far communicated to you. They

For educational financing : Dr. Oscar Bardecci,
Chief of Economic Commission for Latin America
Mission, Peru.

Ph.D. in Economics from Harvard, with special
study of educational financing. Consultant
to Santiago Conference. Has done a study on
financing education in Latin America.

For manpower requirements : Mr. G. Tobias, Manpower
Adviser, Education Division, World
Bank, Washington.

Was on US permanent delegation to I.L.O. Worked
with US Department of Labour on manpower studies.
Did manpower survey in Tanganyika for Ford
Ford Foundation. Was on Bank Mission to Chile etc.

It will be for you and other Indian authorities concerned to decide on the final choice of Consultants and the manner and timing of their visits to India. It seems to us however that you could approach US AID for the services of Mr. Tobias. On the other hand, Unesco could perhaps make available the services of Mr. Bardecci as one of the consultants to be paid for by Unesco under the request recently communicated by Mr. Kirpal to Mr. Adiseshiah.

The matter is placed before the Commission for discussion and decision.

J.P. Naik
Member-Secretary
28.10.64

P.S.

The names of the other consultants recommended are:-

Education Financing (1) Professor Arthur Lewis, late of
University of West Indies, now at Harvard University;
(2) Mr. John Vaizey, U.K., author of several books on the
subject; (3) Mr. H.C. Bos, Deputy Director, Netherlands
Economic Institute.

For Manpower: (1) Professor F. Harbison, Princeton University
(2) Mr. D. Snyder, Head, Manpower Section, ILO Geneva.

Item V. Supp. Agenda
3rd Meeting

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No. 3(11)-3/E.C.
EDUCATION COMMISSION
GOVERNMENT OF INDIA

Sub: Bio-data of Prof. S.A. Shumovsky -
A Member of the Commission

Professor S. Shumovsky is an outstanding Soviet scientist and educationist, well known in the USSR and abroad.

Professor Shumovsky is at present a Director of Department of Methods and Development and a member of the Governing Body in the Ministry of Higher and Specialised Secondary Education. Among the tasks, for which Prof. Shumovsky has been responsible in the Ministry during past five years has been development of high academic standard in all universities, engineering colleges and other educational institutions and planning of expansion and further improvement of education.

Professor Shumovsky has a broad knowledge of educational institutions in the USSR and many other countries including USA, France, India, England, Germany and others.

In addition to his important post in the Ministry, Professor Shumovsky for last twenty years has been teaching as a professor of aeronautics.

Prior to joining Ministry Professor Shumovsky was for more than ten years a Vice-Chancellor of the Moscow Institute of Physics.

From 1939 to 1949 Professor Shumovsky was a Deputy Director of the National Institute of Aeronautics and a member of the Scientific Board of the Ministry of Aircraft Production.

From 1936 to 1939 Professor Shumovsky represented Soviet Ministry of Aircraft Production in the USA.

Professor Shumovsky holds B.S. and M.S. degrees of Massachusetts Institute of Technology (Cambridge, USA) and a Doctor's degree from the National Institute of Aeronautics

(USSR). He is an author of seventeen scientific publications on aerodynamics and aircraft stability. During last few years Professor Shymovsky has written a number of elaborate papers on various aspects of development of education.

In recognition of his outstanding achievements in science and education the Supreme Council of the USSR has awarded Professor Shumovsky with five orders and other high distinctions.

Professor Shumovsky has been devoting considerable time to the improvement of education on international scale. He is a member of the Soviet Union National UNESCO Commission and a Chairman of its Committee on Science and Technical Assistance. He is also a member of the Governing Board of the International Institute for Educational Planning (Paris, France). He has been participating in numerous UNESCO activities including various international conferences and seminars. He was a member of UNESCO Advisory mission to India on improvement of Science teaching (1962). In 1964 Professor Shumovsky visited India as UNESCO consultant. Professor Shumovsky is a Deputy Chairman of the Joint Soviet-Indian Commission on Textbooks and Technical aids.

Professor Shumovsky was born in 1902. He is a Soviet citizen, married, has two children.

Circulated to Members of the Commission for information.

M.D. Paul
(M.D. Paul)
Deputy Educational Adviser.

Human Resources Third Meeting
Development Planning 1st Supp. Agenda
in Modernising Economics¹ Item -6
by

Frederick H. Harbison
Princeton University

(Manpower planning is an essential element of national development policy, whether viewed as a means of building up the skills required for economic progress, or of providing the individual with productive and socially useful employment. A major problem faced by newly developed countries is that of evolving an effective approach to this vital aspect of development planning. Obviously, a careful assessment of manpower resources is part and parcel of the fixing of economic policy objectives, and this in turn implies top-level co-ordination and integration of manpower, assessment and planning with general development planning. The I.L.O is endeavouring, particularly through its operational activities programme, to help the less developed countries to set up machinery capable of meeting this need.

Apart, however, from the fixing of elaborate manpower resources programmes geared to the particular development needs of individual countries, it is possible to identify a number of human resources problems which are common to all modernising societies, and, in that light, to devise a "strategy" of immediate use to countries whose urgent need is for rapid modernisation. In the following article Prof. Harbison, after defining the problems, presents the elements of such a strategy, followed by suggestions for its implementation.)

¹ The concepts set forth in this article have grown out of the author's work during the past several years with the Inter-University Study of Labour Problems in Economic Development, and the author is indebted to his colleagues Clark Korr, Charles A Myers, and John T. Dunlop for many of the thoughts expressed. They, however, will not want to be held responsible for any parversions of their ideas in the pages which follow. The article was prepared with the assistance of funds granted to the Inter-University Study by the Carnegie Corporation of New York.

The newly developing nations of the world are in a state of revolt. They have rejected the notion that poverty, squalor and disease are preordained. No longer are they disposed to entrust their economic and political future to the forces of the market, the will of God, or the omnipotent judgement of colonial rulers. And in pressing for high-speed modernisation, they think in terms of leaps rather than mere steps forward. They are hoping and planning for accelerated development.

A country which commits itself to accelerated growth needs a strategy for development. It must increase sharply its rate of savings by one means or another. It must emphasise industrialisation, but at the same time it must modernise agriculture. It must invest wisely in both things and people. And, in so doing, it must develop a sense of priority, so that savings and manpower are directed into the most productive channels.

A strategy for development of human resources - i.e., the building and the effective utilisation of the skills of people - is an essential element of any modern development strategy. The wealth of a nation is as much dependent upon the development of its people as upon the accumulation of material capital, and there is little need to argue which is the more important. Both material and human capital must be accumulated at high rates of speed if rapid growth is to be achieved. And it is essential for politicians and planners to understand that the development of human and physical resources must be integrated carefully in any master plan for growth.

In this article I propose, first, to examine the manpower problems which seem to be emerging in the newly modernising countries, and then to set forth the elements of a strategy of human resources development. And, in a concluding section, I shall advance some suggestions for the integration of manpower development programming with over-all economic development planning.

THE MANPOWER PROBLEMS OF MODERNISING ECONOMIES

Most modernising economies are confronted simultaneously with two persistent, yet seemingly diverse, manpower problems: the shortage of persons with critical skills in the modernising sector and surplus labour in both the modernising and traditional sectors. Thus, the strategy of human resources development is concerned with the twofold objective of building skills and providing productive employment for unutilised or under-utilised manpower. The shortages and surplus of human resources, however, are not separate and distinct problems; they are very intimately related. Both have their roots in the changes which are inherent in the development process. Both are related in part to education. Both are aggravated as the tempo of modernisation is quickened. And, paradoxically, the shortage of persons with critical skills is one of the contributing causes of the surplus of people without jobs. Although the manpower problems of no two countries are exactly alike, there are some shortages and surpluses which appear to be universal in modernising societies.

Manpower Shortages

The manpower shortages of modernising countries are quite easy to identify, and fall into several categories:

(1) In all modernising countries there is likely to be a shortage of highly educated professional manpower such as, for example, scientists, agronomists, veterinarians, engineers, and doctors. Such persons, however, usually prefer to live in the major cities rather than in the rural areas, where in many cases their services are most urgently needed. Thus, their shortage is magnified by their relative immobility. And, ironically, their skills are seldom used effectively. In West Africa and also in many Asian and Latin

American countries, for example, graduate engineers may be found managing the routine operation of an electric power sub-station or doing the work of draughtsmen. Doctors may spend long hours making the most routine medical tests. The reason is obvious.

(2) The shortage of technicians, nurses, agricultural assistants, technical supervisors, and other sub-professional personnel is generally even more critical than the shortage of fully qualified professionals. For this there are several explanations. First, the modernising countries usually fail to recognise that the requirements for this category of manpower exceed by many times those for senior professional personnel. Second, the few persons who are qualified to enter a technical institute may also be qualified to enter a university, and they prefer the latter because of the higher status and pay which is accorded the holder of a university degree. Finally, there are often fewer places available in institutions providing intermediate training than in the universities.

(3) The shortage of top-level managerial and administrative personnel, in both the private and public sectors, is almost universal, as in the dearth of persons with entrepreneurial talents.

(4) Teachers are almost always in short supply, and their turnover is high because they tend to leave the teaching profession if and when more attractive jobs become available in government, politics, or private enterprise. The scarcity is generally most serious in secondary education, and particularly acute in the fields of science and mathematics. This shortage of competent teachers is a "master bottleneck" which retards the entire process of human resources development.

(5) In most modernising countries there are also shortages of craftsmen of all kinds as well as senior clerical personnel such as bookkeepers, secretaries, stenographers, and business machine operators.

(6) Finally, there are usually in addition several other miscellaneous categories of personnel in short supply, such as, for example, radio and television specialists, airplane pilots, accountants, economists, and statisticians.

I shall use the term "high-level manpower", or alternatively "human capital", as a convenient designation for the persons who fall into categories such as those mentioned above. The term "human capital formation", as used in this paper, is the process of acquiring and increasing the numbers of persons who have the skills, education, and experience which are critical for the economic and political development of a country. Human capital formation is thus associated with investment in man and his development as a creative and productive resource. It includes investment by society in education, investment by employers in training, as well as investment by individuals of time and money in their own development. Such investments have both qualitative and quantitative dimensions - i.e., human capital formation includes not only expenditure for education and training, but also the development of attitudes toward productive activity.

As stressed earlier, a central problem of all modernising countries is to accelerate the process of human capital formation. Human capital, or high-level manpower, may be accumulated in several ways. It may be imported from abroad through a variety of means such as technical assistance, expatriate enterprises, hiring of consultants, or immigration. It may be developed in employment through on-the-job training, in-service programmes of formal

training, management development seminars, part-time adult education classes, and many other means. It is also developed in employment through better organisation of work, creation of appropriate attitudes and incentives, and better management of people. It is accumulated through formal education in schools, technical training centres, colleges, universities and other institutions of higher learning. And finally, it may be developed as a by-product of modern military training.

The analysis of human capital formation is thus parallel and complementary to the study of the processes of savings and investment (in the material sense). In designing a strategy for development, one needs to consider the total stock of human capital required, its rates of accumulation, and its commitment to (or investment in) high-priority productive activities.

The rate of modernisation of a country is associated with both its stock and rate of accumulation of human capital. High-level manpower is needed to staff new and expanding government services, to introduce new systems of land use and new methods of agriculture, to develop new means of communication, to carry forward industrialisation, and to build the educational system. In other words, innovation, or the process of change from a static or traditional society, requires very large "doses" of strategic human capital. The countries which are making the most rapid and spectacular innovations are invariably those which are under the greatest pressure to accumulate this kind of human capital at a fast rate. Here we may make two tentative generalisations:

First, the rate of accumulation of strategic human capital must always exceed the rate of increase in the labour force as a whole. In most countries, for example,

the rate of increase in scientific and engineering personnel may need to be at least three times that of the labour force. Sub-professional personnel may have to increase even more rapidly. Clerical personnel and craftsmen may have to increase at least twice as fast as the labour force, and top managerial and administrative personnel should normally increase at a comparable rate.

Second, in most cases, the rate of increase in human capital will need to exceed the rate of economic growth. In newly developing countries which already are faced with critical shortages of highly skilled persons, the ratio of the annual increase in high-level manpower to the annual increase in national income may need to be as high as three to one, or even higher in those cases where expatriates are to be replaced by citizens of the developing countries.

The accumulation of high-level manpower to overcome skill bottlenecks is a never-ending process. Advanced industrial societies as well as underdeveloped countries are normally short of critical skills. Indeed, as long as the pace of innovation is rapid, the appetite of any growing country for high-level manpower is almost insatiable.

Labour Surpluses

The over abundance of labour is in most countries as serious a problem as the shortage of skills. Its more common manifestations are the following:

(1) In nearly all countries the supply of unskilled and untrained manpower in the urban areas exceeds the available employment opportunities. The reasons are not difficult to find. First, large urban populations are

likely to build up prior to rather than as a consequence of the expansion of industrial employment. Second, as industrialisation gains momentum, the productivity of factory labour tends to rise sharply, and this limits the expansion of demand for general industrial labour. Modern industrialisation may even displace labour from cottage and handicraft industries faster than it is absorbed in newly created factories. Third, the government service is able to provide legitimate employment for relatively few people. And, finally, unless development is extremely rapid, trade, commerce, and other services simply do not absorb those who cannot find jobs in other activities. But despite relatively limited employment opportunities and overcrowded conditions, the modernisation process impels people to migrate from the rural areas to the cities. And, as progress is made toward universal primary education, nearly every modernising country is faced with the problem of mounting unemployment of primary school leavers.

(2) In overpopulated countries such as, for example, Egypt or India, the rural areas are also overcrowded, resulting in widespread underemployment and disguised unemployment of human resources. Indeed, in many countries it is evident that total agricultural output could be increased if fewer people were living on the land and the size of agricultural units was increased. Thus, surplus labour in rural areas in most cases is no asset and in some cases is definitely a liability for increasing agricultural output.

(3) The "unemployed intellectual" constitutes an entirely different kind of surplus. In many countries, for example, it is reported that there are too many lawyers or too many graduates of the arts and literature

faculties. And there may be instances also of unemployed or underemployed engineers, scientists, economists, and even agronomists. The unused intellectual, however, is unemployed only because he is unwilling to accept work which he considers beneath his status or educational level. A university education creates very high employment expectations. In some countries, a university degree may be looked upon almost as a guarantee of a soft and secure job in the government service, and in most it is assumed to be a membership card in the elite class. But, even in rapidly modernising countries, the purely administrative jobs in the government service become filled fairly rapidly; the demand for lawyers, for example, is certainly not as great as the demand for technically trained personnel. And in some societies where large enterprises are owned and managed by members of family dynasties, even the opportunities for professionally trained engineers and technicians may be limited, at least in the early stages of development. Rather than accept work beneath his status, or employment in remote rural areas, the university graduate, and sometimes even the secondary school leaver as well, may join the ranks of the unemployed. A sizeable quantity of unused human capital of this kind reflects a wasteful investment in human resources development and poses a serious threat to a country's social and political stability.

(4) There are other miscellaneous kinds of surplus labour. For example, the introduction of new processes and automated machinery may throw skilled labour out of work. Or secondary school leavers, who feel that they should qualify for white collar jobs, may shun manual work of any kind. And, in some countries, immigrants and refugees swell in ranks of the unemployed.

Some labour surpluses, however, can be eliminated and

others reduced substantially by a well-conceived and balanced programme of economic growth. A strategy of human resources development, therefore, must include an attack on surpluses as well as shortages.

Manpower analysis

As indicated above, no two countries have exactly the same manpower problems. Some have unusually serious surpluses, and others have very specialised kinds of skill bottlenecks. Politicians and planners, therefore, need to make a systematic assessment of the human resources problems in their particular countries. Such assessment may be called "manpower analysis".

The objectives of manpower analysis are as follows: (1) the identification of the principal critical shortages of skilled manpower in each major sector of the economy, and an analysis of the reasons for such shortages; (2) the identification of surpluses, both of trained manpower as well as unskilled labour, and the reasons for such surpluses; and (3) the setting of forward targets for human resources development based upon reasonable expectations of growth. Such forward targets are best determined by a careful examination and comparison, sector by sector, of the utilisation of manpower in a number of countries which are somewhat more advanced politically, socially and economically.

Manpower analysis cannot always be based on an elaborate or exhaustive survey. It is seldom possible to calculate precisely the numbers of people needed in every occupation at some future time. But, whether statistics are available or not, the purpose of manpower analysis is to give a reasonably objective picture of a country's major human resources problems, the inter-relationships between these problems, and their causes, together with an informal guess as to

probable future trends. Manpower analysis is both qualitative and quantitative, and it must be based upon wise judgment as well as upon available statistics. In countries where statistics are either unavailable or clearly unreliable, moreover, the initial manpower analysis may be frankly impressionistic. The methodology of manpower assessments, however, lies beyond the scope of this article, and is to be treated more fully in forthcoming publications of the Inter-University Study.¹

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In conclusion, the major shortages and surpluses of manpower in most countries are easy to identify. Many of them are common to all modernising societies. Manpower analysis, based on relevant comparisons with other countries at different stages of development, is useful in assessing particular problems and probable future trends. To be sure, there is need for research in manpower supply and demand as related to economic growth. But those who are responsible for the planning of accelerated growth cannot and need not wait for the completion of definitive studies before designing a realistic strategy for human resources development.

A MANPOWER PLANNING STRATEGY

Once the manpower problems of a newly developing country are identified, a strategy must be developed to overcome them effectively. The essential components of such a strategy are the following: (1) the building of

¹International organisations such as the I.L.O., and the O.E.C.D., U.N.E.S.C.O., and the planning ministries of several countries have developed a wide variety of techniques for manpower surveys. It is hoped that, with the assistance of the Inter-University Study, progress can be made toward development of a common methodology which will facilitate cross-national comparisons.

appropriate incentives; (2) the effective training of employed manpower, and (3) the rational development of formal education. These three elements are interdependent. Progress in one area is dependent upon progress in the other two. The country's leaders should not concentrate on only one or two of them at a time; they must plan an integrated attack on all three fronts at once.

The Building of Incentives

In the strategy of human resources development, the purpose of building incentives is to encourage men and women to prepare for and engage in the kinds of productive activity which are needed for accelerated growth. To accomplish this, the compensation of an individual should be related to the importance of his job in the modernising society. It should not depend upon his level of formal education, the number of degrees held, family status, or political connections. And the relative importance of jobs should be based not on tradition or heritage from colonial regimes, but on an assessment of the manpower needs of the developing economy.

If, for example, agricultural officers or village workers are desperately needed in rural areas to carry forward a programme of modernising traditional agriculture, their pay and status position may have to exceed that of professionally trained people who have desk jobs in the cities. If a technician with limited education can perform work normally assigned to an engineer, he should receive the same pay and perquisites as the engineer on that job. If science and mathematics teachers are urgently needed in secondary schools, their rewards should be higher than those of other less urgently needed teachers (whether university graduates or not) and perhaps higher also than professionally trained people in some other less essential activities.

If technicians, nurses, and foremen are in very short supply (as is the case in most modernising countries), their rates of pay may need to be higher than those of some university graduates holding down administrative jobs for which many persons could qualify. In some cases, the medical technician or the agricultural assistant who is willing to live in the bush deserves to be compensated as much as the doctor or the agronomist who insists on living in the city. And the manager of an enterprise, who may have had only a limited secondary education, should be entitled to higher compensation than the university graduates who are his subordinates. Admittedly, pay alone may not be a sufficient incentive; the status of an occupation is of equal if not greater importance; but a rise in relative pay in itself may contribute to the raising of the status level of a job.

Large outlays for education are unlikely to produce the kind of high-level manpower needed if the proper incentives are lacking. In many developing countries, any university degree is looked upon almost as a right to employment in the government service. Thus, if one is admitted to a university and completes the requirements for a degree, he may thereby have gained tenure in the higher-paid ranks of government employees. He is also strongly motivated to prefer work in the large urban areas. The idea that a university education is a "permanent escape from the bush" is widespread, for example, in Africa.

In Nigeria the reason for the critical shortage of agricultural specialists of all kinds is not the lack of places in agricultural schools but rather the reluctance

of students to go into them.¹ Obviously, in the minds of young people the employment opportunities are not as attractive in agriculture as in some other fields which are less vital for the country's development. For the same reasons, technical education, particularly at the intermediate level, has had little appeal in Nigeria. As the Ashby Commission pointed out, "the literary tradition and the university degree have become indelible symbols of prestige in Nigeria, by contrast, technology, agriculture and other practical subjects, particularly at the sub-professional level have not won esteem."²

I would argue most strongly that situations of this kind will not be corrected by publicity, exhortations of prime ministers, and the building of more educational institutions. They will be changed only when the system of rewards and status in a modernising society are changed, and the initiative in making changes must come from the Government itself in the form of a complete revision of the entire system of compensation of government employees. The failure of politicians and planners to come to grips with this problem will produce in the newer countries, as it has produced already in Egypt and India, an army of unemployed intellectuals.

By the same token, the problems of rural-urban migration and the unemployed primary school leavers are not likely to be alleviated substantially by mere changes in the curriculum of primary and secondary schools. In this age of rising aspirations and spreading mass

¹See Investment in Education. The report of the Commission on Post-School Certificate and Higher Education in Nigeria (Lagos, Federal Ministry of Education, 1960), p.21.

²Ibid., p.5.

communication, the sons of farmers are not going to sentence themselves to traditional agriculture if they can possibly avoid it. The only fundamental solution is the modernisation of rural life. This calls for sweeping measures such as land reform, agricultural research and extension services, widespread rural community development programmes, the effective utilisation of rural labour in the building of roads, irrigation systems, houses, and schools, and other programmes aimed at making rural life more productive and attractive. If people see a positive reason for remaining in the rural areas and a promise of a better life there, the problem of revision of curricula in the schools will be relatively easy to handle.

A detailed discussion of the need to develop agriculture lies beyond the scope of this article. It is necessary only to point out that none of the modernising countries are likely to solve many of their most pressing human resources problems unless they find the means of revolutionising rural life. Industrialisation by itself will never solve the problem of surplus labour in most of today's underdeveloped countries; government employment petty trade and domestic services will not soak up the teeming masses in overcrowded cities; and the retention of surplus human resources in traditional agriculture, even if it were possible, would simply result in more disguised unemployment. To quote Arthur Lewis, "If agriculture is stagnant, it offers only a stagnant market, and inhibits the growth of the rest of the economy. The core of the doctrine, 'balanced growth', is that neglect to develop agriculture makes it more difficult to develop anything else." ¹ Similarly, the failure to develop effective

¹W. Arthur LEWIS: "Reflections on the Economic Problem", paper delivered to the Oxford Conference on Tensions in Development, New College, Oxford, September 1961.

measures for productive utilisation of human resources in rural areas will make it more difficult to solve the manpower problems in any other part of the economy.

Thus, a primary condition for solution of all manpower problems, whether they be critical skill bottlenecks in the modernising sector or mounting labour surpluses throughout the nation, is the building of appropriate incentives. Lacking this, massive expenditure on training and education will contribute little to accelerated development. The notion that there is always a direct relation between the development of education and economic growth can be misleading, and planners should be wary of accepting it without careful scrutiny.

The leaders of the modernising nations probably have the means to influence the structure of wages and salaries in a country if they have the courage to do so. In most cases, the government is by far the largest employer of manpower, and private employing institutions are strongly influenced by the patterns which it sets. But, being bound by tradition and constrained by established interests which are bent on preserving the status quo, some politicians and planners think that it would be rather arbitrary suddenly to gear compensation to the relative importance of occupations as determined by development objectives. Yet it is equally arbitrary and even politically dangerous to cling to an archaic system of compensation which may have been inherited from a past era of colonialism. In committing themselves to planned, accelerated development, the modernising nations are charting a revolutionary course. And if they are to follow it successfully, they must discard many traditional and orthodox ideas, many of which they have borrowed from the advanced nations which never had to face the same kinds of problems.

The Training of Employed Manpower

The potentialities of fully utilising government agencies, private employers, expatriate firms and foreign technical experts as trainers and developers of manpower are enormous, but they are seldom fully understood by the leaders of most modernising countries. Human resources development is usually equated with investments in formal education, and government, business, and education leaders for some reason cling to the notion that schools and universities can prefabricate the skills needed. To be sure, they may be quick to see the need for technical training, but, unfortunately, just as quick to assume that the system of formal education must somehow be given the responsibility for it.

At this point, it is important to understand that training and education are two quite different processes, and planners should draw a sharp distinction between them. Training involves the development of specific skills which are needed to perform a particular job or series of jobs. Education involves the acquisition of general knowledge and development of basic mental ability. Both training and education are involved in human capital formation. Education is, of course, a prerequisite for various kinds of training. But this does not mean that the responsibility for training and the responsibility for education are inseparable.

The strategy of modernising nations should be to shift as much responsibility as possible for training to the major employing institutions. These include government ministries, public or quasi-public enterprises, private industry and commerce, and foreign-owned and managed firms.

At the same time, the strategy should aim at exploiting more systematically the training possibilities of technical assistance.

The government, as the largest employing institution, should take the lead in shouldering this responsibility. Most of the arts of public administration can be developed effectively by a well-conceived and organised programme of in-service training. It is likewise practical for the appropriate employing ministries to train craftsmen, senior clerical employees, and even certain categories of sub-professional technical personnel. Each major government ministry, therefore, should have a training organisation responsible for on-the-job training, in-service programmes of instruction, supplementary off-the-job programmes of training in co-operation with educational institutions, periodic examination of accomplishment, and certification of qualification for promotion and advancement. The techniques of in-service training of this kind are available, but the idea that the government-as-employer should assume responsibility for such training is to most leaders in newly developing countries completely strange and unorthodox.

In many countries, the military establishment is an important skill-building institution. It develops skilled craftsmen and clerical personnel; it trains a variety of technicians; and it must teach its officers the principles of administration. In some cases, it may need to provide literacy and language courses as well. From top to bottom, therefore, the military is a kind of training organisation.

Many newly developing countries could greatly speed up the process of human capital formation if they purposely used the armed forces as an institution for training civilian as well as military manpower. For many young men,

a period of compulsory military service may be the most effective avenue for developing skills needed in the civilian economy. Army officers frequently turn out to be excellent managers of new industrial enterprises (as, for example, in the case of Egypt). And even, in some cases, military personnel may be assigned to certain kinds of teaching activities in vocational schools. Thus, the use of the military as a generator of trained manpower for the economy as a whole deserves serious study. Careful consideration of its potential contributions, as well as its shortcomings, should be an integral part of any strategy for manpower development.

At the same time, pressure should be exerted upon the non-government employing institutions to assume a corresponding responsibility for training. The larger enterprises should be expected to have foreman training and manager development programmes. They should also be required to assume major responsibility for training of their own craftsmen, clerical workers, and some categories of technicians as well as semi-skilled production workers. In short, the development of human capital through in-service training should be accepted as an integral part of business operations.

The small employer can also carry some of the burden of training, and in practice he often carries more than his share. In Nigeria, for example, most lorries and automobiles are repaired in small shops consisting of an owner and several apprentices, who may even pay him for the opportunity of learning a trade. The handicraft industries in most countries are completely dependent upon an informal apprenticeship system. The planners in the modernising countries will be well advised not to replace such systems by costly vocational schools, but rather to try to improve

them by providing programmes of technical assistance in apprenticeship and on-the-job training.

The foreign-owned enterprise can be a powerful instrument of human capital formation if it is handled properly, because its training capacity is usually greater than that of the local enterprises. The host country should allow the foreign firm to bring in as many expatriates as it wishes, provided that it guarantees to train local nationals to take over their jobs within a reasonable specified time. In most instances, the foreign firm develops more people than it uses itself. For example, craftsmen and mechanics trained by an expatriate oil company may take jobs in other local industries; or service station attendants may soon become independent dealers. A well-trained foreman in a foreign-owned truck assembly plant may be the future organiser of a locally managed parts factory. Unquestionably, a more deliberate and carefully planned policy of using the expatriate firm as a training institution could greatly accelerate the process of human capital formation in many countries, and politicians should be more concerned with exploiting this asset to the maximum than with placing arbitrary restrictions on the employment of expatriate personnel.

Finally, the newly developing countries should fully exploit the potentialities of technical assistance as a training institution. To the maximum extent possible, the purpose of technical assistance should be to train one or more individuals to do work which was previously done by a foreigner, or not done at all. It is short-sighted to invite foreign technical experts to a country to handle operations or merely to make studies or surveys. In whatever activity they

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are engaged, the responsibility of foreign experts should be to train counterparts - to transmit knowledge by developing people.

The advantages of utilising employing institutions and technical assistance staff as trainers and developers of manpower would appear to be blindingly obvious. But the failure to do so is almost universal in newly developing countries. Outside technical experts are employed to engage in operations, and often local counter-parts are not assigned to them for training. The government ministries are too busy to spend time on in-service training, and complain when vocational schools and universities send them poorly trained recruits with queer attitudes towards work. The idea that training is a continuous process of human resources development rather than a simple pre-employment indoctrination seems to escape politicians, planners, and public and private employers alike. The solution here is relatively simple. If the employing institutions are shouldered with the responsibility for a considerable amount of training, they will have an incentive to provide it. If they have the incentive to undertake it, the technical means of carrying it out are available from a variety of sources.

Formal Education

No one would argue, of course, that all training activity can or should be undertaken by the employing institutions. Many skills must be developed in schools, colleges, and universities. Teachers, engineers, scientists, agronomists, doctors and many kinds of sub-professional personnel are not likely to be effectively trained in employment. And some kinds of crafts are learned better in schools than

through apprenticeship or on-the-job training arrangements.

In the main, however, the essential function of formal education is to prepare people for training rather than to train people for particular occupations. In other words, the principal output of formal education should be educated "trainable" people. Like a photographic film, the capacities of people are developed after exposure to productive activity. Pre-employment education, as in the coating of the film, determines the future sensitivity of man for understanding and continuous learning. In this three-phase strategy of human resources development, therefore, the right incentives and the proper arrangements for continuous in-service training are necessary if formal pre-employment education is to contribute effectively to accelerated growth.

Nearly all modernising countries have rejected the idea of gradual elimination of illiteracy; they are determined to have universal primary education in record time. This must be accepted as a major objective in any programme of accelerated development. But, in many countries, and particularly those in Africa and parts of Asia, universal primary education cannot be achieved in the next ten to 15 years if the educators insist on the same teacher-student ratios and teacher qualifications as those in the advanced countries. For the most part the developing countries are being forced to sacrifice quality for quantity in their mass attack upon illiteracy.

It is unquestionably true that the cost of primary education must be held down; otherwise it will consume most of the resources which are more urgently needed for secondary and higher education. Most of the developing countries currently spend less than 4 per cent. of national income per annum on formal education of all

kinds, and, in view of competing demands for funds for development purposes, it is doubtful whether many of them will be able to raise this to 5 to 6 per cent. in the next decade or two. And the need for high-level manpower is such that most modernising countries will have to devote well over two-thirds of total educational expenditure to secondary and post-secondary institutions.

Consequently, developing countries should concentrate their attention on finding new technologies of education which can be utilised effectively by large numbers of teachers who themselves have had little more than primary education and which can multiply the strategic services of a very small group of more highly trained personnel. The application of new teaching techniques - visual aids, programmed learning, instruction by radio and television, revised and simplified curricula and texts - offer a real challenge both to the developing countries and to the assisting countries. The discovery of new technologies for primary education will be given much more serious effort once it is understood by politicians, planners, educators and outside experts, alike that under conditions of accelerated growth it will be impossible to raise substantially either the pay or the qualifications of teachers in the near future.

The main purpose of primary education is to make people literate and to prepare them to participate more effectively as citizens in the modernising society. It is not and should not be vocational education, and indeed most educators in advanced as well as under-developed countries are united in opposing such an orientation. It must, however, provide a means of selecting and preparing those who proceed to secondary-level education.

One of the consequences of rapid introduction of universal primary education is to raise aspirations of people more rapidly than jobs and places in secondary schools can be provided. This is one of the costs of rapid modernisation. In time, however, the social and political pressure for more secondary education will assist rather than obstruct the rapid accumulation of high-level manpower.

If a country demands accelerated development, the proportion of students in secondary education must rise sharply. The secondary school leavers constitute the main reservoir from which "trainable" high-level manpower must be drawn. University students, teachers, entrepreneurs, managers, sub-professional technical personnel, rural development centre workers, agricultural specialists, senior clerical employees, master craftsmen, foremen and supervisors come directly or indirectly from the pool. Its size and quality, therefore, are critical for human capital formation. As in the case of primary education, streamlined methods of instruction and new educational technologies are needed. But, at the secondary level, the main consideration is not to keep costs from rising; it must be to provide high-quality education for an ever-increasing minority of the school-age population.

The proportion of the school-age population in secondary education will depend upon the stage of development. In the most under-developed countries, less than 1 per cent. of the normally eligible age groups (12-18 years) are in secondary schools. Some of the more advanced African countries have been able to raise this to 4 or 5 per cent. Egypt and India and some of the Latin American countries have ratios as high as 15-20 per cent. In most of the industrially advanced countries, it is already in excess of 50 per

cent. But in most, though not all, modernising countries (Egypt and India being notable exceptions), there is under-investment in secondary education, and thus accelerated growth calls for immediate and sharp increases in education at this level. The Conference of African States on the Development of Education recommended that the tropical African countries as a whole increase the proportion of school-age population in secondary schools from an average of 3 per cent. in 1961 to 23 per cent. in 1981, during which period universal primary education would also be achieved.¹

The major mission of secondary education is to give students a firm grounding in verbal and written communication skills, mathematics, foreign languages, history, social studies, and science. In this process, some attention should be given to development of manual skills as well. In most cases the human resources development strategist should press for breadth of education for all rather than specialisation at an early stage, and need not feel safe in doing so if a large part of occupational skill development is to be left to later training in employment or to post-secondary educational institutions.

Vocational training at the secondary level presents particular problems. It is expensive, and competent teachers are very difficult to find. Modernising countries often waste large sums of money in misplaced emphasis on primary and secondary vocational schools. In some countries, for example, students who prove to be unfit for higher academic training

* 1 Conference of African States on the Development of Education in Africa, Addis Ababa, 15-25 May 1961: Outline of a plan for African Educational Development (Paris, U.N.E.S.C.O., 1961).

are sent to vocational schools, and as a consequence these institutions become the catch-basins for incompetent. And, in many instances, the training they receive tends to be of poor quality and not specifically enough related to the occupations which the students later enter. As stressed above, the policy of newly developing countries should be to place more responsibility on employing institutions to train workers for specific occupations, and to this end funds might better be channelled into training of trainers in employing institutions than into the proliferation of poorly equipped and poorly staffed general vocational schools.

There is a need, however, for teacher-training institutions at the secondary level (primarily for elementary schools teachers). A limited number of well-staffed and well-equipped craft training centres are undoubtedly necessary, as are others such as certain kinds of secretarial schools and agricultural training institutions. But plans for these should be carefully scrutinised after analysis of expected manpower requirements and training potentialities of the employing institutions.

The mission of higher education is twofold: (1) to provide liberally educated persons for positions of leadership in the modernising society; and (2) to develop high-level technically trained and technically educated manpower. The newly developing countries are keenly aware of the importance of university-level education. Except in rare cases, they are not likely to underinvest in higher education, but, in terms of development objectives, they are prone to place the wrong emphasis on the investments which they make.

It is probably reasonable to assume that on the average the newly developing countries can and will provide higher education for about 20 per cent.

of those who complete secondary education. The crucial questions then are: What proportion of these should have university-level education and what proportion should take intermediate training? What proportion should concentrate on technical studies and what proportion should devote themselves to academic studies? And, of those who should have university-level education, what proportion should be educated at home and what proportion should be sent abroad to foreign institutions? In each country these issues are likely to be resolved partly by logical analysis and partly by political expediency.

The answers may be given in part by a manpower assessment. Typically, a manpower analysis might suggest that from two to four students should pursue studies at the intermediate level (two or three years beyond secondary) for every one who takes a full university course (ranging from four to six years). The manpower assessment would probably also suggest that, in a country committed to accelerated growth (with emphasis of industrialisation and modernisation of agriculture), at least half of the students at both the intermediate and university levels should concentrate on technical subjects such as science, engineering, medicine, agriculture, veterinary medicine or pharmacy. Another 25 per cent. should go to intermediate-level teacher-training colleges, and the remainder would concentrate on law, letters, social sciences, and business administration.

1 In practice, of course, manpower assessments in individual countries will show a wide variation from this "typical model". The inter-University study is engaged in research in this area, and hopes to have available shortly more empirical evidence on this subject.

From an economic standpoint, the logical course for the typical country would be to build institutions at home to take care of practically all students at the intermediate level, and to send a substantial portion of those qualified for university-level work to foreign institutions, at least until the country was rich enough to afford first-class university-level education without cutting into the high-priority need for investment in secondary and intermediate higher education.

The politicians, however, will have difficulty in accepting such a rationalised programme for higher education, even if it is based upon a quite reliable manpower assessment and even if it can be demonstrated to be the more rapid and least expensive way of producing trainable high-level manpower. The reasons are obvious:

As the number of secondary school ~~graduate~~ increases (as it must, if accelerated growth is desired), the government will be under pressure from students and irate parents to provide more places in universities. And as long as university degrees determine in large measure the starting salaries for the better jobs (irrespective of what subjects may have been studied), students will want to by-pass the intermediate institutions if at all possible. If the mere number of people in universities is important to the politicians, moreover, the universities will tend to offer more work in the non-scientific areas than is needed. The cost of educating an engineer or scientist, for example, is three to four times that of educating a lawyer or a man of letters and arts.

Thus, both the expansion of institutions designed to provide urgently needed intermediate education and the objective of placing more emphasis on science

and engineering education in the universities may meet strong resistance. But this is not all. From the standpoint of national grandeur and prestige, a university is a much more impressive symbol of modernisation than a teacher-training college, an intermediate technical training institute, or a "senior college of arts and sciences". A "university", along with an international airline, a steel mill, and several television stations, is important in the eyes of the leaders of newly developing nations. Finally, too much reliance on sending university-level students abroad for study is often considered to be inconsistent with a country's objective of bolstering its economic and political independence of foreign powers.

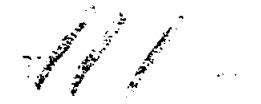
For these reasons, therefore, modernising countries will probably commit themselves to spend more money on university education than they should; they will tend to neglect the development of intermediate education which should have higher priority; and they are likely, in the interest of providing the maximum number of places for university students, to understress scientific and engineering education. This leads eventually to the lowering of standards of the university, reliance on professors who teach only part time because of the poor salaries offered, and the development of built-in obstacles to innovation, in the form of professors with academic tenure who have a vested interest in the status quo. In the end, the

1 The Inter-University Study is involved in studies in a number of countries aimed at analysis of the university as a stimulating or retarding force in economic development and the factors which make for adaptability of the system of higher education to development needs.

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education and training offered in universities may sink to a level below that of a good teacher-training institution or technical or junior college, and the curriculum is likely to be unrelated to the needs of a rapidly modernising society.

In view of these pressures, how can modernising countries give the needed emphasis to intermediate-level training and to science and engineering studies in the universities? As already stressed above, it is rationally desirable and politically feasible to gear the compensation of jobs, particularly in the government service, to their relative importance for the country's development rather than to formal degrees or educational levels. If this were done, the artificial value of the traditional academic university degree would soon disappear. If, for example, the compensation of high-level personnel such as scientists, engineers, agronomists, technicians, and secondary school teachers were to be raised substantially in accordance with the obvious needs of a modernising society, students would have an incentive to enter the intermediate technical training institutions, secondary teachers' colleges, and scientific and engineering faculties in the universities. These would become the new avenues to positions of high pay and status. Parents and students would then exert pressure to expand and improve these avenues. In this way, the adaptation of the system of higher education to the needs of a rapidly modernising society would become politically more feasible. This need not conflict with the university's mission of providing liberally educated persons for positions of service and leadership in the nation. The modernising society will always have important and high-paying positions for the well-educated lawyer,



arts graduate, and social scientist. But it should not allow large numbers of poorly educated university graduates to use their degrees to claim high-level positions for which they are not well prepared.

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Ministry of Education
(Central Planning Group)

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Subject:- Pattern of Central assistance for educational developments in the States (General Education)

The problem of Central assistance for educational developments, which was always important, will assume far greater significance in the Fourth Plan. On the one hand, size of the total educational effort to be made in the Fourth Plan will be larger than in the first three Plans; on the other, the capacity of the States to raise additional resources will be severely limited; partly because of the large increase in committed expenditure and partly because of the restrictions indirectly imposed upon their tax-raising capacities by the increase in Central taxation. The measure of Central assistance, which will have to be given to the States in the Fourth Plan, would, therefore, be much larger than in the Third. Moreover, the experience of the first three plans, and particularly of the Third Plan, has shown that the Centre has very little effective control on the manner in which its grants-in-aid for educational development are actually utilised by the States in practice. There is, therefore, a general feeling that the Centre should now control, more effectively than in the past, both the direction and pace of educational development by earmarking Central grants for specific programmes which are of great significance and by creating a suitable machinery to watch over the utilisation of Central grants. The object of this paper is to suggest some concrete proposals regarding the manner in which these two objectives can be secured in the Fourth Five-Year Plan.

2. Historical: It may not be out of place to give a brief resume of the pattern of Central assistance to

State Governments for educational development during the first three plans.

(a) The First Plan: In the first Five-Year Plan, the system of specific-purpose grants was adopted as a basis of Central aid. This form of grant-in-aid has two unique advantages:

(1) It promotes activity on pre-determined lines in desirable sectors of educational development; and (2) it is also the simplest and the most convenient form of grant-in-aid to administer. From the historical and comparative point of view also, there was ample justification for this choice. In U.S.A., the earliest federal grants for education were of this type; and even today, all federal grants for education are given for specific purposes. In India, the Despatch of 1854, the first document on grant-in-aid, recommended the adoption of the same principle. When Central grants for education were revived on a large-scale between 1900 and 1921, they were also given on the same basis. We, therefore, stand in good company and on firm ground in so far as the choice of this method was concerned.

The actual pattern of Central assistance for schemes included in the State Plans during the first Five-Year Plan is given in Annexure I. It will be seen therefrom that there were as many as 16 different programmes for which Central financial assistance was made available. The rates of grant-in-aid generally changed from year to year; they also changed from scheme to scheme; and, even within the same scheme, they were different for recurring and non-recurring expenditure. Taken all in all, it was a rather complicated structure which needed a good deal of careful accounting work, both at the State and Central levels. Administratively, it kept a few officers quite busy and cases involving adjustments of grant-in-aid dragged on for years before a final settlement could take place. It was mainly for these reasons that the pattern of Central

assistance for educational development was changed in the second Five-Year Plan.

(b) The Second Plan: Three main changes were made in the second Five-Year Plan with regard to the pattern of Central grant-in-aid for educational development.

The first was to simplify the pattern of Central assistance on schemes included in the State Plans. The rate of grant-in-aid was now fixed for the Plan period as a whole and did not change from year to year. Similarly, no difference in rates of grant-in-aid was usually made between the recurring and non-recurring expenditure of a given scheme. The actual rates of grant-in-aid approved for this Plan period are given in Annexure II.

The second important change introduced was to abandon the system of giving Central grants separately for each scheme included in the State sector. As pointed out earlier, this system, adopted in the first Plan, was found to be administratively very inconvenient. It was, therefore, decided to give Central grants for schemes included in the State plans by grouping them together under four sectors - elementary education, secondary education, higher education and other educational programmes. This simplified the administrative and financial procedures no doubt; but to that extent the power of the Government of India to direct educational development in pre-determined directions was also reduced.

The third important change was to evolve the concept of a Centrally-sponsored sector. The programmes included in this sector were selected on the basis of their significance. By and large, it may be said that programmes of high priority, which the Government of India wanted every State to adopt, were included in the Centrally-sponsored sector. A broad outline of each such programme was also finalised by the

Centre; but each State had some freedom to modify it, in view of local conditions, subject to approval of the Government of India. Theoretically, it was open to a State Government to accept or to reject a programme included in the Centrally-sponsored sector. But sooner or later, every State Government accepted these programmes for two considerations: (1) the rate of Central grant-in-aid for these programmes was higher than that for State schemes; and (2) the Central grant-in-aid for these programmes was received outside the State Plan ceilings. The Centrally-sponsored programmes, therefore, generally became 'national programmes' which were in simultaneous operation in all the States.

The pattern of Central assistance on Centrally-sponsored schemes in the second Five Year Plan is given in Annexure III. It may be pointed out, however, that, in the last years of the Plan, the matching contribution expected from the State Governments was either considerably reduced or waived altogether so that these programmes came to be almost wholly financed from Central revenues.

(c) The Third Plan: The process of simplification of Central grants-in-aid started in the second Plan was continued further in the third Plan and two major changes were introduced.

The first was to reduce the number of Centrally-sponsored schemes to the minimum. This was advocated on two grounds:-

(i) The Centrally-sponsored schemes tend to distort the education policy of the State Governments and tempt them to accept even weak schemes by promising larger financial assistance; and

(ii) A large Centrally-sponsored sector would under-mine the Constitutional responsibility of State Governments for educational development.

It was, therefore, decided that the Centrally-sponsored sector should include schemes of research, evaluation or pilot

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projects or should be related to matters for which the Centre has a Constitutional responsibility. The list of Centrally-sponsored schemes selected finally for the third Plan is given in Annexure IV. For all these schemes, Central assistance was available, on a 100 per cent basis, outside the State Plans.

The second important change made in the third Plan was to give a grant-in-aid for the Plan as a whole, with the object of giving the largest freedom possible to the State Governments to relate their development plans to local conditions. As may be easily anticipated, this decision reduced the authority of the Centre to secure educational development on pre-determined lines almost to a minimum especially in view of the simultaneous reduction of the Centrally-sponsored sector.

It may be stated that a pattern of financial assistance has been sanctioned, even in the third Five Year Plan, for certain schemes included in the State sector. (See Annexure V). It must be pointed out, however, that this pattern does not mean much in actual practice. The Central assistance is given for the plan as a whole and if there is any shortfall in the educational sector, either in individual schemes or in the sector as a whole the State could always make up for it in other sectors and still claim the entire grant-in-aid promised by the Government of India. In short, under this system, the State Governments have full authority to plan educational development just as they like without any reference to the Centre. They have also all interest in grants-in-aid for individual schemes included in the State Plans. For instance, the idea that the scheme of girls' education earns 100 percent central assistance does not make any impression on the States who are sure that they will always

got the entire promised Central assistance irrespective of what they do for this individual programme. The only thing that matters to the States under the present system is grants under the Centrally-sponsored sector which are given outside the State plans. But, as stated above, this sector have now been reduced to the minimum.

3. Issues at Stake:

It will be seen from an analysis of the foregoing review of historical developments that a number of significant issues have now arisen with regard to the pattern of Central assistance for educational development in the States and these need an early decision, at any rate before the fourth Five Year Plan is finalised in 1965-66. These have been briefly stated below.

(1) Central Grants for Educational Expenditure -

Plan and Committed: In all the first three plans, central assistance for educational development has been restricted only to 'Plan' expenditure and there is no direct grant for the 'non-Plan' or 'committed' educational expenditure which is not reflected in the educational plans of the States. It is true that each Finance commission reviews the entire committed expenditure of the State Governments at the end of each Plan period and allocates larger revenues to them so as to enable them to balance their budgets. In this process, the committed expenditure on education in the States also receives some financial assistance from the Centre. But it is not earmarked. Such a situation has certain disadvantages and there is a group of thinkers who feel that, in so important and fundamental a subject like education, it would be better to provide Central assistance to the States for all

educational expenditure - both Plan and committed. They point out that the committed expenditure of the States in education is very large - about four times as much as Plan expenditure and that it is growing rapidly from year to year. The principle of Central grants for Plan expenditure alone is, they argue, quite good in the case of projects like irrigation works where, once the project is completed and transferred to the non-Plan sector, there is no addition to recurring expenditure and there is also a recurring income. It may also be good in the case of projects like construction of roads and bridges where the recurring expenditure involved is comparatively meagre. But in programmes like education, where the recurring expenditure is very heavy, a system of Central assistance for Plan expenditure only does not help the State Governments very materially. It is, therefore, recommended that the Central assistance for educational development should be based on both the plan and committed expenditure on education and should be given outside the Central block grant fixed for the Plan as a whole.

(2) Increase in the Central Sector: This suggestion is very radical and cuts right across the present system of Central grants to State Governments. Since the chances of such a proposal being accepted are comparatively less, two other suggestions are put forward which will secure the desired results without altering the basis of the present system of Central grants. The first pleads for a very large increase in the Central sector, i.e., in programmes which are directly operated under the

Government of India and which are, therefore, planned, implemented and financed exclusively by the Centre. Such an increase of direct Central activity will have two advantages. Firstly, it will provide an indirect financial assistance to the State Governments in the sense that their own responsibility for educational development would be limited to that extent. The example of the Regional Colleges of Engineering or the Regional Colleges of Education are illustrations in point. These institutions are established and maintained by the Centre, and to the extent they provide facilities for training in engineering or education, the responsibility of the States to provide similar facilities in their own areas is reduced. Moreover, these institutions can also serve as 'leaders' in breaking new ground and maintaining high standards which will ultimately help in raising standards all-round. The programmes implemented under the U.G.C. provide another example. To the extent larger funds are made available to the U.G.C. the liability of the State Governments to spend on higher education is lightened. It is, therefore, suggested that, in the fourth Plan, there should be a very large expansion of the Central sector, particularly in higher education and research so that the State Governments will get an indirect financial assistance. It may be admitted, however, that the main argument underlying this programme, is not so much the indirect reduction of the financial responsibilities of the State Governments, but the possibility of raising standards of education through the direct enterprise of the Centre.

(3) Increase of the Centrally-Sponsored Sector: The second alternative proposal put forward is to increase the Centrally sponsored sector very largely. It is readily granted that the existing system of assistance to State Governments (for their committed expenditure through the Finance Commission and for their developmental expenditure, for the Plan as a whole, through the Planning Commission) may continue. This should, it is suggested, be supplemented by a very large Centrally-sponsored sector under which Central grants on a 100 per cent basis will be given to State Governments for specific schemes and outside their Plan ceilings. This plan, it is argued, will have all the advantages of the specific-purpose grants, that is to say, it can secure educational developments on pre-determined lines and assist in the organisation of national programmes of education without interfering with the freedom and autonomy of the States in working out the details of their own educational plans under a Block grant from the Centre.

4. Third Plan Policies to Go: Before considering merits of these alternative proposals, it is necessary to raise one preliminary issue: Why should we not continue the policies adopted in the third Five Year Plan, with some marginal adjustments, if necessary? A closer examination of the problem will show that this policy will have several undesirable consequences. For instance, under such a policy, it will be hardly possible for the Centre to channelise educational developments in certain desirable directions. The Government of India will have to place the funds at the disposal of State Governments and leave them to decide the priorities and details of educational

development. As in the past, therefore, the bulk of the resources available will again be utilised for quantitative expansion and the development of quality will again be driven to the wall. This is not because the State Governments do not appreciate the advantages of qualitative improvement; but because, being near to the scene, they are not in a position to resist the demands of expansion which are generated at the local and State levels. For instance, in a democratic set-up of the present type, it is next to impossible for the State Governments to refuse the demands to open new colleges, new secondary schools or new middle or primary schools. They will not be in a position to insist on selective admissions to educational institutions. They will also find it difficult to raise fees or to withdraw any concessions which have once been provided. The States will, therefore, have to be protected against themselves and enabled to provide funds for qualitative improvement, in spite of the immense pressures for quantitative expansion which they, and not the Government of India have, to face. In a system of Central block grants for the Plan as a whole, the quantitative pressures, which are generated at the local and the State levels are allowed to climb up to the Government of India. But fortunately, the Centre is comparatively more immune to these pressures of expansion and can take deliberate steps to preserve quality. This can be done only if Central grants are provided outside these pressures of expansion and can take deliberate steps to preserve quality. This can be done only if Central grants are provided outside the State Plans and are earmarked for those programmes which are vital to qualitative improvement.

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5. The same argument also applies to the short-term and the long-term or the national and the local values in education. Being situated nearer to the field, the States generally tend to emphasise the short-term and local needs of education. On the other hand, the Centre is in a favourable position to attend to the long-term and national needs of education. Under the financial policies adopted in the third Plan, where most of the available funds are placed at the disposal of the State Governments in the form of block grants, the short-term and local interests of education tend to be emphasized in preference to the long-term and the national. If this situation were to continue over a longer interval, the consequence can only be disastrous. It is, therefore, necessary to increase the funds allocated to the Central sector and to provide earmarked funds to State Governments which can be utilised only for the long-term and the national interests of education. Even from this point of view, therefore, it would not be desirable to continue the policies of Central grants-in-aid adopted in the third Plan.

6. Expansion of the Central sector: Assuming that the financial policies adopted in the third Plan have to be modified, the question arises: Which of the three proposals mentioned above, either separately or in combination, shall we adopt for the fourth Five Year Plan?

7. Probably, the least controversial of these proposals is the expansion of the Central sector. The establishment of the U.G.C. and the attempts now being made, through it, to secure a qualitative improvement of higher education are two of the finest achievements of the post-independence period.

and have met with universal approval. A programme of expanding the sphere of influence of the U.G.C. by placing larger funds at its disposal, for developmental as well as the recurring expenditure, should, therefore, be welcomed in all sectors.

In the second and the third Plans, the U.G.C. has not received its due share of financial allocations. In the second Plan, its total allocation was only Rs. 21 crores and in the third Plan, it has received only Rs. 37 crores. In the fourth Plan, it will have to be given a much larger allocation, probably of the order of about Rs. 300 crores. This is of course only a tentative estimate and the exact amount needed will depend upon the type and extent of programmes to be operated. From this point of view, the following suggestions are put forward:-

(1) Assistance to Selected Affiliated Colleges: Owing to limitations of funds, the assistance of U.G.C. has so far been limited to Universities and their constituent colleges. By and large, it has not been able to improve the conditions in the affiliated colleges to any appreciable extent. The bulk of our university students, however, read in the affiliated colleges. It is, therefore, necessary to extend the influence of the U.G.C. to the affiliated colleges also. For this purpose, it is suggested that, in the fourth Plan, the U.G.C. should be authorised to select, for intensive development, one college in every district. The selection should be made on the basis of the largest potential for growth. A definite blue-print should be prepared of what such a good college should be

and these selected institutions should be assisted, through recurring and non-recurring grants, to be developed into good institutions which will not fall below a minimum standard and which will ever try to raise their standards higher. The expenditure needed for this programme may be shared between the U.G.C. and the State Governments on an agreed basis. This programme will obviously come as a great relief to the State Governments. It will save them considerable expenditure and yet meet an important need of the present educational situation in their own areas.

(2) Postgraduate Stage: At present, the post-graduate stage is limited in capacity, and its qualitative standards leave much to be desired. It is at the post-graduate stage that we create an elite which is not only national but of an international character. It is also the persons coming out of the post-graduate stage that will ultimately determine the standards at the other stages of education, in administration and in all walks of life. The need for expanding the post-graduate stage and of maintaining the highest standards therein is, therefore, paramount. It would, therefore, be very desirable, in the fourth Plan, to place a much larger grant at the disposal of the U.G.C. than in the second or the third plan and to authorise it to assist the development of post-graduate education, without expecting any matching funds, either from the Universities or the State Governments. The State Governments may be consulted in these programmes because they will have to bear the committed expenditure at the end of the Plan period. But this will not present any difficulty and the decision to expand and improve post-graduate education,

at the entire cost of the Centre, will come as a great relief to the strained finances of the State Governments.

(3) Centres of Advanced Study: The programme of establishing Centres of Advanced Study which has been started by the U.G.C. is of very great significance. It has to be continued and expanded. It would, therefore, be desirable to take a decision, once and for all, that all expenditure on the Centres of Advanced Study, both developmental and committed, shall continue to be borne by the Centre, through the U.G.C., on a 100 per cent basis. In other words, the financial basis of all the Centres of Advanced Study will be the same as that of the Central Universities. This is the only way in which to maintain a continuity and quality in the programme.

(4) Assistance to State Universities: At the moment, the U.G.C. gives grants for committed expenditure only to four Central Universities. It is necessary to extend this principle to selected Departments of State Universities also. The U.G.C. should have an authority to select Departments of State Universities where the best potential for development exists and to assist them, on a continuing and a 100 percent basis, for all their expenditure. This will secure qualitative improvement and lessen the burden on the State Governments to a corresponding extent.

(5) Colleges of Education: The training of teachers for secondary and elementary schools is of the highest significance. At present, due merely to lack of finances, the U.G.C. is doing very little to help the Colleges of Education to grow. It would be a very great service to education if the necessary funds are placed at the disposal of the U.G.C. in order to enable it to develop a programme of qualitative improvement of University Departments of Education or selected constituent and affiliated training colleges. The details of a programme, which may be

developed for this purpose, are given in Annexure VI.

(6) Scholarships in Higher Education: One interesting development of the post-independence period is the large programme of scholarships at the post-matriculation stage which has been developed by the Government of India. This began in a humble way with the grant of a few scholarships to the students of Scheduled Castes and Scheduled Tribes at the university stage. It has since developed into a very big programme under which a scholarship is given to every student of the scheduled castes and scheduled tribes at the university stage and more than 60,000 scholarships are awarded every year. In addition, the Government of India introduced, in the Third Plan, a scheme of national scholarships, under which about 2400 scholarships are awarded annually to deserving students and a scheme of loan scholarships, estimated to cost Rs. 9 crores in the Plan period, under which 18,000 loan scholarships are awarded to deserving students every year. There is also a small scheme under which scholarships are given, at the university stage, to deserving children of primary and secondary school teachers. As compared with this large scale programme of scholarships at the university stage operated upon by the Government of India, the number and amount of scholarships given by the State Governments at the same stage appear to be insignificant. It is, therefore, suggested that it would be better to have a fairly clear-cut division of responsibility in so far as scholarships are concerned: the Government of India may assume total and direct responsibility for grant of scholarships at the university stage and the responsibility of the State Governments may be restricted to the grant of scholarships at the elementary and secondary stages only.

The Government of India has already assumed direct responsibility for certain significant educational programmes,

such as (1) cultural relations with other countries, (2) programme of exchange scholarships with other countries; (3) development of Hindi and Sanskrit, (4) development of other Indian languages, and (5) development of research. The Central sector will expand as these programmes develop in depth and extent.

8. Secondary Education: In the field of higher education, the Central sector can easily be expanded through the UGC which is a statutory, autonomous organisation already established and which has been able to secure the goodwill of all concerned, through its programmes developed during the last 8 years. In secondary education, however, there is no such organisation. The Central Board of Secondary Education, which has been established recently, is doing a useful job and may help in developing standards in secondary education by affiliating good secondary schools in all parts of the country. The scheme of Central Schools for the Central Government employees, which has been recently initiated and which is proposed to be expanded largely in the near future, will also create a network of good secondary schools which might assist in raising standards all-round. But what is needed is a larger programme than either of these. The following proposals are, therefore, made from this point of view:

(1) A Secondary Grants Commission may be established, on the lines of the University Grants Commission, for qualitative improvement of secondary education. It should be authorised to select secondary schools and to assist them to raise their standards through grant-in-aid for recurring and capital expenditure. The immediate attempt in the fourth Plan should be to select one secondary school in each Community Development Block and to help it to raise itself to a certain minimum standard. The entire expenditure on this programme, both capital and recurring, may be shared

by the Centre and the States on an agreed basis.

(2) National Council of Educational Research and Training: This is a Central Organization whose objective is to improve standards of school education. Its programmes and activities may be considerably expanded in the Fourth Five Year Plan.

(3) Vocational Education: A major weakness of our system of secondary education is the failure to diversify it adequately and to introduce vocational courses which will prepare students for different walks of life rather than for entrance to universities. Of the total enrolment at the secondary stage, only about 12 per cent is in courses of vocational education. In advanced countries, the vast bulk of students at the secondary stage study in vocational courses. In Germany, for instance, the secondary students taking vocational courses form about 70 per cent of the total enrolment and in Japan, about 60 per cent. The proportion of students at the secondary stage taking vocational courses in India is probably the lowest in the world. For the next three plans, therefore, it is absolutely essential to emphasize the expansion of vocational courses at the secondary stage. It is, therefore, proposed that it would be a very good financial policy for the Government of India to offer grants-in-aid, to State Governments, for the introduction of vocational courses. The grants offered should be fairly liberal and about 3/4th of the expenditure - both recurring and capital - may be shared by the Government of India. This will be in keeping with the policy adopted in U.S.A. where federal grants are available for providing vocational education in secondary schools.

9. Elementary Education: So far as elementary education is concerned, there is hardly any need for direct Central action.

10. Expansion of the Centrally-sponsored Sector: The second proposal, namely, to expand the Centrally-sponsored Sector has a slightly different purpose to serve. There is no intention here of developing any programmes under the direct control of the Centre. On the other hand, the essential objective is to identify some crucial programmes which fall within the responsibilities of the States and place earmarked funds at their disposal with a view to enabling them to do justice to these programmes, especially because they generally tend to suffer in the ordinary course of events. The suggestion, in short, is that educational programmes which have a seed value, a multiplying effect, or a very high potential for qualitative improvement should be identified and placed in the Centrally-sponsored Sector.

11. An important question to be decided in this context is to identify programmes which can be included in the Centrally-sponsored Sector. In so far as higher education is concerned, it may not be necessary to include any scheme in the Centrally-sponsored sector. On the other hand, the policy with regard to the financing of higher education should be to divide the programme into two sectors only - the Central and the State - and to enlarge the Central sector to cover a group of significant programmes as suggested above in paragraph 7. The concept of the Centrally-sponsored sector would, therefore, be applicable only in respect of secondary and elementary education. In this field, the following programmes may be suggested for inclusion in the Centrally-sponsored sector:-

- (i) Training of teachers of elementary and secondary schools;
- (ii) Strengthening the teaching of Science at the school stage;

- (iii) Strengthening the teaching of English;
- (iv) Introduction of productive work or teaching of crafts in elementary and secondary schools;
- (v) Introduction of new ideas and programmes such as vocational guidance, examination reform, etc.;
- (vi) Programmes of physical education and school health services (including school meals); and
- (vii) Production of educational literature for children and teachers.

12. One important administrative issue will arise in this context; how are the funds provided by the Government of India in the Centrally sponsored sector to be distributed among the different States? The ideal solution would of course be to ascertain the needs of the programmes included in the centrally-sponsored sector separately in each State for the Plan period and to make the entire amount thus determined available to the States. This formula may not, however, work in practice because the total needs of the States for the centrally sponsored schemes would be much larger than any funds which the Government of India may be able to provide in the centrally sponsored sector. Some alternative methods would, therefore, have to be found. One suggestion would be that, of the total funds available in the centrally sponsored sector, 20 per cent should be set aside for special assistance to the less advanced States and the remaining 80 per cent should be distributed among all the States on some equitable basis, such as the total population or enrolment in schools. Alternatively, we may make grants available to the different States on the basis of their needs and their capacity to spend the amount usefully. It is obvious, however, that the problem will not be very difficult of solution and that it would be possible

for the Government of India to find out some equitable basis for distribution of grants-in-aid under the centrally sponsored sector.

13. Elementary Education: Elementary Education will continue to be essentially a responsibility of the States and it may not be possible to solve the problems to be faced at this stage by an expansion of the central or the centrally sponsored sectors. The best solution of the problem would, therefore, be to accept the first proposal made above in paragraph 3 and to institute a separate grant for elementary education. This should cover all expenditure on elementary education.- both committed and developmental and be given on the basis of equalisation. The problem is rather complicated and is, therefore, dealt with in a separate paper.*

14. The main objection that may be raised against these proposals is that they increase considerably the financial liability of the Government of India which will now have to find the finances for (1) a very large and expanded central sector, (2) a considerably expanded centrally sponsored sector and (3) an ear-marked specific purpose grant for elementary education to cover all expenditure -both developmental and committed. It may be stated that this is precisely the objective of these proposals. A large increase in the investment on education is needed in the Fourth and the subsequent plans. In the present financial situation, it is obvious that the bulk of this additional investment will have to come from the Government of India. The Kher Committee recommended that the Government of India should spend about 10 per cent of its total budget on education and that the State Governments should spend about 20 per cent of their budgets on education. In so far as this target is concerned, the State Governments, taken together, have risen to the occasion; and, in the

* Financing of Elementary Education in India, by J.P.Naik and E.S. Lawler.

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State sector, the total public expenditure on education is about 20 percent of the total revenues of the State Governments. It is true that there is still some scope for expansion, in the sense that not every State Government is spending 20 per cent of its budget on education. But the scope is comparatively limited. On the other hand, the Government of India is now spending only about 3 per cent of its budget on education as against a target of 10 per cent recommended by the Kher Committee. It is, therefore, obvious that a much greater effort has to be made by the Centre to finance the educational development in the Fourth and the subsequent plans. The above proposals are based on this fundamental assumption and they merely indicate the manner in which the additional resources which the Central Government would now be required to find may be channelised in the best interests of education and the country.

ANNEXURE I

PATTERN OF CENTRAL ASSISTANCE, DURING THE
FIRST FIVE YEAR PLAN, FOR EDUCATIONAL SCHEMES
INCLUDED IN THE STATE PLANS.

.....

| <u>Scheme</u> | <u>Year</u> | <u>Ratio of Central Assistance</u> (Recurring) | | |
|--|--------------------|--|----------------------------------|-----|
| Propagation of Hindi | 1954-55 | 66% of approved expenditure on approved schemes. | | |
| | 1955-56 | 66% of approved expenditure on new approved schemes and also the schemes for which central assistance was sanctioned in the year 1954-55 but were not started in that year. 50% of those schemes which were started in 1954-55. | | |
| <u>Elementary (including Basic Education).</u> | | <u>Recurring Expenditure</u> | <u>Non-Recurring Expenditure</u> | |
| (i) Post-graduate basic training colleges. | 1952-53 1953-54 | 60% | 66% | |
| (ii) Basic Training Colleges | 1954-55 | 50% | 66% | |
| (iii) Community Centres | } | | | |
| (iv) Integrated Library Service | | | | |
| (v) Janta Colleges | | 1955-56 | 33 $\frac{1}{3}$ % | 66% |
| (vi) Improvement of Primary Schools | | | | |
| (vii) Pre-primary schools | 1952-53 | 60% | 66% | |
| (viii) Urban Basic Schools | 1953-54 | | | |
| | 1954-55 | 50% | " | |
| | 1955-56 | 33 $\frac{1}{3}$ % | " | |
| <u>Secondary Education</u> | | | | |
| Development of Schools | | | | |
| (i) Cum-Community Centres | 1952-53 1953-54 | 60% | 66% | |
| (ii) Improvement of secondary schools | 1954-55 | 50% | " | |
| (iii) Improvement of Library Service | 1955-56 | 33 $\frac{1}{3}$ % | " | |
| <u>Social Education</u> | | | | |
| (i) Training of Social Education workers | 1952-53 | 60% | 66% | |
| | 1953-54 | | | |
| | 1954-55 | 50% | " | |
| | 1955-56 | 33 $\frac{1}{3}$ % | " | |
| (ii) Appointment of District Social Education Organisers | 1955-56 | 50% | 50% | |
| (iii) Production of Literature | 1955-56 | 50% | 50% | |
| (iv) Educational unemployed relief scheme. | 1953-54 | 75% | 75% | |
| | 1954-55 | 50% | 50% | |
| | 1955-56 | 25% | 25% | |

Pattern of Central Assistance on
State Schemes in the Second Five
Year Plan

| <u>Scheme</u> | <u>Pattern of Assistance (Percentage)</u> |
|--|---|
| <u>Elementary Education</u> | |
| (i) Pre-primary Education | 50 |
| (ii) Education of Girls - (a) Basic Schools (b) Non-Basic Schools | 60 |
| (iii) Basic Education (including Training of Basic Teachers) | 60 |
| (iv) Improvement of Salaries of Primary School Teachers | 50 |
| (v) Relief to Educated Unemployed and Expansion of Primary Education | 100 |
| (vi) Additional Inspectorate | 50 |
| (vii) Staff Quarters for Teachers | 50 |
| (viii) Other Schemes (except Scholarships, Administrative Staff/Buildings) | 50 |
| <u>Secondary Education</u> | |
| (i) Conversion of High Schools into Multipurpose Higher Secondary Schools | 60 |
| (ii) Conversion of High Schools into Higher Secondary Schools | 60 |
| (iii) Training of Teachers for Multipurpose Higher secondary Schools. | 60 |
| (iv) Improvement of Teaching Facilities in existing Secondary Schools (non-Recurring only) | 50 |
| (v) Improvement of Teaching Science in existing Secondary Schools (Non-Recurring only) | 50 |
| (vi) Improvement of Libraries (Non-Recurring only) | 50 |
| (vii) Improvement of Salaries of Secondary School Teachers | 50 |
| (viii) Additional Inspectorate | 50 |
| (ix) Staff Quarters for Teachers | 50 |
| (x) Educational and Vocational Guidance Bureaux | 50 |

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| <u>Scheme</u> | <u>Pattern of Assistance</u> (Percentage) |
|---|--|
| (xi) Seminars for Teachers and Inspectors | 50 |
| (xii) Other Schemes (except Scholarships), Public Schools and Administrative Staff/Buildings) | 50 |
| <u>University Education</u> | |
| Women's Education | 50 |
| <u>Social Education</u> | |
| (i) State, District, Branch and Children's Libraries | 50 |
| (ii) Appointment of District Social Education Organisers | 50 |
| (iii) Janta Colleges | 50 |
| (iv) Other Schemes (except schemes covered under the programmes of the Ministry of Community Development) | 50 |
| <u>Audio-Visual Education</u> | |
| Audio-Visual Education Schemes | 50 |
| <u>Education of the Handicapped</u> | |
| Schemes for the Education of the Handicapped | 50 |
| <u>Promotion of Hindi</u> | |
| Schemes for the Promotion of Hindi | 60 |
| <u>Miscellaneous</u> | |
| Planning and Statistical Units | 60 |

ANNEXURE III

Pattern of Central Assistance on Central Sponsored Schemes Implemented Through the State Governments During the Second Five Year Plan

| <u>Scheme</u> | <u>Pattern of Assistance (Percentage)</u> |
|--|--|
| <u>Elementary Education</u> | |
| (i) Expansion of Girls' Education and Training of Women Teachers | 75 |
| (ii) Post-Basic Schools | 100 (Assistance is also given to Voluntary Organisations on 60% basis) |
| (iii) Organisation of Literary Workshops for the production of Literature for Children | 100 |
| (iv) Travel Concession to Elementary Schools Teachers | 100 |
| (v) Pilot project for improved Science Teaching in Elementary Schools | 100 |
| (vi) Teacher's Training Facilities for Implementing Scheme on Free & Compulsory Education During the Third plan. | 100 |
| (vii) Educational Survey | 66 2/3 (The scheme has since been completed) |
| <u>Secondary Education</u> | |
| Introduction of Agricultural and Science Courses | 60 (The scheme has been dropped with effect from 1959-60) |
| <u>University and Higher Education</u> | |
| (i) Improvement and development of Educational Institutions at Collegiate Level (Three-Year Degree course) | 50 (Assistance is also given to Universities) |
| (ii) Rural Institutes | 75 N.R. (Assistance is given to Voluntary Organisations) |
| <u>Physical Education and Youth Welfare Activities</u> | |
| (i) Physical Education Training Colleges | 100 (Assistance is also given to Voluntary Organisations on 75 per cent basis) |
| (ii) National Physical Efficiency Drive | 50 |
| (iii) Seminars on Physical Education | 50 |

| <u>Scheme</u> | <u>Pattern of Assistance</u> (Percentage) |
|---|--|
| (iv) Grants to Vyayamshalas | 75 (Subject to a maximum of Rs. 2,500/-) |
| (v) Stadia and guest Houses | 50 (Assistance is also given to Voluntary Organisations) |
| (vi) Labour and Social Service Camps | 100 (Assistance is also given to Voluntary Organisations) |
| (vii) Campus Work Projects | 75 (Voluntary Organisations are also entitled to assistance. Under the scheme assistance is given on the actual cost of these projects without taking into consideration the cost of land and that of skilled and un-skilled labour rendered by students & teachers and subject to the ceiling prescribed for the different types of projects detailed below: (a) Swimming Pool Rs.30,000 (b) Open Air Theatre Rs.15,000 (c) Small Stadium Rs.25,000 (d) Pavilion Rs.10,000 (e) Recreation Hall Cum-Auditorium Rs.35,000 (f) Gymnasium Rs.25,000 (g) Prepration of 400 Metres Oval Cinder Track Rs.10,000 |
| (viii) Development of Sports and Games - Acquisition of Play Fields | 100 (Subject to a maximum of Rs.5,000) |
| (ix) Youth Hostels | 100 (Subject to a maximum of Rs.40,000 per Hostel) |
| (x) Student's Tour | 100 Third class railway/Bus fare at students concessional rates) |
| (xi) Non-Student Youth Clubs | 50 (Subject to a maximum of Rs.5,000) |

Social Education

Organisation of Literary Workshops for the Production of Literature for Neo-Literates 100

Promotion of Hindi and Sanskrit

Appointment of Hindi Teachers 60

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ANNEXURE IV

List of Centrally Sponsored Schemes
Proposed to be included in the Third
Five Year Plan.

- | <u>Sl.No.</u> | <u>Scheme</u> |
|---------------|--|
| A. | <u>Elementary and Basic Education</u> |
| 1. | Pilot Project for the Intensive Development of Primary Education in selected Areas |
| B. | <u>Secondary Education</u> |
| 2. | Examination Reform-- Setting up of State Evaluation Units. |
| 3. | Educational and Vocational Guidance Programme for States. |
| 4. | Strengthening of Multi-purpose schools |
| 5. | Loans and Grants for the Construction of Hostels. |
| C. | <u>University and Higher Education</u> |
| 6. | *Rural Higher Education |
| D. | <u>Physical Education, Sports and Youth Welfare Activities</u> |
| 7. | National Physical Efficiency Drive |
| 8. | Implementation of Syllabuses of Physical Education and Health Education. |
| 9. | *Youth Hostels |
| 10. | *Youth Welfare Boards and Committees |
| 11. | Non-Student Youth Clubs and Centres |
| 12. | Holiday Camps |
| 13. | Camp Sites |
| 14. | Children's Museums |
| 15. | Student's Tours |
| 16. | Assistance for Construction of Stadia and Utility Stadia |
| 17. | *Labour and Social Service Camps |
| 18. | *Campus Work Projects |
| E. | <u>Development and propagation of Hindi and Sanskrit</u> |
| 19. | Appointment of Hindi Teachers |
| 20. | Grants to Non-Hindi Speaking States for Propagation of Hindi |

*Grants under the scheme are given to Voluntary Organisations also.

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Sl.No.

Scheme

Hindi (Contd)

21. Revision of Pay Scales of Hindi Teachers

Sanskrit

22. Grants to State Governments

23. Providing facilities for the Teaching of
Sanskrit in Secondary Schools.

F. Education of the Handicapped

24. Establishment of the Training Centre for
the Adult Deaf

25. Establishment of Special Employment Offices
for the Physically Handicapped

G. Evaluation, Research and Publication

26. Establishment of Evaluation and Research
Bureaux in the States.

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ANNEXURE V

PATTERN OF CENTRAL ASSISTANCE FOR SCHEMES
INCLUDED IN STATE PLANS IN THE THIRD FIVE
YEAR PLAN

| <u>Schemes</u> | <u>Pattern of Assistance</u> |
|---|------------------------------|
| 1. Special Schemes relating to Girls education | Grant - 100% |
| 2. Teachers' training | Grant - 100% |
| 3. Appointment of Additional Teachers for primary schools. | Grant - 50% |
| 4. Conversion of high schools into higher secondary schools | Grant - 50% |
| 5. Improvement of science teaching in secondary schools. | Grant - 75% |
| 6. Scholarships for Primary and secondary school students | Grant - 75% |
| 7. Improvement in emolument of teachers | Grant - 50% |

.....
.....

Programme for the Improvement of University
Departments of Education and Selected consti-
tuent and affiliated Training Colleges.

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The original idea in establishing University Departments of Education was that they should become centres of research and assist the country in solving its complex and difficult educational problems. For several reasons, this development has not yet taken place and most University Departments of Education concentrate all their energies on the training teachers for secondary schools. It is necessary to improve this situation and to develop University Departments of Education (and where these do not exist, selected constituent or affiliated colleges) into really high-level and progressive institutions.

2. The following programme of action is suggested for this purpose:-

- (1) About 20 University Departments of Education, one in each State and more than one in the bigger States or in places where there is a good promise of potential growth, should be selected for intensive development.
- (2) In each department, adequate provision should be made for building up a strong programme of research and post-graduate teaching.
- (3) Steps should also be taken to develop a composite programme for the training of teachers - both for the elementary and secondary stages - by opening sections for the training of elementary teachers and establishing experimental elementary schools.
- (4) Where conditions are favourable, integrated courses or general and professional education should be organised for secondary teachers, on the lines of the courses

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being developed in the Regional Colleges of Education, by the collaborative effort of the different Faculties of the Universities in Arts and Sciences.

(5) These selected Departments would also organise correspondence courses for the in-service education of teachers.

(6) The programme will need a considerable amount of recurring and capital expenditure and can be operated through the University Grants Commission if adequate funds are placed at its disposal. The details of the costs involved can be worked out only at a later stage after the institutions to be developed are tentatively selected and some outline of their possible development has been determined.

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Item: 10
Supp. Agenda
3rd Meeting

Education Commission
Govt. of India

Subject: Visit to Rajasthan

Chairman(E.C.) and the Member-Secretary had a discussion with Shri V.D. Sharma, Education Secretary, Rajasthan, regarding a tentative programme of visit to Rajasthan State. The following is the gist of the decisions reached:-

1. The best time to pay a visit to Rajasthan will be in the earlier half of January say from 11th to 16th January with a view to avoiding a conflict with the Indian Science Congress which is being held at Calcutta and the A.I.C.C. which is being held at Guntur.

2. The Commission will have to spend full six days in Rajasthan.

3. The Commission should spend three days at Jaipur; but before coming to Jaipur the Commission should visit different places in the State for about three days. The following would be an outline of the programme:-

(a) The Commission should divide itself into five parties which should visit the following groups of places separately:-

Group I

- (i) Bikaner
- (ii) Sangaria
- (iii) Sardarshahr

Group II

Jodhpur .

Group III

- (i) Jaipur
- (ii) Banasthali
- (iii) Shivdaspura
- (iv) Certain selected institutions in Jaipur proper

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Group IV

- (i) Ajmer
- (ii) Hataundi

Group V

- (i) Udaipur
- (ii) Dabok
- (iii) Chitoorgarh

(b) It is suggested that the Commission may begin these visits on Monday, the 11th of January, or, if necessary, even a little earlier. Each of the five groups mentioned above will complete their visits and tour programme in such a way that they will all gather together at Jaipur on the evening of Wednesday, the 13th of January. A list of institutions to be visited is enclosed (Annexure I).

4. For the last three days of the week, namely Thursday, Friday and Saturday (14th, 15th and 16th of January) the Commission will remain at Jaipur.

5. At Jaipur, the programme of the Commission may include the following:-

- (i) Discussion with the Chief Minister.
- (ii) Discussion with the Education Minister and the officers of the Education Department.
- (iii) Discussion with the Vice-Chancellors.
- (iv) A visit to the Rajasthan University.
- (v) Discussions with a number of separate groups such as (a) university teachers; (b) secondary teachers; (c) primary teachers; (d) non-officials, including members of the legislature and representatives of the Panchayat Samitis;
- (vi) Discussion with students;
- (vii) Discussions with Principals of Training Institutions;
- (viii) Interview with the Governor; and
- (ix) One At Home to be arranged by the Rajasthan Government.

6. While at Jaipur, the Commission will also hold its own meetings at some convenient time.

7. All Members of the Commission will stay together for convenience. It is also requested that no individual member of the Commission should accept any personal engagement so as to conflict with the public engagements of the Commission as a whole.

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ANNEXURE I

List of Institutions to be visited in Rajasthan

Group I

1. Bikaner

1. Postgraduate College
2. Maharani Girls' College
3. Teachers' Training College
4. Sardar Patel Memorial Medical College
5. Rajasthani Shodh Sahitya Centre
6. School for Blind
7. Sanskrit College
8. Directorate of Education
9. Some private and aided educational institutions.

2. Sangaria

1. Swami Keshavanad (ex-M.P.) is the founder of many institutions in this small village.

3. Sardar Shahar

1. Government Degree College
2. Teachers Training College
3. Ayurvedic College
4. High School
5. Multi-purpose School
6. Dairy
7. Sanskrit School.

Group II

1. Jodhpur

1. Jodhpur University
2. Mahesh Teachers' Training College
3. Balmandir
4. Oriental Research Institute
5. Desert Afforestation Centre.

Group III

1. Jaipur

1. Rajasthan University
2. M.G.D. School (Public School for Girls)

3. St. Xavier's School
4. Balmandir
5. Government Girls Higher Secondary School
6. Potdar Multipurpose Higher Secondary School (Boys)
7. Regional College of Engineering
8. Sanskrit College
9. S.M.S. Medical College
10. Deaf and Dumb School
11. State Board of Nationalised Textbooks.

Group IV

1. Ajmer

1. Postgraduate Government College
2. Mayo College
3. Savitri Girls' College
4. Regional College of Education
5. D.A.V. College (PG)
6. Government Training College
7. Government Higher Secondary School
8. Government Girls' Higher Secondary School
9. Deaf/Dumb and Blind School
10. Rajasthan Board of Secondary Education.

2. Hatundi

1. Girls Higher Secondary School
2. Girls Training School.

Group V

1. Udaipur

1. Udaipur University
2. Rajasthan Agricultural College
3. Maharaja Bhupat College
4. Girls' College
5. Rajasthan Mahila Vidyalaya
6. Shramjivi College (Engineering College)
7. Vidya Bhawan and its institutions
8. Tribal Welfare Training Centre
9. Saraswati Bhavan Library
10. Rabindranath Memorial Medical College.

2. Chittorgarh

1. Government College
2. Sainik School
3. Gurukul Brahmacharya Ashram
4. Girls' High School
5. Government Multi-purpose Higher Secondary School.

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Items IV & V

EDUCATION COMMISSION
GOVERNMENT OF INDIA

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1. Appointment of Consultants:

The following note has been received from the Union Education Minister:

"Dr. Mulk Raj Anand suggests that Sir Herbert Road, Institute of Contemporary Art, Dover Street, London, might be consulted by the Commission regarding art education. The suggestion is worth considering."

The matter is placed before the Commission for consideration.

2. The following directive issued by the Ministry of Education to the National Council of Educational Research and Training is placed before the Commission for information:

"It has been decided that the National Council of Educational Research and Training should afford full assistance to the Education Commission in the preparation of studies, surveys and research projects. The Commission has set up a number of task forces dealing with different important aspects of Education. These task forces will be drawing upon the specialized knowledge of the various agencies associated with the Ministry and the State Governments, especially the N.C.E.R.T. I have authorized the Member-Secretary of the Commission, Shri J.P. Naik, to transmit the requests of the Commission for any technical assignments coming within the scope of the Council's work to the Joint Director who will kindly make necessary arrangement for assisting the Commission. The Commission's work has high priority and these studies and surveys will also fall into the normal programmes of the Council and its various departments."

J.P. Naik
Member Secretary
8.11.1964

Item VI
Second Supp. Agenda
for IIIrd Meeting

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NOTE ON THE EDUCATIONAL PATTERN IN THE MADRAS STATE

APPENDIX V.

A Note on the three-language formula in Secondary Schools.

1. The Secondary Education Commission(1953) made the following recommendations in regard to the study of languages in secondary schools:-

(i) Mother-tongue or the regional language should generally be the medium of instruction throughout the secondary school stage subject to the provision of facilities for linguistic minorities.

(ii) During the middle school stage, every child should be taught at least two languages. English and Hindi should be introduced at the end of the Junior Basic stage, subject to the principle that no two languages should be introduced in the same year.

(iii) At the High and Higher Secondary stage, at least two languages should be studied, one of which being the mother-tongue or the regional language.

2. In 1956 the Central Advisory Board of Education recommended that three languages should be taught at the secondary stage. The Board suggested two formulas. The second of the two, which it appears, was supported by most of the State, is reproduced below:-

(a) (i) Mother-tongue, or

(ii) regional language; or

(iii) a composite course of mother-tongue and a regional language; or

(iv) a composite course of mother-tongue and a classical language;

(v) a composite course of regional language and classical language;

(b) English or a modern European language.

(c) Hindi (for non-Hindi speaking areas) or another modern Indian language (for Hindi speaking areas).

3. However, in this State, the study of three languages had been provided for even much earlier under the reorganised scheme of Secondary Education of 1948. In 1950, it was ordered that henceforth provision should be made for the study of languages in secondary schools as shown below:-

(i) First language. - The mother-tongue or the regional language consisting of two parts (Parts I and II) of which the study of Part I was compulsory. Students were allowed to choose either Part II of the mother tongue or regional language or a classical or any other Indian language instead.

(ii) Second language. - English - Compulsory.

(iii) Third language. - Hindi - Optional.

Those who did not choose Hindi were allowed to learn an additional craft or occupy themselves during the period allotted for the study of that language in any other approved activity.

The above changes were introduced from the school year 1950-51 commencing from Form I and given effect to progressively every year up to Form VI.

4. Languages in schools became a prominent and controversial issue with the constitution of the Official Language Commission and publication of its report. It was no part of the terms of reference of the Official Language Commission that it should examine the question of language in schools and colleges. As, however, all aspects of the language problem are interconnected, the Commission found it necessary not only to examine these aspects but also formulate specific conclusions thereon. The relevant conclusions (as distinct from recommendations) of the Commission so far as schools were concerned were as below:-

I. The educational system must be reorientated to achieve the imparting of sufficient literacy in the Hindi language by the age limit of 14 years.

The study of Hindi should extend for a minimum of three or four years before attaining the 14 years of age.

The instruction in the Hindi language should commence roughly at the close of the primary stage and continue up to the S.S.L.C. stage.

Instruction in Hindi should be compulsory at the secondary stage all over the country. The decision as to when compulsion should be introduced was left to the State Government concerned.

II. The study of English was necessary in the Secondary Education stage. English should be taught principally as a language of comprehension and not as a literary language and might be commenced in the secondary school stage of about five years of pre-S.S.L.C.

The Commission realised that as result of its conclusions, the pupils in Hindi-speaking States would have to study two languages and the pupils in non-Hindi speaking States would have to study three languages. It had before it a suggestion that there should be 'compensatory compulsion' to the students in Hindi-speaking areas in secondary schools to learn another Indian language (a South Indian language). The Commission examined this suggestion and negatived it.

5. The Government of Madras did not agree with the two proposals made by the Commission, viz. (i) that instruction in Hindi should be compulsory at the secondary stage and (ii) that the study of Hindi should commence earlier than the study of English. Their views crystallised in the recommendation of the Legislature Committee on White Paper on Education (1956) which suggested the following three-language formula for secondary schools. This formula was accepted by Government and implemented

from 1959. According to this formula all languages were grouped together as one subject with three Parts:-

Part I - Regional language or mother-tongue when it is different from the Regional language.

Part II - Hindi or any other Indian language not included in Part I.

Part III - English or any other non-Indian language.

(The formula was designed so as not to 'impose' either Hindi or English on any pupil).

A pupil taking the academic course in high schools has to study three languages, one under each part. A pupil taking the diversified courses has to study two languages, one under each of Parts I and III.

Linguistic minorities who study their mother tongue under Part I can, if they want, study the regional language under Part II.

6. A Committee consisting of members of the Lok Sabha and Rajya Sabha was constituted in accordance with the provisions of the Constitution to examine the recommendations of the Official Language Commission and to report their opinion thereon to the President. The Committee submitted its report to the President in February 1959 and the Presidential directions on the Report of the Committee were passed in April 1960. The Parliamentary Committee drew a sharp distinction between 'recommendations' and 'conclusions' of the Official Language Commission. The 'recommendations' of the Commission related to "Official Language" which alone constituted the term of reference to the Commission and the Committee. The 'conclusions' of the Commission related to other aspects of the language problem of the country, such as the language formula for schools, which fell outside the terms of reference to the Commission and the Committee. The Parliamentary

Committee decided neither to discuss nor to express any opinion on these latter 'conclusions'. The Presidential Directive was also silent about the language issue in schools. Thus the Madras Government found themselves free to continue to give effect to the policy as settled by them already on the basis of the recommendation of the Legislature Committee on White Paper on Education.

7. During 1961, the language issue again came into prominence with the deliberations of the Committee on National Integration and the meetings of Chief Ministers and Central Ministers. The meeting of the Chief Ministers and the Central Ministers held during 1961 agreed that the three-language formula should be simplified and the language subjects for teaching at the secondary stage of education should be as below. For facility of comparison the existing formula in this State and the one recommended by the Chief Ministers' Conference are presented in the table below:-

| Existing State formula | Formula adopted by the Chief Ministers' Conference |
|--|--|
| I. Regional language or mother tongue when the latter is different from regional language. | Regional language and mother tongue when the latter is different from the regional language. |
| II. Hindi or any other Indian language not included in Part I. | Hindi, or in Hindi speaking areas, another Indian language. |
| III. English or any other non-Indian language. | English or any other modern European language. |

8. In April 1962, the Union Education Minister addressed a D.O. letter to all State Education Ministers enquiring whether they had experienced any difficulty in implementing the Chief Ministers' formula. Extracts from the reply sent by this Government in May 1962 are reproduced below:-

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"You will appreciate that in essence the formula recommended by the Chief Ministers' Conference and the one followed in this State are the same, with one important exception. Under the Chief Ministers' formula the study of Hindi is compulsory whereas it is optional under our system. We have made it clear to the Government of India on previous occasions that the State Government cannot agree to the compulsory study of Hindi at any stage and that the cause of Hindi in States like Madras can be best promoted by making the study of it optional in schools. This policy has paid rich dividends. You will be glad to know that of about 54,000 students who have appeared for the Secondary School-Leaving Certificate Examination in March 1962, about 80 per cent have offered Hindi under Part II of the language scheme.

I may also bring to your notice that the formula recommended by the Chief Ministers' Conference places the linguistic minorities at a disadvantage as they are obliged to learn in effect four languages. Our State formula will not place them under this handicap. We have carefully reviewed the position in the light of the recommendations made by the Chief Ministers' Conference and come to the conclusion that the existing formula followed by the State Government is the best in the circumstances and that it does not need any change."

9. The measures that should be taken to expedite the implementation of the three language formula came up for consideration in the State Education Ministers' Conference held in October 1962. The Conference decided that a Committee should be set up to make a detailed examination of the recommendations and authorized the Union Education Minister to nominate members on the Committee.

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10. The three- language formula came up at the meeting of the Southern Zonal Council held in Kanyakumari on 30th December 1962. It was decided to postpone the consideration of the question to the next meeting of the Zonal Council by which time the report of the Committee set up by the Education Ministers' Conference was expected to be available.

11. Recently Government announced their decision that public examination need not be conducted in the languages under Part II of the language Scheme with effect from the S.S.L.C. Examination of March 1963 since there is no prescribed minimum marks for this examination and the marks do not count for eligibility to college courses.

12. A statement showing the implementation of the three language formula by different States and Union territories is appended, for information.

APPENDIX

STATEMENT SHOWING THE POSITION OF INTRODUCTION OF THE THREE LANGUAGE FORMULA BY DIFFERENT STATES AND UNION TERRITORIES.

1. Andhra Pradesh. - (a) Telugu or a composite course of mother tongue and Telugu.

(b) Hindi.

(c) English.

2. Assam. - (a) Vernacular (Mother tongue). English and Hindi are compulsory from Class IV to Class VIII.

(b) Classical subjects are compulsory in Classes VII and VIII.

(c) In Matric class (i.e. IX and X) Vernacular and English are compulsory and classical subjects optional.

(d) In the Higher Secondary Schools of four years' course from Class VIII to Class XI English and Vernacular are compulsory throughout. Hindi is compulsory up to Class X.

3. Bihar. - Every student is required to read English, Hindi and his mother tongue. The Hindi-speaking students are required to read another Indian language.

4. Gujarat. - (a) Gujarati and mother tongue if it is different from Gujarati.

(b) Hindi.

(c) English.

5. Jammu and Kashmir. - Instruction in the schools is provided in Urdu and Hindi and English taught in the secondary stage. Among other regional languages, Punjabi is also taught as an optional subject.

6. Kerala. - (a) First language -

Part I - Four periods per week
(Optional).

Under Part I.

A pupil can take any one of the following languages, namely. - Malayalam, Tamil, Kannada, Sanskrit, Arabic, Gujarati, Urdu, French or Syriac.

Under Part II.

A pupil can take any one of the following languages, namely. - Malayalam, Tamil, Kannada or Special English for English medium pupils.

NOTE . - In oriental schools, i.e., special schools for languages such as Sanskrit or Arabic, pupils will compulsorily take Sanskrit or Arabic under both parts.

(b) Second language - English - Six periods per week
(Compulsory).

(c) Third language - Hindi - Three periods per week
(Compulsory).

7. Madhya Pradesh. - The State Government has accepted the second three-language formula suggested by the Central Advisory Board of Education, namely:-

(a) (i) Mother tongue, (ii) or regional language, (iii) or a composite course of mother tongue and a regional language, (iv) or a composite course of mother tongue and classical language, (v) or a composite course of regional language and classical language.

(b) English or a modern European language.

(c) Hindi (for non-Hindi speaking areas) or another modern Indian language (for Hindi-speaking areas).

8. Madras. - (i) Regional language or mother tongue.

(ii) Hindi or any other Indian language not included in (i).

(iii) English or any other non-Indian language.

9. Maharashtra. - The State Government has adopted the following pattern:-

(i) Mother-tongue or Regional language.

(ii) English.

(iii) Hindi.

10. Mysore. - Three languages are being taught at the secondary stage already. The Government of Mysore propose to modify the existing three-language scheme on the lines of the decisions taken by the Chief Ministers' Conference.

11. Orissa. - (1) M.I.L. (Oriya, Hindi, Urdu, Telugu, Bengali) Higher Standard.

(2) English.

(3) (i) For students who take Oriya (Higher) Standard as M.I.L. -

(a) Sanskrit.

(b) Hindi (Lower Standard).

(ii) For students who take Hindi (Higher Standard) as M.I.L.:-

(a) Sanskrit.

(b) Oriya (Lower Standard).

(iii) For students who take languages other than Hindi or Oriya (Higher Standard) as M.I.L. -

(a) Hindi (Lower Standard) or Sanskrit or Persian.

(b) Oriya (Lower Standard).

12. Punjab. - (a) English.

(b) Hindi.

(c) Punjabi.

13. Rajasthan. - (a) Hindi and mother-tongue where that is different from Hindi.

(b) An Indian language (as mentioned in the Eighth Schedule) other than Hindi.

(c) English or any other modern European language.

14. Uttar Pradesh. - (a) The regional language and mother-tongue when the latter is different from the regional language.

(b) An Indian language (as mentioned in the Eighth Schedule of the Constitution).

(c) English or any other modern European language.

15. West Bengal. - (a) First language: - Mother tongue, which may be any recognised modern Indian language or English in Classes I to X or XI, as the case may be.

(b) Second language - English or, if English be the first language, Bengali - in Classes III to X or III to XI, as the case may be.

(c) Third language - (a) Hindi or, if Hindi be the first language, Bengali - in Classes VI and VII of all schools;

(b) any one of the following classical languages, namely:-

Sanskrit, Pali, Arabic, Persian, Latin or Greek -

(i) as a compulsory subject in Class VIII of all schools;

(ii) as a compulsory subject in Classes IX and X of High Schools; and

(iii) as one of the three compulsory elective subjects for the Humanities course and as an optional fourth elective

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subject for any other course of study - in Classes IX, X and XI of Higher Secondary Schools.

16. Andaman and Nicobar Islands. - For Classes IX and above as in West Bengal.

17. Delhi. - The three language formula has been introduced in the syllabus of the Multi-purpose Higher Secondary Schools in Delhi. A student of the Multi-purpose Higher Secondary School is required to take three languages on a compulsory basis according to the following formula:-

- (1) English.
- (2) Mother-tongue or regional language.
- (3) The third language other than the mother-tongue.

In this are included Hindi, Urdu, Bengali, Punjabi, Tamil, Sinhhi, Gujarati, Marathi and Telugu.

As regards introduction of the three language formula in the remaining Higher Secondary Schools, the matter is being taken up with the Central Board of Secondary Education which will conduct the Higher Secondary Schools of Delhi from the next year.

18. Himachal Pradesh. - (a) Hindi.

(b) English.

(c) Urdu.

19. L.M. and A. Islands. - They follow the practice in Kerala.

20. Manipur. - Manipuri, Hindi and English are being taught in schools. In Bengali and Hindi-medium schools, Bengali or Hindi, as the case may be, is taken in the place of Manipuri.

21. N.E.F.A. - (a) English.

(b) Hindi.

(c) Assamese.

22. Tripura. - The language pattern adopted for this Territory upto Class III of schools is-

(a) Regional language/mother-tongue (in case of some Tribals having a written language of their own).

(b) English.

(c) Hindi.

Class IX and above as in West Bengal.

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Third Meeting

ITEM VII

SECOND SUPPLEMENTARY AGENDA

THE UNIVERSITIES AND DEVELOPING COUNTRIES

CONVOCATION LECTURE, LEEDS, 1964

Prof. P.M.S. Blackett

If I had been giving this talk five years ago, I would have asserted that the problem of the poverty of the developing countries and their relation to the Rich Industrial countries was the second most vital problem in the world. The first was, of course, that of atomic weapons: would the rich, industrialised and relatively affluent nations destroy themselves and perhaps a large part of the rest of the world, because of inability to learn how two different political systems can live together? That this danger is now somewhat lessened as due to the general acceptance that neither the USA nor the USSR have the capability to knock out the nuclear striking force of the other without suffering catastrophic retaliation. On this real but slender balance of terror rests the present détente between the two giant powers. But the potential threat to man's very existence remains and will remain, until something better is found than the present balance of nuclear destructive power - this balance depends today on the rationality of men, which, alas, cannot always be assumed. With the world's arsenal of nuclear explosives of some 50 thousand million tons of TNT equivalent, the risk from real Dr. Strangeloves cannot be completely ignored. It is somewhat staggering to realise that to nuclear stockpile of the two giant powers amounts to nearly 20 tons of TNT for each of the 3000 million inhabitants of the globe. Of these, 1500 million live in great poverty in the developing countries, and it is of these that my talk is about. Now that we are enjoying a certain respite from the danger of mutual nuclear destruction, it is time that the rich and industrialised countries, both East and West, really got down to what is clearly Number one Problem today, that is the development of the now under-developed two-thirds of the world's population.

Though the figures have often been told, it is perhaps useful to repeat them. The 700 million people living in the rich industrialised countries - mainly Europe, North America, and the USSR - have an annual income per head of around \$400. The 1500 million living in the still under-developed and under-industrialised countries of East and South-East Asia, Africa and South America have an average income per head of only one-tenth of this, that is, about \$ 40 per year.

In 1947, Britain initiated the historic process of decolonisation by setting free India, Burma and Ceylon; France, Holland and Belgium followed suit. Today, seventeen years later, seventy-seven Afro-Asian and South American States are members of the United Nations. Many of these nations had for decades been under authoritarian rule from Europe, but now, with few exceptions, they are politically free and are experimenting with variants of parliamentary democracy. They are all desperately poor. To the emerging countries, the task of using wisely their newly-won political freedom will surely be found to be much more difficult and arduous than that of winning it.

Why should we help? There are many answers, but in essence they all amount to the view that to help them is also to help ourselves, either materially, morally, or both. As Dean Acheson commented somewhat sharply, but I think rightly: "Britain has lost an Empire but not yet found a goal". His use of the word "lost" is notable, as indicating that Britain wanted to keep the Empire but unfortunately found it impossible to do so. Dean Acheson would have been nearer the truth if he had said that Britain wisely let an Empire go and then unwisely forgot about it.

It is plausible to argue that the lack of sustained interest by Britain in the economic growth and general progress of its former colonies, which stands in marked contrast to the relative brilliance of its political sense in acting as midwife to independence, has been the result of an essential ambiguity in Britain's attitude, or rather to the existence of widely divergent views. The supporters of the traditional view of Empire could hardly all be expected to throw their weight unanimously behind the economic and social ambitions of the peoples whom they had so lately ruled: for many, the transition from master to equal was too abrupt. Nor, on the other hand, did the British radicals, who had agitated for decades and finally achieved the freeing of our former colonies, feel it possible to make the nation as a whole proud of this achievement which amounted, in fact, to presiding over the dismemberment of the British Empire. So for the first decade after 15 August, 1947, when Jawaharlal Nehru became Prime Minister of an Independent India of 400 million people, Britain seemed not very interested and even sometimes somewhat contemptuous of what India was trying to do.

Today, with European de-colonisation all but complete, the full extent of the revolution started by Britain can be discerned. The extent of this revolution is nicely indicated by what happened at Geneva a few weeks ago at the United Nations Conference on Trade and Development (UNCTAD). As the "Economist" put it, "The feat of the developing nations, the so-called seventy-five (who are now seventy seven) in snatching political success from the mouth of virtual failure is a tour de force which could have repercussions for decades to come. By an unprecedented show of diplomatic unity the seventy-seven have turned it into a real North-South confrontation and made an impact out of all proportion to the material results achieved. The consequences could be incalculable". "If this unexpected development of a common policy among the leaders of the 1000 million inhabitants of the poor nations, that is, excluding the Soviet countries, persists in the future, then something like an International Trade Union of the Poor will come into being". These new states from the South could command a majority at the UN and so could become a power which the rich North will have to take very seriously.

The challenge of the poverty-stricken South can no longer be ignored. It is therefore vital to understand what are the main problems to be solved and what can be done about them. More explicitly, Britain as a nation has to decide what part it could play and individuals have to decide what part they can play.

There are three primary requisites for the successful development of an emerging country, be it a giant one like India or a small one like Ghana. The first is the political will and the administrative machinery to carry through the social, economic, educational and political changes essential to the process of modernisation. The second requisite is an adequate supply of trained personnel - teachers, administrators, industrialists, doctors, scientists, technologists and engineers,

and perhaps above all, agriculturists. This is where the universities come in, both those in Britain and those in the developing countries. The third requirement is money: I will come back to this later.

Turning back to our first requisite - an able and dedicated political leadership - clearly this is a task which must be performed by the nationals of a developing country itself. For, however much some of these countries will need foreign expert staff for some years in administration, teaching, industry and science, the political leadership must essentially be indigenous.

One very hopeful feature of the emerging countries is that many of them have thrown up political leaders of striking ability. And this has happened even though a decade or two ago, when the present leaders were growing up, the ladder to education was very exiguous. Taking the ex-British colonies of Middle Africa alone (I will come to the Indian sub-continent later) there is Kaunda of Northern Rhodesia, Nyerere of Tanganyika, Banda of Nyasaland, Kenyatta and Mboya of Kenya, Nkrumah of Ghana, Abubakar of Nigeria. One need not agree with all their policies to realise that here is a first generation of statesmen of Free Africa who are remarkable by any standard. Incidentally, several of those mentioned will be assembling at Marlborough House within a few days.

Britain sometimes claims, with a degree of irony or self-justification depending on the speaker, that Britain can claim some credit for the emergence of these outstanding men, by keeping so many of them so long in prison. Certainly a reunion gathering of these "prison graduates" would be an impressive affair, even though Jawaharlal Nehru - the greatest among them and the one with the longest apprenticeship, in fact eleven years in goal - is, alas, no longer with us. But to such a gathering could come such prison graduates as de Valera, Nkrumah, Banda, Kenyatta, Kunda and Makarios.

Assuming then that our first requirement for development is satisfied, at least in some of the newly-born African states, that is, the existence of a dedicated and wise top political leadership, then comes the problem of finding the requisite number of trained personnel to formulate in detail and carry out any chosen programme of economic and social advancement. Of course, the long-run solution is for the emerging nations to train all its own intelligentsia, in its own schools, training colleges, universities, technical colleges and industrial plants. However, in the short run - and the short run may last a lifetime - a supply of trained personnel from overseas is essential. As I have been in a university all my adult life, and because you who are listening to me today are university men and women, I will start by saying something about the problem of the supply of university staff from Britain to the universities of the new States of Middle Africa.

Let us begin with a few facts. In 1962 there were more than 16,000 African students in the Middle African universities and about another 11,000 African students in training overseas. The total number of teachers in these universities was 2,200 of whom only 27% were locally born, the rest being from overseas. These teachers came from a wide diversity of countries: The emerging countries will shop for good academics in any part of the world where they can be got - and quite rightly. At present Britain provides about 700 of these foreign teachers, that is, a third of the whole - much the biggest number from any one country. If one assumes that these new universities will expand very rapidly - one can reasonably assume, say, a doubling in ten years -

then many more foreign teachers will be needed, for an adequate supply of African teachers will not be achieved till the second decade is well advanced. Thus the supply of university teachers from Britain to the universities of the emerging African countries is of vital importance. It has been estimated that about 500 English-speaking university teachers from overseas will be needed each year for five years.

Recognising this, the Department of Technical Co-operation (D.T.C.) which is the government agency responsible for all technical including educational - aid, set up a Committee for University Secondment to encourage the secondment of British academic staff to posts overseas. The Chairman of this important Committee is your former Vice-Chancellor, Sir Charles Morris. As Sir Charles has recently put it: "I have spoken of the all-important twenty years that are upon us. Many of these countries are quite desperately short of graduates for the professions, for government and administration, and for the development of commerce and industry. Even the more advanced of them are desperately short of teachers for their secondary schools and colleges. They simply must have help from outside for twenty or twenty-five years".

Some have held that the rapid expansion of the British universities which is now under way will create such a demand for staff in Britain that very few will be left over to be seconded overseas. However, Sir Charles Morris has expressed the view that it may not work out like that. I agree with his view - it is quite possible that the present flow to the African universities, particularly of young men and women, could actually increase. For so much publicity has been given to university expansion in Britain that a lot more graduates may aspire to a career as university teachers, and this increased number of applicants is likely to exceed the increased number of vacancies. At present when the total university staff is 15,000, the planned 6% annual rise means some 1200 new appointments (allowing for wastage) to the British universities a year. If the qualified applicants for staff appointments here were to overstep the home demand by only 20% then 250 potential candidates for overseas service would be available. This would amount to a very important contribution.

These figures suggest that, though the rapid expansion of British universities may make the recruitment overseas of senior academic personnel difficult, it could, aided by suitable encouragement, actually raise the number of Junior staff, including those who have not yet held a staff appointment here. Experience shows that quite often a young man or woman with a higher degree (a Ph.D. or equivalent) can make an invaluable member of the junior staff of one of the emerging universities. Such young people would not normally expect to stay for more than a few years before returning to this country to take up a permanent post. But some would no doubt find the life attractive and worth while and stay on.

What I have said refers explicitly to those who have taken a higher degree, and, in general, a student with only a first degree would not be suitable for a junior university post. However, in conditions of severe local shortage such young B.Sc.'s and B.A.'s might be very useful, especially in those universities which have 'intermediate' courses for students with only O-level qualifications. And of course they would be excellently suited to become school teachers, for whom there is an insatiable demand.

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I have one small practical suggestion to make, based on an experiment which has been made in the Physics and Mathematics Departments of Imperial College and no doubt elsewhere also. A meeting could be arranged, to which undergraduates, post-graduates and staff would be invited, to hear short talks on the opportunities in universities overseas. Representatives of the Inter-University Council, who actually make many of these appointments, and of the D.T.C. would, I know from experience, be prepared to speak, and incidentally show admirable colour slides of the very attractive campuses of these new universities. Here I will throw out a hint to the D.T.C. itself: why not get a documentary film in colour made of the life of these new universities and of the local life and surroundings? When opportunity offered, members of the staff of the African universities could be asked to speak at such a gathering. If only a few per cent of the audience were stimulated to try a period overseas, it would well repay the effort.

What these new African universities most need is, as I have already pointed out, an adequate supply of university staff from overseas, either on long period appointment or seconded for periods of up to two years or so. However, the experience of the last few years has suggested that it may not be easy to supply all the staff required on the basis of two or more years of secondment. So other, additional methods must be considered. One of these under discussion is the use of short visits, of say one term, perhaps repeated in each of a period of a few years. Supposing that an African university needed two physics lecturers for the next two years and that these could not be found on the usual secondment terms, then it would be possible for the African university to request Britain to provide six university physicists who would each spend one term a year there for two years, or twelve who could each stay only one term, arranged at periods so that there were always two in post at any one time. It is probable that many more British university staff would be willing to take part in such a scheme, since it would not mean moving a family or very seriously interrupting a man's own research effort. Assuming that one half the time of a university teacher in the U.K. is devoted to research, then a term away each year would only involve a moderate reduction of the time for research, especially since most British university teachers achieve their research results in close collaboration with their research students: these do not need day-to-day supervision, but once started on their research project, can and often should work on their own with only light supervision.

The Educational Department of the Department of Technical Co-operation is strongly supporting the working out of such schemes of informal sponsorship of certain overseas departments and has expressed the intention of allocating funds to cover the fares and maintenance costs overseas, in so far as the African university itself cannot meet them. One attractive feature of such schemes is that they give great scope for local and personal initiative in the British universities. For instance, an individual member of a university staff could find out from the D.T.C., or by personal contact with Africa, what African departments both need, and are prepared to accept, visiting teachers on this basis. Then the individual could canvass his colleagues in his own department or in a neighbouring one and attempt to create a club of, say, physicists who would collectively guarantee to maintain a steady flow of short-term appointees to a particular African department.

I would like to see many such centres of initiative growing up in British universities and, of course, in the higher technical colleges also. Where the African university can by itself pay the salaries and travelling costs, then the whole operation could be arranged by the African university that wanted the teachers and the British institution which was prepared to loan them, keeping the D.T.C. informed; where funds were required for salary or fares, then the D.T.C. would have to be brought directly into the arrangements from the beginning.

I have spoken about the university academic staff, that is, salaried members of a university teaching staff. Clearly, such people would be likely to be of most use to an African university because they are people experienced, to some extent at any rate, in teaching, in research, and in administration. There are, however, in most university departments, many others who would have much to contribute overseas: academic and technical research assistants, foreign research fellows, skilled laboratory technicians; such people might also be exceedingly useful. In some African departments, the shortage of laboratory technicians is almost more acute than the shortage of academic staff.

So far I have been talking mainly about the problems of the new African States where the lack of trained manpower is perhaps the biggest single bar to development - bigger even than the shortage of capital.

In India and Pakistan the situation is different. Since India has had a modern higher educational system for many decades, she can and does produce adequate numbers of trained men and women to carry out nearly all the multifarious jobs to be done in a newly developing country. There is, however, still a shortage of certain specific types of experts in certain basic sciences and technologies, and in managerial skills. However, in complete contrast with Africa, there is little or no need for foreign academics in normal university posts.

During the last few years, the Indian University Grants Committee has started to build up a limited number of university departments, in fact, about 30 in number, to become centres of advanced teaching and research. It is intended to provide additional staff and research facilities so as to allow the building up of each centre to a very high level. When this is achieved - it is, of course, already achieved in some departments - then it can become the natural thing for the best students from all Indian universities to go to one of these centres to take their higher degrees.

There are three reasons why it seems to me exceedingly important that all developing countries should attempt as soon as possible to create facilities in the major subjects for first class higher degree work, so that normally a student takes his higher degree in his own country. First, the present widespread practice of sending most bright students overseas to take a higher degree makes it difficult to build up native research schools in the universities, because an adequate supply of research students is the life-blood of a creative university postgraduate department. Following from this, it will be difficult to keep good staff unless they have an adequate number of postgraduate students. Second, the loss of trained people to the developed countries, by overseas students not returning to their homeland after taking their higher degree abroad, will be reduced. Third, it will save much foreign exchange. A three-year Ph.D. course will cost some £ 3000, taking fees, maintenance and fares into consideration, and this is a direct drain on foreign exchange, whether the money is provided by the State or privately.

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Once these centres of advanced research have reached a high level, then it can become the practice in general for India to send her bright young people abroad only after taking their Ph.D.'s in India and then only to get some special experience directly relevant to their future job. In fact, it would clearly be generally most efficient for such people to be first appointed to a job and then to be sent on abroad for such Post post-graduate training with a defined job to return to.

Most British scientists with large research schools in pure research are often embarrassed to find their Indian students after their Ph.D.'s finding no opening in India for their perhaps very "pure" and reconidre speciality, so that they either join the brain drain by not returning to India, or start expensively to re-main in some more practically useful technology or in some practical profession like medicine.

So on all these counts the 30 or so centres of advanced study now being built up in India are of great importance and foreign scientists can very definitely help. Sir Charles Morris has recently returned from India, where he has been studying these centres for advanced work and has learnt that the Indian U.G.C. has emphasised the importance of arranging visits of three or four months, or even shorter, of first-class British scientists with the specific object of helping a particular centre to build up the research and postgraduate teaching in their own special research field. Such visits could be repeated after, say, a year. Alternatively shorter, more frequent visits may be more efficient, though here the cost of fares sets a limit.

I very much share Sir Charles Morris's hope that Britain will help energetically in the setting up of these centres and that the government will give the necessary financial support. I hope also that as part of this support will be some money for essential equipment. For foreign exchange is desperately short in India to buy equipment from abroad.

However, what is holding up the development of India and Pakistan is not primarily a question of trained people but of capital. It seems to me that it is vital that there should be much more public awareness in Britain of the problems of Indian development. Not only is India overwhelmingly the largest developing country outside the Soviet orbit but, because of this, it is the testing ground of the adequacy of parliamentary democracy of the British type for the transformation of a desperately poor and largely agricultural country into a balanced modern state with an economic growth rate well above the population rise. The development of India is the single most important economic problem before the whole Western World, and her requirements for aid are so high as to involve all the rich countries.

However, the historic British ties with India, with all their ambivalence on both sides, do give us a special obligation to help. And the first step in helping is to understand.

When we handed over India to Indians in 1947, after 200 years of dominance and 100 of autocratic rule, we left behind the British language, the British political and legal systems, British trained armed services, a small British educated middle class, some textile mills, coffee and tea estates, and a railway system. But we also left behind essentially a static and even feudal country, with a very low literacy rate, and an income per head of much less than one-tenth that of Britain. Once we called India "The Brightest

Jewel in the Imperial Crown" - we left her one of the poorest countries in the world. It must be remembered that British policy over the previous century had been essentially to preserve, not to develop. Under our rule the Industrial Revolution, which multiplied many times the wealth of Britain, largely passed India by. As the 19th Century wore on, the income per head in India steadily fell relative to that in Britain, to reach the desperately low level of today.

So India, on achieving independence in 1947, found herself not only much poorer compared with Britain than she had been 100 years before, but actually with a smaller fraction of her population engaged in manufacture and so a bigger fraction on the land than 200 years before. Some scholars hold that the Indian peasant was richer during the Mogul Empire than he is today, due to a much higher wheat yield per acre.

Time is short for India. Indians may not be prepared to wait too long before they can enjoy some of the riches which modern technology has spread so bounteously over the industrialised countries. Then there is the overpowering, almost Himalayan, presence of China to the North and East. I do not think that a major Chinese military invasion of India is a real danger. If China were foolish enough to make one, her armies would be defeated on the Plains of India. The real influence of China is likely to be through economic and social competition. When China started her drive forward in 1949 she began, as a result of decades of foreign and civil wars, at an even lower level of poverty than India. If, by the late 1970's, it were to appear that China had far surpassed India in wealth per head, literacy, education, steel production etc., then India would face an agonising dilemma: either to give up the competitive struggle with China or to become more authoritarian politically in the hope, perhaps a vain one, of speeding up development. However, the outcome of both possible courses is likely to be a grave risk of the break-up of the unity of India. For is it likely that all the Indian States would be willing to go along unreservedly with either agonising alternative policy?

It cannot now be known whether China or India will lead the race for social betterment by, say, 1975. If India does then the dilemma outlined will not arise. If, however, China leads, then it may be too late to avoid profound consequences for India - and the world: - even by a big dose of Western aid. The aid is needed now.

In the first two five-Year Plans (1951 to 1961) the Indian national income rose markedly - a welcome advance on the near stagnation of the decades before the war. However, population rose too, so that the income per head rose only by 1.6% per year. Investment rose from 5%, which is a typical figure for a static agrarian society - as India was under British rule - to 11% which is near the minimum requirement of about 14% that India needs for a sustained growth. Industry expanded very fast in the ten years - in fact doubled - and even agricultural production rose by 40%.

The Third Five-Year Plan (1961 to 1966) got off to a very bad start, due partly to bad harvests and partly to the Chinese War. As William Clark has put it, "If it were to continue as it began the whole Indian strategy for economic growth and social change would collapse, with incalculable consequences for the world - both the rich and the poor".

The Third - Five-Year Plan itself is modest. It envisages a 30% rise of national income and a per capita income rise of 3.4% p.a. over the five years. Even if

continued successfully for still another five years, to the early 1970's, the average income of an Indian will be only about £ 30 a year compared with about £ 500 a year for everyone in Britain now. The wealth gap is still widening and will widen even further.

Given the chosen target of a 5% increase of national income per year as the minimum requirement, then the amount of capital investment required follows: it is nearly £ 8,000 million over the five years. Then the internal resources are estimated, proceeds of taxation, profits of public enterprises etc., and it is found that £ 2,400 million is required in foreign assistance over the five years to supplement the internal resources - this is 30% of the required total investment which must come from aid.

Of this £ 2,400 million, the Aid-India Consortium, consisting of the USA, the UK, Canada, West Germany, Japan, France, Italy, Austria, Belgium and the Netherlands, has guaranteed £ 1,200 million for the first half of the Plan. It is vital that this guarantee be extended to cover the last half as well, thus assuring the full £2,400 million needed. The uncertainty in India as to whether it will be forthcoming or not is striking at the very basis of the execution of the Plan. It is urgent, in fact, that the Consortium underwrite the whole Five-Year Plan. The cost of £500 million a year is only 0.2% of the national income of the nations in the Consortium - a small burden: yet in India it could be the difference between modest success and stark tragedy.

Since the increase of agricultural production is India's most important single task, it is satisfactory to note that use of nitrogenous fertilisers is planned to rise by over 300% to 1,000 million tons. Next largest planned rise is over 400% in machine tools; these are essential to further industrial development and to save desperately short foreign exchange. In general, the Plan seems very realistically worked out and shows a greater expertise at economic forecasting and planning than Britain has ever aspired to, at least until the setting up of N.E.D.C. a few years ago. However, to allow it to be implemented, the foreign aid requirement of £1,200 million for the second half of the Third Five-Year Plan is an urgent and vital necessity. In fact, there would be enormous advantages if the financial aid requirements of the Fourth Five-Year Plan (1966 to 1971) as well could be underwritten by the Consortium. By the end of this period India should be in a position to finance her future expansion with much less reliance on outside help. A major object of the Indian Plans is, of course, to dispense with the need for aid as soon as possible.

In spite of the fact that Britain has had two centuries of intimate contact with India, and that there are many thousands of her citizens who have spent their lives there and still have a deep interest and much nostalgia for India - in spite of all these things Britain, in 1962, gave slightly less aid to India than did Germany, which has little historic contact with India. I feel that something is wrong somehow in Britain that this should be so. Moreover, it is said that the British Treasury has told India that each of her three Five-Year Plans was too ambitious! I would like to hear the Chancellor of the Exchequer explain in detail what major parts of the Third Five-Year Plan he would advise the Indian planners to cut out - and still survive as a democratic state.

It is interesting to look at the total financial aid from the major rich countries to the less developed ones.

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The United States makes much the biggest contribution, amounting to £1,500 million in 1962, that is, 0.72% of her national income. Britain's public aid last year made a welcome small rise but only reached £175 million, which is about 0.66% of the national product of £26,000 million. So Britain gives an aid a slightly smaller fraction of her wealth than the USA, but, of course, a much smaller total sum: in fact, the total of US public aid is nearly nine times that of Britain. France gives a much bigger fraction of her wealth in aid than any other country - in fact 1.78%, which is two-and-a-half-times the fraction given by Britain. There are two main reasons, I think, why France has given so much more aid than Britain: one is that France seems to have a much more explicit view of her mission to spread French civilisation; the second is that France has a better Government organisation for aid. M. Jeanneney, Chairman of a French Government Commission to study the whole policy of aid, wrote: "Even if France thought that the misery of others threatened neither her security nor her development, she should assist them simply because it would be intolerable to be heedless to their fate. To fail in this study would be to deny the civilisation which she incarnates, to destroy her inspiration, to endanger its flowering. Politics here combines with ethics."

Recently an independent British organisation, the Overseas Development Institute (O.D.I.), has made a study of British aid and has written: "Responsibility for the aid programme and its public presentation is at present shared among several Government departments. No single Minister is responsible for all aid. The seven departments mainly concerned are the Treasury, the Department of Technical Co-operation, the Board of Trade, and four departments of external affairs - the Colonial Office, the Commonwealth Relations Office, the Central Africa Office and the Foreign Office." After considering the case for and against various possible improvements, the O.D.I. recommends that a Ministry of Overseas Development be created which would take the initiative in devising an Aid Policy for Britain. The new Minister would be responsible to the Cabinet for the British Aid Programme as a whole, though it would be implemented in various ways. Mr. Harold Wilson said last autumn that if he becomes Prime Minister he intends to act on these lines and put a senior Minister in the Cabinet in charge of our aid programme.

No discussion of India's development plans is complete without reference to population control. First, it is clear that even a very high birth rate, as now in the USA, is not an economic handicap, but may be a valuable economic stimulus, provided that, as in the U.S.A., the material resources are available to match it. This is not so in India. Here the expected rate of growth of the population during the Third Five-Year Plan is 2.4% cumulative, compared with a planned rise of national income of 5%; the increase in the average income of an individual is the difference between these figures, that is, 2.6%. Thus the population rise eats up half the planned increase in wealth. If, in a few decades, the population rise could be reduced by 1% to 1.4%, then the same 5% increase of national income would give a per capita rise of 3.6% instead of 2.6% - a rise of over 50% in the rate of increase of wealth. To get the same increase in per capita income without reducing the population rise would need an extra £1,200 million capital investment over the five years. Since India has not got any more capital to invest, it would have to come in as

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aid. This gives a measure of the economic saving in capital due to a hypothetical reduction in the birth rate of 1%. A more detailed study by Robert Neild of the Indian problem indicates that "if a life can be prevented for anything less than £45 it is better economically to allocate funds to population control than to investment. The desired living standard will be reached more quickly.

India plans to spend £37 million on population control over the five-year period. Economically, it would pay India to spend much more and to put much more social drive into educating the villagers, particularly in the desirability of birth control and in available methods. But the rich industrialised countries also have important tasks. Much more research should be done in developing new and better methods of birth control. The total amount of Government money now being spent in Britain in research into methods of population control appears to be trivial. Then the specialised U.N. agencies, especially the World Health Organisation (WHO), are at present debarred from any activity in the field of population control, due to the opposition of member states of the UN in which Catholics are influential. Though there are welcome signs of change in Rome, it is very important not only to reverse this ban on the study and promotion of population control by WHO, but also to give WHO instructions to make such work a major part of its activities. Though the main opposers of population control are not likely to be much influenced by arguments of "nicely calculated less or more", it is well worth pointing out repeatedly that the cost to the rich countries of underwriting the development plans of India - if they do not, political disaster may ensure - will be greatly reduced if the population explosion can be kept under control. In such vital matters as this one should not disdain to use the simple appeal to people's pockets.

I have been talking mainly of Aid in various forms. Of course Trade is still more important. Most under-developed countries earn more of the critical foreign exchange by Trade than by Aid. Abdus Salam, Professor of Theoretical Physics at Imperial College, London, has written recently: "Year after year I have seen the cotton crop from my village in Pakistan fetch less and less money: Year after year the imported fertiliser has cost more. My economist friends tell me that the terms of trade are against us. Between 1955 and 1962 the commodity prices fell by 7% and, in the same period, the manufactured goods went up by 10%. Some courageous men have spoken against this. Paul Hoffman called it a "subsidy, a contribution paid by the under-developed countries to the industrialised world".

It is devoutly to be hoped that the follow up of the recent conference on trade at Geneva will succeed in doing something to offset the catastrophic effects of the terms of trade turning against the poorer countries.

I want to conclude by saying that I think you University men and women have a double task. The first is to help to ensure, both by example and influence, an adequate supply of trained persons to those developing countries who need them. Secondly, to use whatever political influence you may be able to exert to influence the Government to increase the amount of its aid and to improve its organisation to administer it.

There must be many like myself who have seen some of the daunting problems of Indian poverty: who have participated even in a small way in helping our Indian colleagues to tackle these problems and who admire, though often with friendly criticisms,

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their dedication to the goal of a new and modernised India; who shared my abounding admiration for Jawaharlal Nehru, one of the greatest men of our time; those who, like me, have mused on these things must conclude that the Western effort as a whole, and especially the British effort, is just not good enough.

It has recently become popular among scientists to speculate on the problems of affluence in 1984, and in particular on the social implications for the rich countries of the vast flood of consumer goods flowing from ever some automatic factories. Perhaps an even more useful exercise might be to imagine how we affluent Westerners of today may appear to those of us who survive to the nineteen eighties. Do we want in 1984 to look back in anger on ourselves in 1964 as affluent fools?

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Note on Task Force and Working Groups on
Teacher Training and Welfare.

On an analysis of the problem areas included in the sector of Teacher Training and Welfare, it was seen that this sector comprises many diverse problems which require a detailed examination and which call for recommendations of a specific nature. The problems are certainly interdependent but each of them requires close analysis and specialised knowledge.

It was, therefore, decided that Working Groups should be set up to consider each problem area in detail; and for an integrated approach to the sector as a whole there should be a Task Force; of a compact nature, consisting of the conveners of the Working Groups and one or two other specially interested in the sector as a whole.

The following five Working Groups are to be set up as indicated below:

1. Working Group on Teacher Education:

1. Shri K.G. Saiyidain.
2. Miss S. Panandikar.
3. Shri P.K. Roy, Principal, C.I.E. Delhi.
4. Dr. S.N. Mukerji, Dean, Faculty of Education and Psychology, M.S. University, Baroda.
5. Shri V.S. Mathur, State College of Education, Patiala.
6. Dr. (Mrs.) Chitra Naik, Principal, Maharashtra State Institute of Education, Poona.
7. Miss Vergese, Principal, Government Secondary Training College, Trichur.
8. Dr. R.K. Singh, Director, Rural Institute, Bichpuri.
9. Mrs. Nelini Das, Women's Training College, 20-B Hastings House, Judges Court Road, Calcutta-27.
10. Mrs. Miri, Principal, College of Education, Shillong (Assam)
11. Shri Dwarika Singh, Principal, State Institute of Education, Patna (Bihar)
12. Dr. A. Mujib, Professor Head of Deptt of Education, Muslim University, Aligarh.

Miss Panandikar will be the convenor of this Group.

II. Working Group on Evaluation in Teacher Training:

As accepted under item No. 7 at the meeting of the

Commission held on 16-10-1964. Miss. S. Panandikar is to be the convenor of this Group.

III. Working Group on Recruitment, Pay Scales and Conditions of Service:

1. Shri J.P. Naik
2. Dr. V.S. Jha.
3. Miss. S. Panandikar.
4. Shri. Deva Gowda.
5. Shri S. Natarajan, S. I. T. U., Madras.
6. Shri B.R. Desai, Principal, Gokalibai High School, Vilsparle, Bombay-57.
7. Shri S. Adinarayan, State Institute of Education, Hyderabad (A.P.)
8. Shri Shri Ranga Raju, Deputy Director of Public Instruction, Dharwar Division, Dharwar.

Shri J.P. Naik will be the convenor of this Group.

IV. Working Group on Statistical Calculations and Projections of Teacher requirements:

1. Shri J.P. Naik.
2. Shri A.R. Dawood.
3. Dr. S.P. Agarwal.
4. Shri J.A. Vakil, Deputy Director of Education, Poona-1 (Maharashtra)

Dr. S.P. Agarwal will be the convenor of this Group.

V. Working Group on Finance and Unit Costs:

1. Shri J.P. Naik.
2. Prof. M.V. Mathur.
3. Dr. G.N. Kaul.

Dr. Kaul will be the convenor of this Group.

The Task Force on Teacher Training and Welfare will then consist of the following members:-

1. Shri K.G. Saiyidain.
2. Shri J.P. Naik.
3. Miss. S. Panandikar.
4. Dr. Reginald Bell.
5. Shri S. Natarajan.
6. Shri A.C. Deva Gowda.
7. Dr. Agarwal.
8. Dr. G.N. Kaul.
9. Dr. Salamatullah, Teachers' College, Jamia Millia Islamia, New Delhi-25.

Miss S. Panandikar will be the convenor of this Task Force.

Sd/-
(S. Panandikar)
Convenor
Task Force on
Teacher Training & Welfare.