

REPORT

OF THE

Intermediate Education Committee

· ALLAHABAD:

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1927

REPORT

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Intermediate Education Committee.

- intment of the School and Intermediate Education, consequent on the passing of the Allahabad University and the iate Education Acts, 1921, criticisms were passed on the started under its auspices. Accordingly, in December, 1925, the Government of the United Provinces appointed a committee, with the following personnel, to examine these criticisms and to suggest any changes that might be considered desirable and possible within the Intermediate Education Act, 1921:—
 - 1. Mr. A. H. MACKENZIE, Director of Public Instruction, Chairman.
 - 2. DR. ZIA-UD-DIN AHMAD.
 - 3. Dr. TARA CHAND.
 - 4. Ma. N. A. Rust (afterwards replaced by Mr. R. H. Moody).
 - 5. Pt. HIBDAY NATH KUNZRU.
 - 6. RAI BAHADUR VIKRAMAJIT SINGU.
 - 7. RAI BAHADUR A. C. MUKERJI, Secretary.

Subsequently the Government added to the committee, from May, 1926, Dr. D. R. Bhattacharya, Dean of the Faculty of Science, Allahabad University, to represent the interests of Science.

- Terms of reference 2. The terms of reference to our committee to the committee. were as follows:—
- (1) To examine how far the following criticisms made against the present system of Secondary and Intermediate education are justified, and to make recommendations:—
 - (a) That the Board of High School and Intermediate Education has been lenient in canctioning applications for recognition.

- (b) That present by the Bor of a se prescribed form the Alahabad University for the Matriculation and Intermediate classes.
- (c) That there has been deterioration in the standard of examination.
- (d) That the facilities for efficient teaching, especially of Science, in Intermediate Colleges, are less satisfactory than those formerly provided when the Intermediate Examination was conducted by the Allahabad University.
- (6) That the libraries of Intermediate Colleges are inadequate.
- (f) That the teaching of English in Intermediate classes has deteriorated.
- (g) That the practical test in Science and the viva voce test in English for the High School Examination have been abolished without sufficient cause.
- (h) That sufficient provision has not been made for vocational training in Intermediate Colleges.
- (2) To examine the present organization of Intermediate Colleges and to recommend any changes that are considered desirable and possible within the Intermediate Education Act, 1921.
- 3. The committee held two preliminary meetings, one on Feruary 6, 1926 at Allahabad, and the other on March 30, 1926 at Lucknow. The committee next met at Naini Tal on May 25, 26 and 29, 1926. Subsequent meetings were held at Allahabad on December 9, 10, 11, 21 and 22, 1926. The committee met finally on January 31, 1927, to discuss the draft report.
- 4. Before the regular sittings began our Secretary had issued a general letter to sixty-two educationists (whose names appear in Appendix 1) requesting them to help the committee in its investigations by supplying such ascertained facts as in their opinion revealed defects in the working of the Intermediate Education scheme in regard to—
 - (a) staff, enrolment and classification,
 - (b) buildings and equipment,
 - (c) recognition and inspection,
 - (d) courses and examinations,
 - (e) other matters.

- Que man suggestions for such improvements as could in their opinion be effected without recourse to fresh legislation. Replies to the general letter were received from nineteen persons and were considered by us at our preliminary meetings along with the following statements and notes compiled by the Secretary:—
 - (1) Statements showing briefly, certain particulars (enrolment, accommodation, staff, conditions of recognition, etc.), regarding (a) High Schools and (b) Intermediate Colleges that have been recently recognized by the Board. [Reference—item (1) (a) of the terms of reference.]
 - (2) Prospectuses of the Allahabad University for the years 1922 and 1923 and those issued by the Board for the years 1924 to 1928. [Reference—item (1) (b) of the terms of reference.]
 - *(3) Statement showing the innovations introduced by the Board in the system of the High School and Intermediate Examinations and a comparative statement showing the minimum pass marks in the various subjects under the Allahabad University and under the Board, [Reference—item (1) (c) of the terms of reference.]
 - (4) Reports (in original) of the practical examiners in Physics, Chemistry and Biology for the Intermediate Examinations of 1924 and 1925. [Reference—item (1) (d) of the terms of reference.]
 - *(5) Statement showing the amounts of grant given by Government during the past five years to Intermediate Colleges for libraries, and the amounts spent on libraries by colleges from their own funds. [Reference—item (1) (e) of the terms of reference.]
 - *(6) Statement showing the names and qualifications of teachers of English in Intermediate Colleges. [Reference—item (1) (f) of the terms of reference.]
 - •(7) Note describing the circumstances that led to the abolition of the practical examination in Science and the oral test in English for the High School Examination. [Reference—item (1) (g) of the terms of reference.]
 - *(8) Note showing what the Board has done in the matter of vocational education. [Reference—item (1) (h) of the terms of reference.]

- *(9) State Colleges in the United Provinces, including Degree Colleges maintaining Intermediate classes. [Reference—item (2) of the terms of reference.]
- *(10) Statement showing the accommodation and enrolment in the Intermediate Colleges of the United Provinces.
- *(11) Statement showing the dates of inspection and the names of the inspectors appointed to inspect Intermediate Colleges in the United Provinces.
- *(12) Statement showing the number of teachers engaged in teaching the Intermediate classes of colleges in the United Provinces. [Reference—item (1) (d) of the terms of reference.]
 - (13) Information regarding the procedure that was followed by the Education department in recognizing schools for the School-Leaving Certificate Examination, and the procedure now adopted by the Board for recognizing High Schools and Intermediate Colleges. [Reference—item (1) (a) of the terms of reference.]
- (14) Comparative statements showing the percentage of passes in the different subjects prescribed for the School-Leaving Certificate and Matriculation Examinations of 1921, 1922, and 1923 and the High School Examinations of 1924 and 1925, for the Allahabad University Intermediate Examinations of 1921, 1922 and 1923 and the Board's Intermediate Examinations of 1924 and 1925, and for the Allahabad University Commercial Diplmoa Examinations of 1921, 1922 and 1932 and the Board's Commercial Diploma Examinations of 1924 and 1925. [Reference—item (1) (c) of the terms of reference.]
- (15) Reports of examiners for the School-Leaving Certificate Examination of the department for the years 1921, 1922 and 1923 and for the High School and Intermediate Examinations of the Board for the years 1924 and 1925, including the reports of examiners in practical science. [Reference—item (1) (c) of the terms of reference.]
- (16) Specimens of question papers set for the School-Leaving Certificate Examinations of 1921, 1922 and 1923, for the Allahabad University Matriculation and Intermediate Examinations of 1921, 1922 and 1923, and for the Board's High School and Intermediate Examinations of 1924 and 1925. [Reference—item (1) (c) of the terms of reference.]

- (17) Rules for v. Que, a man mations conducted by the annabad University and by the Board.

 [Reference—item (1) (c) of the terms of reference.]
- (18) Lists of examiners for the School-Leaving Certificate Examinations of 1921, 1922 and 1923, for the Aliahabad University Matriculation and Intermediate Examinations of 1921, 1922 and 1923, and for the Board's High School and Intermediate Examinations of 1924 and 1925. [Reference—item (1) (c) of the terms of reference.]
- (19) Lists of examination centres for the School-Leaving Certificate Examinations of 1921, 1922 and 1923, for the Allahabad University Matriculation and Intermediate Examinations of 1921, 1922 and 1923, and for the Board's High School and Intermediate Examinations of 1924 and 1925.

 [Reference—item (1) (c) of the terms of reference]
- (20) Statement showing the number of students studying Physics, Chemistry and Biology in the Intermediate Colleges of the United Provinces recognized by the Board, together with sketch plans showing the accommodation provided for the teaching of those subjects.

[Reference-item (1)(d) of the terms of reference.]

Inspection of Intermediate Colleges.

but when we resumed our sittings at Naini Tal some of our members felt that they could not arrive at definite conclusions unless they personally visited and inspected Intermediate Colleges. We therefore decided that members of the committee should inspect some of the colleges in the United Provinces, individually or ingroups as circumstances might permit, during the recess between the summer sittings held at Naini Tal and the winter session to follow at Allahabad. The following statement gives the names of the colleges that were inspected, the names of the members who inspected them and the dates of inspection:—

No.	Names of Colleges inspected.	Names of members.	Dates of inspection.
1	Government Intermediate College, Fyzabad.	Dr. Tara Chand Dr. D. R. Bhat- tacharya. Mr. N. A. Rust	August 12, 1926. Ditto.
2	Government Intermediate College, Allahabad.	Dr. Zia-ud-din Ditto	September 13, 1926. September 11, 1926.
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No.	Names of Colleges inspected.	Names of members.	Dates of inspection.
8 •	Government Intermediate College, Jhansi.	Dr. Zia-ud-din	September 8, 1926.
4	Radhaswami Educational Institute, Agra.	Dr. Tara Chand	Septomber 27, 1926.
5	Government Intermediate College, Moradabad.	Ditto Pandit Hirday Nath Kunzru.	September 6, 1926. Ditto.
6	S. S. M. Intermediate College, Chandausi.	Dr. D. R. Bhattacharya Dr. Tara Chand Pandit Hirday Nath Kunzru.	Ditto. September 7, 1926. Ditto.
7.	N. R. E. C. Intermediate Col- lege, Khurja.	Dr. Tara Chand	September 28, 1926.
8	Government Jubilee Intermediate College, Lucknow.	Dr. D. R Bhattacharya	August 27, 1926.
9	Christian Intermediate College, Lucknow.	Ditto	August 25, 1926.
10	Kanayakubja Intermediate College, Lucknow.	Ditto	August, 26, 1926.
11	Queen's Intermediate College, Benares.	Ditto	November 12, 1926.
12	Agra College	Dr. Tara Chand	September 27, 1926.
	E.	Mr. R. H. Moody	Ditto.
13	St. John's College, Agra	Dr. Tara Chand	Ditto.
14 15	D. AV. College, Cawnpore Christ Church College, Cawnpore.	R. B. Vikramajit Singh Ditto	August 26 and 27, 1926.
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^{6.} We had before us the opinions of nineteen persons who had Questionnaire issued replied to the Secretary's general letter referred to by the committee. in paragraph 4 above. But we desired to collect further opinions on the subjects of our inquiry. We therefore (at one of our meetings held in Naini Tal) framed the following questionnaire and issued it to over one hundred persons (vide list given in Appendix 3). We also published the questionnaire in the press in order to give as wide a publicity as possible to our inquiries:—

Quo. ~ ~ TAFF.

I.-GENERAngth and qual + is your

1. Do you consider the present syster you have finate education possible within the Intermediate Education Acc, and the later mediate Education Acc,

II.—CLASSIFICATION.

- 2. Is the Intermediate College comprising classes III to XII in your opinion satisfactory?
 - 3. If not, what classification would you suggest? Give reasons,
- Are you in favour of the retention of Intermediate classes in Degree Colleges; if so, on what conditions?

III. - ENROLMENT.

- Is the maximum of 45 suitable for an Intermediate class?
- \$6. Is the maximum of 35 suitable for a High School class?
 - If not, what maximum would you fix in each case.

IV.—RECOGNITION.

- 8. Do you consider that the Board has maintained a satisfactory standard of recognition in respect of-
 - (a) High Schools, and
 - (b) Intermediate Colleges?

If not, give your reasons with reference to specific cases within your knowledge.

9. What essential conditions must be fulfilled by a High School and an Intermediate College before obtaining recognition?

V.—Courses of Study.

- 10. Are the present courses for the High School and Intermediate Examinations in your opinion satisfactory?
 - 11. If not, how would you improve the courses?
- In particular, what in your opinion should be the total number of (a) compulsory and (b) optional subjects for-
 - (i) the High School Examination, and
 - (ii) the Intermediate Examination?
 - 13. What subjects would you make compulsory?
 - What subjects would you leave as optional?
- 15. Should the Board prescribe groups of subjects for candidates for the Intermediate Examination? If so, what grouping would you recommend?
- 16. Do you recommend the introduction of vocational subjects into the High School and Intermediate courses? If so, what subjects?

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- 17. Do you soard has mainta ts examinations the stands Allahabad Uni Names
 - 18. Is the presc. | .ard satisfactory?
- 19. What improver onts can you suggest in the present system of examinations? Give details,
- 20. At what stage in the secondary school course should the first public examination be beld?
- 21. On what conditions should private candidates be admitted to the examinations conducted by the Board?
- 22. Are you in favour of retaining the "compartmental" system of examination unde regulation 18, Chapter XII?
- 23. It has been suggested that at the end of the High School stage the Board should award two classes of certificate—one qualifying for admission to class XI of an Intermediate College, and the other of a lower standard certifying completion of High School education but not qualifying for admission to class XI, What is your opinion of this suggestion?

VII.—Instruction.

- 24. What difficulties are there in adapting school methods to the teaching of Intermediate classes?
- 25. Do you think that the teaching in Intermediate classes will, in any way, be affected by the fact that the use of the vernacular as medium of examination is permissible with effect from the High School Examination of 1927?
- 26. Has the teaching of English and of Science in (a) Intermediate classes and (b) school classes deteriorated? If so, for what reasons?

Has the standard been affected by the abolition of the oral test in English for the High School Examination?

What steps should be taken to improve the teaching of English?

- 27. Do you advocate an oral test in English in (a) the High School and (b) the Intermediate Examination?
- 28. Are the facilities for practical work in the Science laboratories adequate (a) at the Intermediate and (b) at the High School stage? If not, what improvements would you suggest?
- 29. Do you think that the measures adopted by the Board for ensuring practical laboratory work in High School classes are adequate?
- 30. Do you recommend the re-introduction of the practical test in Science for the High School Examination?
- 31. Can you say from your knowledge as an examiner or teacher whether the standard of attainment of the average Intermediate student has fallen during the last four years as compared with the past? Please give full reasons for your statement.

VIII.—STAFF.

32. What is your opinion of the strength and qualifications of the staff of Intermediate Colleges of which you have first-hand know ledge?

How any teachers are teaching Intermediate classes in your college? How many of these were formerly teaching only school classes?

- 33. What qualifications would you regard as essential for teachers of Intermediate classes?
- 34. Should the Board lay down a minimum scale of salaries for teachers of Intermediate classes as a condition to be fulfilled before recognition is given?
 - 35. If so, would you enforce this scale in the case of Intermediate Colleges already recognized?
 - 36. Would you lay down any maximum for the periods of teaching to be done per week by teachers of Intermediate classes? If so, what should be the maximum?

IX.-INSPECTION.

- 37. What is your opinion with regard to the present system of inspection of Intermediate Colleges?
 - 38. What changes, if any, would you recommend?

X.-EXPANSION OF INTERMEDIATE EDUCATION.

- 39. Do you consider that the present facilities for Intermediate education are adequate for the needs of this province?
- 40. If not, what suggestions would you make for the extension of the facilities?
- 41. Do you think that new colleges should be established; if so, where?

XI.-GENERAL.

42. Have you any further (suggestion to imake which are not covered by your answers to the preceding questions?

Of the one hundred and three persons addressed by name forty-six sent in replies more or less full. Our Secretary prepared summaries of these replies and arranged them, for the consideration of the committee, in the order of the questions contained in the questionnaire. These summaries are printed in Appendix 4.

- 7. Of the persons who had sent in replies to the questionnaire, the Witnesses invited by following ten, selected on s. more or less reprethe committee to give sentative basis, were invited to appear before the committee to give oral evidence:—
 - (1) Mr. H. Krall, Professor of Chemistry, Agra College.
 - (2) P. Amaranatha Jha, Reader in English, Allahabad University.

- (8) Mr. B. Sanjiva Rao, Principal, Queen's Intermediate College, Benares.
- (4) Mr. S. C. Chatterji, Principal, Christ Church College, Cawn-pore.
- (5) Mr. P. Seshadri, Professor of English, Benares Hindu University.
- (6) Mr. J. A. Strang, Professor of Mathematics, Lucknow University.
- (7) Dr. K. C. Pandya, Professor of Chemistry, St. John's College, Agra.
- (8) Mr. Brahma Swarupa, Principal, N. R. E. C. Intermediate College, Khurja.
- (9) Mr. Devi Prasad Khatry, Head Master, Pt. Prithi Nath High School, Campore.
- (10) Khan Sahib Maulvi Idris Ahmad, Head Master, Government High School, Bareilly.

The above witnesses were examined at considerable length on the written statements submitted by them in response to the questionnaire. We did not consider it necessary to make a verbatim record of their evidence as the object of the examination was mainly to clear up points about which individual members of the committee were doubtful.

8. We now proceed to record our own conclusions on the questions incorporated in the questionnaire issued by us. These conclusions have been grouped under the tions incorporated in the questionnaire has been divided, viz.:—

I .- Classification,

II .- Enrolment,

III,-Recognition,

IV .- Courses of study,

V.-Examinations,

VI.-Instruction,

VII.—Staff

VIII.—Inspection,

IX.—Expansion of Intermediate education.

9. A majority of us think that an Intermediated College comprising classes III—XII is, as a rule, too heavy a
charge for the Principal, and that therefore,
wherever possible, the lower classes, i.e., III—VI or III—VIII
according to local conditions, should be located in a separate building
under the control of-x separate head master. Nearly all the witnesses
who appeared before us held this view, and this was also the impression

left on the minds of those of us who inspected Intermediate Colleges comprising ten classes. Some of us are, however, doubtful whether a junior school comprising classes up to class VI or class VIII will be an efficient institution.

- 10. We think that the maximum enrolment for a High School class, viz., 35, and the maximum enrolment for an Intermediate class, viz., 45, which has been laid down by the Board in its regulations is in each case a suitable maximum. With the exception of Rai Bahadur Vikramajit Singh we are of opinion that Degree Colleges maintaining Intermediate classes should not be permitted to enrol a higher maximum in these classes than is permissible for Intermediate Colleges.
- standard of recognition in respect of High Schools, but was somewhat lenient, in the case of some Intermediate Colleges, at the beginning of its regime, when the closing of the Intermediate classes at the Muir Central and Canning Colleges created a sudden demand for more accommodation in Intermediate Colleges. A majority of the committee suggest that the Recognition Committee should be convened more frequently than twice in an academical year, in order that it may have more time to examine cases. We think that the Board should insist on a strict fulfilment of the conditions in regard to financial stability, qualifications of the staff, accommodation and equipment in the case of new colleges applying for recognition in additional subjects.

IV.-Courses of study. 12. Our conclusions, regarding courses, are as follows:-

- (1) That the present Intermediate course allows too wide a choice of subjects.
- (2) That the High School course is on the whole satisfactory, except that the separation of History and Geography in the manner prescribed for the High School Examination of 1928 and subsequent years is not desirable.
- 13. On the basis of these conclusions, we have by a majority decided to suggest the following improvements in the courses for the Intermediate Examination:—
 - (1) That Drawing, Logic and Civics should be excluded from the list of optional subjects, and that the remaining optional subjects should be grouped under two main heads, Arts and Science, Matheir matics and Geography being placed under both.
 - (2) That the compulsory subjects for the Intermediate Examindard should be— of other

On the Arts side, - English and History. (European and In-

Rai Bahadur Vikramajit Singh and Mr. R. H. Moody would not make History compulsory.

On the Science side. - English and either Mathematics or Biology.

The optional subjects on the Science side should be combined in such a way that the combinations may be educationally sound and equal in standard, and may fulfil the requirements of the Lucknow Medical College and the Roorkee Engineering College.

The following groups are suggested:-

- 1. Geography, Physics, Mathematics;
- 2. Geography, Chemistry, Biology;
- 3. Physics, Mathematics, Chemistry;
- 4. Physics, Biology, Chemistry.

On the Arts side each student may select any two optional subjects from the following list:—

- 1. Mathematics,
- 2. Geography,
- 3. Economics,
- 4. A Classical language,

A modern language,

5. History of Greece and Rome.

We are unanimously of opinion that the syllabus laid down for practical work in Economics should be revised so as to take the form of instructions to teachers in regard to the practical work to be done by students, and that the practical examination in Economics should be abolished.

14. The question of introducing vocational subjects into the High School and Intermediate courses has been carefully considered by us in the light of the opinions we have received, and we have arrived at the definite conclusion that it is neither desirable nor possible to introduce vocational training properly so called at the High School or the Intermediate stage, but that arrangements should be made at all schools in classes III to VIII for the teaching of some form of educational handwork (e.g., paper folding, cardboard modelling, clay modelling and wood-work) associated with drawing, aiming at the training of hand and eye and the development of practical aptitudes. In this connexion we discussed the question of introducing Music into the school curriculum. The opinion of the majority is that Music

9. the school curriculum. The opinion of the majority is that Music I.—Classificany be taught as an additional optional subject in High Schools, rinning in the Middle Schools, but that it should not be made a wherever posset for examination at present.

according to loc. After careful consideration of the present system of examinaunder the control tions in all its aspects and of the opinious that have who appeared beforeations. been received, we conclude that there has been a slight deterioration in the standard of the High School Examination in some subjects. The evidence in regard to the standard of the Intermediate Examination is conflicting, but the majority of witnesses from the Universities expressed the opinion that there had been some deterioration in English, and with this view the majority of us agree. In regard to other subjects for the Intermediate Examination we conclude that there has been no appreciable change.

- In connexion with the system of examinations we considered several other questions.—First, whether private candidates, i.e. candidates who have not studied at an educational institution of any kind during the year preceding the examination or during the two-years' course prescribed for the examination, should be admitted to the examinations conducted by the Board and, if so, on what conditions. We are of opinion that the conditions on which the Board admits private candidates are satisfactory and require no change, particularly since we understand that the Board has recently decided not to admit as private candidates any candidates, even failed candidates of a previous year, desiring to offer subjects for which practical work or a practical examination is prescribed. Secondly, we considered the desirability of retaining the practice of re-examination of failed candidates in a single subject under conditions laid down in regulation 18, chapter XII of the Board's regulations. We are of opinion that the system is unobjectionable and should be retained. Thirdly, we considered a suggestion made to us at one of our meetings that at the end of the High School stage the Board should award two classes of certificates, one qualifying for admission to class XI of an Intermediate College and the other of a lower standard certifying completion of High School education, but not qualifying for admission to class XI. We do not approve of this suggestion.
 - VI.—Instruction. applicable to Intermediate classes should not be precisely the same as those employed in the junior classes, but that while students should continue to receive individual attention even in classes XI and XII, there should be a progressive modification of method in order to develop in them habits of self-reliance and enable them to profit from a lecture.
 - 18. On the question whether the teaching in the Intermediate classes will be affected by the introduction of the vernacular medium of examination, which has been authorized with effect from the High School Examination of 1927, we are divided in our opinion. Some members think that while the standard of English will deteriorate, there will be no appreciable improvement in the standard of other subjects. Other members are of opinion that if improved methods of teaching are introduced, there need be no deterioration in the standard of English and that there will be improvement in the teaching of other subjects.

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- Rg. We have no doubt that there is room for improvement in the marching of English in Intermediate Colleges. We have noticed that in some of the Intermediate Colleges English is taught by teachers who, although possessing the minimum qualifications prescribed by the Board, are neither experienced nor trained. We think that special arrangements should be made for improving the teaching of English in Intermediate Colleges.
- 20. From the inspection reports on Intermediate Colleges that were placed before us we conclude that in some of the colleges the Science laboratories are inadequately equipped and the funds provided for current expenditure are insufficient. In the case of High School aboraltories we think that equipment is on the whole adequate, but that in their case also there is insufficient provision for recurring expenditure. We attribute whatever insufficiency there is in the teaching of Science mainly to lack of adequate equipment in Intermediate Colleges.
- 21. A majority of us are of opinion that a practical examination in Science as well as an oral test in English are desirable as parts of the High School Examination, but that under existing conditions they are impracticable. We believe that the measures adopted by the Board for ensuring practical laboratory work in High School classes should ultimately prove adequate, though a temporary deterioration is to be expected after the abolition of the practical examination.
- 22. Our general conclusion in regard to instruction is that the average standard of teaching in the Intermediate classes is higher than in colleges of the old Allahabad University, although it is inferior to that given by the best colleges of the old Allahabad University; but no useful comparison with the latter is possible as they were equipped and staffed for degree and post-graduate teaching and the best students of the province were concentrated in them.
- 23. We are of opinion that the minimum qualifications laid down by the Board are satisfactory, but that, in order VII.—Staff. to encourage highly qualified graduates to take up teaching posts in Intermediate Colleges, the Board should lay down a minimum scale of salaries for teachers of Intermediate Colleges, both government and non-government. In paragraph 39 of this report we have suggested definite scales. We think that new colleges applying for recognition should be required to employ teachers on the prescribed scale, and that colleges already recognized should be assisted to introduce the prescribed scale gradually wherever the existing scale is lower.
- 24. We think that in the interests of efficiency it is desirable to lay down both a minimum and a maximum for the hours of teaching required of teachers in High Schools and Intermediate Colleges. In our opinion the minimum should be eighteen hours a week and the maximum twenty-four hours a week, provided that in calculating the

maximum the time required by teachers of Science to arrange apparatus for their lessons is taken into account. We are also of opinion that each teacher in an Intermediate College should confine himself to the teaching of a single subject, and that if any teacher is not fully occupied in this way he should teach his special subject to classes IX and X rather than that he should teach some other subject, in which he has not taken the Master's degree, to the Intermediate classes.

- 25. The procedure relating to the inspection of Intermediate Colleges is laid down in regulations 4 and 8 (a), VIII.—Inspection. chapter VII of the Board's regulations. The names of the persons nominated by the Board from time to time for the inspection of Intermediate Colleges are given at pages 348 to 352 of the Board's calendar for 1925-26. We approve of the selection of names. We are, however, given to understand that some of the most suitable persons named in the list are found unwilling to undertake the work of inspection because there is no fee or honorarium prescribed for it. A majority of us accordingly recommend that members of the panel of inspectors nominated by the Board should receive remuneration for the inspection of an Intermediate College.
- 26. The statistics placed before us show that in the province, as a IX.—Expansion of whole, there is available in existing colleges acIntermediate Educa commodation for an increase of about thirty per
 tion. cent. of the present enrolment in the intermediate classes, but in some localities there is a dearth of accommodation.
 We think that new colleges should be started only where a good case
 for them can be established, and that a first charge on funds available
 for Intermediate education should be proposals for making existing
 colleges efficient.
- 27. Having recorded the conclusions arrived at by us in regard to the various questions embodied in the question-naire we are in a position to report the results of our examination of the criticisms referred to it in the terms of reference. These criticisms will be dealt with in the order in which they appear in the terms of reference.
 - 28. That the Board of High Schools and Intermediate Education has been lenient in sanctioning application for recognition.—The result of our examination is that the Board has maintained a satisfactory standard of recognition in the case of High Schools, but, that during the first and second years of its existence it did somewhat relax standards in the case of a few Intermediate Colleges that applied for recognition when the sudden closing of the Intermediate classes of the Muir Central and Canning Colleges had created an embarrassing demand for accommodation in Intermediate Conges. The present standard of recognition is satisfactory.
 - 29. That the courses of study prescribed by the Board are of a lower standard than those prescribed formerly by the Allahabad

University for the Matriculation and Intermediate classes.—We do not find that the courses prescribed by the Board are of a lower standard than those prescribed by the Allahabad University. The difference consists rather in the wider choice of subjects allowed by the Board for the Intermediate Examination and in the Board's regulation according to which candidates are not required to take both History and Geography for the High School Examination. We have already offered constructive suggestions for the improvement of the courses. They are summarized in the recommendations made in paragraph 41 of this report.

- 30. That there has been deterioration in the standard of examination.—In paragraph 15 of this report we said that there has been a slight deterioration in the standard of the High School Examination in some subjects. We think examiners (rather than any policy adopted or regulations made by the Board) are responsible for such deterioration as has taken place. We think also that the Board's procedure for the appointment of examiners has been somewhat defective. We shall in paragraph 42 make a resommendation in regard to the appointment of examiners.
- That the facilities for efficient teaching, especially of Science, in Intermediate Colleges are less satisfactory than those formerly provided when the Intermediate Examination was conducted by the Allahabad University .- We think that this criticism is justified in the case of some Intermediate Colleges, both government and non-government. On the other hand, we think that the standard maintained at the two first grade government colleges of the old Allahabad University, viz., the Muir Central College, Allahabad, and the Queen's College, Benares, was unduly high in regard to apparatus provided for Intermediate students. Many of the Science teachers employed in the Intermediate Colleges are graduates of the Muir Central College or the Queen's College, and, ac ustomed as they were in their student days to somewhat lavish provision of apparatus and stores and the spacious laboratories of those colleges, they not unnaturally feel stinted and cramped in the newer Intermediate Colleges which have been built and equipped on a more medest scale and adapted to the requirements of secondary education. It is only by inspection in situ that it will be possible to ascertain how far the existing complaints regarding the facilities for Science teaching are due to actual insufficiency of accommodation or equipment.
- 32. That the libraries of Intermediate Colleges are inadequate.—We find that the libraries in a majority of the colleges are in an unsatisfactory condition. We make a recommendation on the subject of libraries in paragraph 43 of this report.
- 33. That the teaching of English in Intermediate classes has deteriorated.—In examining this criticism we have noticed that in some Intermediate Colleges some part of the English course is taught by teachers who are only B.A.'s, or who have not taken the M.A. degree in

English, or who have been long accustomed to teaching school classes. We regard such arrangements for teaching as unsatisfactory. But we are not convinced that there has been any general deterioration. On the contrary, in several Intermediate Colleges the teaching of English is, we believe, quite efficient. Nevertheless we are agreed (vide paragraph 19 above) in thinking that there is room for improvement and that the way to improvement lies through the improvement of the staff employed for the teaching of English. We make a definite recommendation in regard to staff in paragraph 39 of this report.

- That the practical test in Science and the viva voce test in English for the High School Exmination have been abolished without sufficient cause. - From a perusal of the Scoretary's note describing the circumstances that led to the abolition of the practical test in Science and the oral test in English (vide Appendix 2) we are convinced that there were good reasons for the abolition. Both these tests are, under existing conditions, impracticable. We think that they are desirable, but we are satisfied that in the present circumstances it is not possible to conduct them with efficiency and fairness. We note however, that practical work in Science laboratories has not been abolished. Board insists on each student who offers Science in the High School Examination furnishing, before he is admitted to the examination, a certificate from the head master to the effect that he has actually performed the experiments laid down in the syllabus. The Board has also directed that a chart, giving a list of the experiments to be performed and showing the date on which each student completes each experiment, should be maintained and hung in the laboratory of each school recognized in Science for the High School Examination. Board has made a regulation to enforce the observance of this practice, and the department has issued instructions to inspectors to see that it is We would also point out that at the Intermediate stage a practical examination in Science is still conducted in the manner prescribed by the old Allahabad University. The Board has, indeed, raised the percentage of marks required for a pass in this practical examination, and in order to gain a certificate, students must pass separately in practical work. We note also that although the oral test in English for the High School Examination has been abolished, the test in English dictation, which formed part of the oral test in the School-leaving Certificate Examination, has been retained as an essential part of the High School Examination; fifteen per cent. of the total marks assigned to English are allotted to his paper.
- 35. That sufficient provision has not been made for vocational training in Intermediate Colleges.—We have carefully examined this criticism in the light of the facts contained in the Secretary's note showing what the Board has done in the matter of vocational education (vide Appendix 2) and of the opinions we have received from the educationists whom we consulted. We appreciate the attempts which the Board has made from time to time to give a practical bias to the courses

by including in them subjects like Commerce, Agriculture, Drawing, Manual Training, and Metal Work. But we adhere to our view (vide paragraph 14 that it is neither desirable nor possible to introduce regular vocational training at the High School or the Intermediate stage. We do not think it is possible to go beyond the recommendations made in paragraph 14 of this report. In this connexion we invite attention to the following extract from paragraph 44 of the Report of the Burn Committee on Provincial Industries:

"Suggestions have frequently been made that students in ordinary schools would be more fitted to earn their living if the school course included technical education . . . Most of us are strongly against such a proposal. After a good deal of experience it is generally accepted in Western countries that technical education, with one exception, should be postponed to a later stage of education than that reached in Vernacular and Anglo-Vernacular schools in these provinces. Practically the only exception is that of commercial subject which frequently taught in schools of corresponding status in Europe and America."

Recommendations of the Committee regarding the organization of Intermediate Colleges desirable considered and possible within the Intermediate Education Act, 1921.

We have already recorded the conclusions we have arrived at on the basis of the evidence given by statistics and witnesses. We have also recorded our findings on the ctiticisms referred to us for examination. We now proceed to make definite recommendations and any other changes with regard to the organization of Intermediate Colleges limiting our recommendations to changes only as are desirable and possible within the Intermediate Education Act, 1921. In doing so it is not possible to avoid repetition, as in

several cases the conclusions we have drawn on the questions framed by ourselves are identical with our findings on the criticisms contained in our terms of reference:

- majority recommend that when a High School is . converted into an Intermediate College, the lower 1. Classification. classes, i.e., classes up to class VI or VII. according to local conditions, should be located in a separate and placed under the control of a separate headmaster. An Intermediate College should then comprise classes VII to XII or IX to XII and should be under the control of a Principal who should exercise general supervision over the junior school.
 - 38. We recommend:—
 - (1) That the Recognition Committee be convened more frequent ١y. 2. Recognition.
 - (2) That in all cases the Board should insist on a strict compliance with the conditions of recognition regarding staff, accommodation, equipment, and financial provision.
 - The majority recommend:— 39.

- (1) That Principals of Government Intermediate Colleges may be a. Staff.

 Recruited in two ways, v.z., by the promotion of teachers in the Provincial Service and by direct own pay of the Provincial Service and in addition a special pay of Rs. 150 per mensem, together with a free house; and that Principals of the latter class should be recruited on a scale of Rs. 650—30—950 and should get a free house.
 - (2) That in each Government Intermediate College there should be at least one teacher of English possessing special qualifications in English and holding an appointment in the Provincial Service.
 - (3) That the aim should be to convert all posts of teachers (excluding demonstrators) teaching the Intermediate classes into Provincial Educational Service appointments.
 - (4) That no non-government institution should be recognized as an Intermediate College unless the teachers teaching the Intermediate classes are on a scale of at least Rs. 150-10-350 and unless the minimum pay of the Principal is Rs. 400 per mensem.
 - (5) That teachers of Intermediate classes should not be recruited from amongst teachers too long accustomed to school classes.
 - (6) That the existing colleges should be assisted by Government, as far as possible, to comply with these requirements.
- 40. We recommend that the methods suitable for teaching in Intermediate Colleges should receive special attention at the Training College (vide paragraph 17 of this report).

With a view to improving the facilities for the teaching of Science subjects in Intermediate Colleges we recommend that funds be more liberally provided for equipment as well as for recurring expenditure on laboratories.

41. We recommend that the Board be requested to revise the courses prescribed for the High School and Intermediate Examinations in the following manner:—

High School Examination.

Compulsory subjects.

- 1. English.
- 2. An Indian Vernacular.
- 3. Mathematics.
- 4. History and Geography (as up to the High School Examination of 1927).

Optional subjects.

One of the subjects at present comprised in the list of optional subjects.

Intermediate Examination.

A. ARTS.

- 1. English compulsory and any two optional 2. History (European and Indian) subjects from the following list:—
 - 1. Mathematics.
 - 2. Geography.
 - 3. Economics.
 - 4. A classical language or a modern language.
 - 5. History of Greece and Rome.

(Rai Bahadur Vikramajit Singh and Mr. R. H. Moody would not make History compulsory.)

B. SCIENCE.

English—Compulsory, and any one of the following groups of subjects:—

- 1. Geography, Physics, Mathematics.
- 2. Geography, Biology, Chemistry.
- 3. Physics, Mathematics, Chemistry.
- 4. Physics, Chemistry, Biology.

In regard to Economics we recommend (a) that the syllabus laid down for practical work should be revised so as to take the form of instructions to teachers, and (b) that the practical examination be abolished.

42. To improve the standard of examination we recommend that the Board be advised to modify the procedure for the appointment of examiners in the following manner:—

The Committees of Courses should not be empowered to recommend the names of either examiners or boards of moderators. The boards of moderators should be reconstituted as boards of examiners and moderators. They should consist of not more than three members and should be appointed by the Examinations Committee, The boards of examiners and moderators should recommend to the Examinations Committee to the extent of at least 50 per cent. in excess of the number required, the names of head examiners as well as assistant examiners in the subjects with which they are concerned. The Examinations Committee should submit to the Board for sanction a list of examiners selected from the lists submitted by the boards of examiners and moderators.

- 43. To improve the libraries of Intermediate Colleges we recommend:—
 - (1) That the provision in the budget for libraries should be at the rate of not less than Rs. 100 per annum for books in English and Rs. 50 per annum for books on each of the other subjects in which the college is recognized.
 - (2) That the Board should from time to time draw up and circulate to Intermediate Colleges a standard list of books suitable for libraries as well as revised lists of new publication.
 - (3) That every Intermediate College should have on its staff a whole-time libratian.
- 44. A majority of us recommend that inspectors appointed from the panel of inspectors nominated by the Board should receive remuneration for the inspection of Intermediate Colleges.
- 45. We recommend that new Intermediate Colleges be established
 9. Expansion of only where a good case for them has been made
 Intermediate education.
 - In conclusion a majority of our Committee wish to offer a auggestion with regard to the general scheme of secondary education which, though not specified 10. General. in our terms of reference, may yet be regarded as falling within their scope. They are of opinion that it is possible to effect a year's reduction in the total period of secondary education after the preparatory stage, i.e., in the course at present covered by classes III to XII by a re-distribution of the courses of study, by improved methods of teaching and by a curtailment of holidays. In these ways it may be practicable without loss of efficiency to accomplish in nine years the amount of work done now in ten years in classes III to XII. We recommend that the possibility of such a reduction of the school course be examined. We believe that the curtailment, if feasible, will be advantageous to University education, as the year saved at school may be utilized at the University, which may thus be enabled to adopt a three years' course for the BA, and B.Sc. degrees. We believe that the Universities regard a three years' course as essential to sound education, but that they have hitherto refrained from introducing it owing to their reluctance to increase the total period of education by

one year. We believe also that much of the criticism directed against the present system of High School and Intermediate education by the Universities of the province would be met if the Universities were put in a position to introduce a three years' degree course without imposing additional burdens on students or their parents. The suggested reduction in the total period of secondary education, if found to be practicable, will not result in any revolutionary change in the present system, but only in a re-distribution of the courses of study between classes III and XII in such a gradual way as to spread these courses over classes III to XI. The change will not involve any change in the present order of examinations: the only departure from present practice will be that the High School Examination will be held at the end of class IX and the Intermediate Examination at the end of class XI.

- 47. The following is a summary of our recommendations:-
- (1) Classification.—An Intermediate College should comprise classes
 VII to XII or IX to XII according to local conditions.
 - (2) Enrolment.—Degree Colleges should not be allowed to enrol in their Intermediate classes a higher maximum than is permissible for Intermediate Colleges.
 - (3) Recognition.—(a) The Recognition Committee of the Board should be convened more frequently.
 - (b) The conditions of recognition should be strictly insisted on in all cases.
 - (4) Staff.—(a) Scales of salary are suggested (vide puragraph 39) for—
 - (i) Principals of Government Intermediate Colleges appointed by direct recruitment;
 - (ii) Principals of Government Intermediate Colleges appointed by promotion from the Provincial Service;
 - (iii) Principals of non-government Intermediate Colleges;
 - (iv) Teaches of non-government Intermediate Colleges.
 - (b) The aim should be to raise the status and to improve the quality of teachers of Intermediate classes.
 - (c) The Board should prescribe a maximum and a minimum number for the number of hours of teaching required of teachers in High Schools and Intermediate Colleges.
 - (5) Instruction.—(a) The methods of teaching suitable for Intermediate classes should receive special attention at the Training College.

- (b) Funds should be more liberally provided for equipment and for recurring expenditure on Science laboratories.
- (6) Courses of study.—(a) The course for the High School Examination should remain as at present, except that History and Geography should be restored to the list of compulsory subjects as up to 1927.
- (b) The course for the Intermediate Examination should be revised as follows:-
- 1. English
 2. History (European and Indian).

 Any two of the following:

 Mathematics.

 Geography.

 Economics (minus the practical work and the practical examination).

 A classical language or a modern language.

 History of Greece and Rome

History of Greece and Rome.

Science ...

1. English ... 2. Mathematics or Compulsory.

Biology ... Compulsory.

3. Two additional subjects, to form groups suggested in

paragraph 13.

- (7) Inspection. Members of the panel of inspectors nominated by the Board should be paid an honorarium for the work of inspection.
- (8) Examinations.—The Examinations Committee should appoint boards of examiners and moderators for the different subjects, and these bodies should recommend examiners, who should be selected by the Examinations Committee and appointed by the Board.
- (9) Libaries. -(a) A definite rate is suggested (vide paragraph 43) for provision in the budget for libraries of Intermediate Colleges.
- (b) The Board should issue lists of books suitable for libraries of Intermediate Colleges.
- (c) Each college should have a whole-time librarian.
- (10) Expansion of Intermediate education. New colleges should be established only when a good case for them is made out.
- (11) General.—The possibility of effecting a year's reduction in the total school course should be examined.

48. We desire to express our obligations to our Secretary, Rai Bahadur A. C. Mukerji, whose care in recording our proceedings and readiness to supply information have been of the greatest assistance to us in formulating our recommendations.

A. H. MACKENZIE,

(Chairman).

ZIA-UD-DIN AHMAD.

VIKRAMAJIT SINGH.

TARA CHAND.

R. H. MOODY.

D. R. BHATTACHARYA.

A. C. MUKERJI.

(Secretary).

By order,

JAGDISH PRASAD,

Secretary to Government,
United Provinces.

ALLAHABAD:
Junuary 31, 1927.