

Proceedings
of
The Fourth Conference of Secretaries
of State Boards of Secondary Education

HELD
ON JANUARY 10 AND 11, 1961
AT NEW DELHI

DIRECTORATE OF EXTENSION PROGRAMMES
FOR SECONDARY EDUCATION
National Council of Educational Research & Training
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Proceedings of the Fourth Conference of Chairmen and Secretaries of Boards of Secondary Education, representatives of Universities conducting the High School/Higher Secondary Examinations and Directors of Education/Public Instruction held on the 10th and 11th of January, 1961.

The Fourth Conference of the Secretaries of State Boards of Education and the representative of Universities conducting the Higher Secondary/High School Examination was held on the 10th and 11th of January, 1961 at Vigyan Bhawan, New Delhi. The Chairmen of the Examining Boards as well as the Directors of Public Instruction of various States were also invited to this conference. The following were present :

1. Dr. N. Ram Lal,
Director of Public Instruction,
Chairman, Board of Secondary Education,
Andhra Pradesh, Hyderabad.
2. Shri B. Venkataramanappa,
Secretary, Board of Secondary Education,
Andhra Pradesh, Hyderabad.
3. Shri K. Ahmed,
Director of Public Instruction,
Bihar State, Patna.
4. Shri A. P. Srivastava,
Secretary, Bihar School Examination Board,
Bihar State, Patna.
5. Shri M. D. Rajpal,
Director of Education,
Gujarat State, Ahmedabad.
6. Shri C. T. Philip,
Director, State Bureau of Educational
Research and Services, Kerala State,
Trivandrum.
7. Shri S. N. Singh,
Vice-Chairman, Board of Secondary Education,
Madhya Pradesh, Bhopal.

8. Shri Mumtazuddin,
Secretary, Board of Secondary Education,
Madhya Pradesh, Bhopal.
9. Shri S. Palaniswamy,
Deputy Director of Public Instruction,
Madras State, Madras.
10. Shri M. P. Ramaprabhu,
Secretary, Board of Secondary Education,
Madras State, Madras.
11. Shri C. D. Deshpande,
Chairman, S.S.C. Examination Board,
Maharashtra State, Poona.
12. Shri M. V. Deshpande,
Secretary, S.S.C. Examination Board,
Maharashtra State, Poona.
13. Shri S. Basheer Ahmed,
Secretary, Secondary Education Board,
Mysore State, Bangalore.
14. Shri I. M. Verma,
Director of Public Instruction,
Punjab State, Chandigarh.
15. Shri Amrik Singh,
Assistant Registrar, Punjab University,
Chandigarh.
16. Shri M. M. Verma,
Chairman, Board of Secondary Education,
Rajasthan State, Jaipur.
17. Shri G. K. Singhal,
Board of Secondary Education,
Rajasthan, Jaipur.
18. Shri S. N. Sharma,
Secretary, Board of High School &
Intermediate Examination,
Uttar Pradesh, Allahabad.
19. Shri S.K. Sarkar,
Assistant Secretary, Board of Secondary Education,
West Bengal, Calcutta.

20. Shri B. K. Neogy,
Chief Inspector, Secondary School Education,
West Bengal, Calcutta.
21. Shri Saadullah Khan,
Secretary, Vidarbha Board of Secondary Education,
Nagpur.
22. Shri Damodar Dass,
Secretary, Board of Higher Secondary Education,
Delhi.
23. Shri R. R. Gupta,
Principal, Education Officer,
Himachal Pradesh, Simla.
24. Shri S. Natarajan,
Convener, sub-Committee on Examination Reform,
Madras.
25. Shri G. S. Khair,
Member sub-Committee on Examination Reform,
Poona.
26. Dr. A. Mujib,
Member, sub-Committee on Examination Reform,
Aligarh.

Welcoming the Chairman and the delegates, Shri R.K. Kapur, Deputy Educational Adviser, Ministry of Education, explained how the programme of examination reform was launched in this country about two years ago with a target of ten years for its completion. In actual practice it was seen that the reform of examination really meant reforming the entire educational system. The implications of the programme, the stages in which it was to be completed and other related details formed the subject matter of the meeting's agenda.

**Inaugural address of Shri Prem Kirpal, Educational Adviser
and Secretary to the Government of India**

Inaugurating the conference, Shri Kirpal extended a warm welcome to the delegates and said :

‘Educational thinking, planning and implementation are part of a large cooperative enterprise in our country and as we advance

from the Second to the Third Plan, it is all the more important to consider this cooperative enterprise in the interests of educational reform as well as national unity. It is for this reason that your presence here is especially welcome to me and my colleagues and we hope to profit immensely by your discussions in the course of this conference.

Four years ago we had the first Conference of Presidents and Secretaries of Boards of Secondary Education when we considered and drew up a programme of examination reform to be implemented throughout the country in a period of about ten years. This programme was launched in January, 1958, and we have since held two further conferences of the Secretaries of Boards to work out details of the programme and to appraise progress achieved from year to year. The meeting at which we are gathered today has, however, a special significance because we have invited not only the Secretaries but also the Presidents and Chairmen of the Examining Boards as well as the Directors of Public Instruction of various States to participate in it. Having just completed the first preliminary phase of the reform, and with a massive target to achieve in the next five years, we considered it desirable to assemble together all those who are concerned with the implementation of this educational reform, so that out of their valuable experience we might frame a plan of coordinated action.

The Philosophy Underlying the Reform

No educational reform functions in isolation. Improvements in any single aspect have an inevitable impact on all other facets of teaching. This is but natural in an enterprise which deals with the total development of a child and attempts to shape him into a fully formed individual. An integrated approach is important in examination reform because upon proper consideration a 'reform of examinations' appears to be much more than the mere improvement of the mechanics of a system. That is why we prefer to call it a programme of 'evaluation'. While the term 'examination' seems to confine its significance to the final process of mechanical testing, 'evaluation' stands for a wider concept. We evaluate not only what the pupil has learnt but how the teacher has taught the subject and whether the methods of teaching have succeeded or failed. The reform, therefore seeks to improve and reorient the entire structure of the educational process, beginning

from what we teach and going through the stages of how and why we teach it and finally culminating in how to measure the end product of our endeavour.

It is based on the realisation that a social philosophy, educational purposes, techniques of teaching, learning experiences and the evaluation procedures are all integrally linked in the large process of education. If the goal of education is the full development of the pupil, then the entire apparatus of curriculum, textbooks, teaching aids, techniques of presentation and testing devices should be geared to the achievement of that goal.

It is this totality of approach that characterises the present reform and lifts it to a higher plane than other measures of improvement which seek to tinker and repair, and not to overhaul. We do not merely seek to sharpen the tools of evaluation, but try to bring about an improvement in the quality of teaching as well. The intrinsic interdependence of the educational trinity, namely the educational purposes, learning experience and evaluation techniques makes our approach comprehensive and all-pervading. There is no doubt that it is a task of great magnitude and cannot be effected by a few individuals, however competent, sitting in laboratories and turning out standardised tests. It calls for the participation at every stage of the entire body of teachers without whose close collaboration it is impossible to bring about either better teaching techniques or happier classroom situations. That is why this programme extends over a period as long as ten years during which it is expected that the entire teacher body of the secondary schools and all the Secondary Education Boards and Training Colleges will be able to adjust themselves to the new demands.

What the Programme Involves

This programme envisages the following steps :

1. Significant purposes of learning should be set before the teacher and the pupil.
2. Teachers should be prepared through in-service and pre-service training to implement those purposes.
3. Internal and external evaluation procedures should be adopted to assess the progress of the pupils.
4. The objectives should be incorporated in the classroom procedures and examinations,

5. Pools of test items should be produced which will validly measure the students' attainments with reference to those purposes.
6. Such test material should be gradually incorporated in the internal and external examinations.
7. Teachers should work out methods of organising learning experiences ; in other words, materials, methods and techniques for bringing about those responses in students which are specified by the objectives.
8. Finally, the process detailed above would in logical sequence lead to amplification and revision of the syllabi so as to provide clear directions to teachers to relate their teaching techniques and evaluation instruments to specific criteria.

It will be obvious from what has been stated that the success of this programme depends upon the cooperation of several agencies, chief of which are the State Departments of Education, the Training Colleges, the Inspectorate and the teachers in secondary schools.

Achievement in the First phase

During the last two and a half years we have established an Examination Unit staffed with specialised officers, who have carried out a programme of orienting a large body of teachers to the new techniques. They have also prepared with the help of secondary school teachers pools of test items which will be shortly supplied to the Boards to serve as illustrative material. A fair amount of literature has also been brought out by the Examination Unit to give teachers and educationists an idea of what the reform seeks to achieve. As the success of an educational effort of this kind depends upon how fully the training colleges lend their support to it, a considerable part of the Unit's work during the past two years has gone towards involving the training colleges in this programme in an extensive and intensive manner. As regards the objectives selected for the work, we have so far concentrated on two objectives in each of the eight subjects. We shall now enlarge our work on other objectives in those and other subjects of the secondary school curriculum.

What we have done so far has no doubt helped to break new ground and create a climate of favourable opinion for a new venture. Any educational programme in a country of our size takes on large dimensions because it affects hundreds of schools and thousands of teachers. The difficulties are further increased when the work calls for a comprehensive approach and repeated contacts with teachers. The next phase of the programme, therefore, calls for concerted efforts to push the reform forward so that it reaches every secondary school. By the end of the Third Plan we shall have covered nearly eight years of the total project and should have reached a major part of our targets.

State Evaluation Units

This is possible only when every state pulls its weight in carrying the reform into the schools, and for this reason, we have, during the last year, stressed the urgency of setting up State Evaluation Units. Every state has its own local problems and special approaches and it would be necessary to adapt national measures to suit these local conditions and needs. The last conference and the twenty-seventh meeting of the Central Advisory Board of Education urged the need for the establishment of State Evaluation Units at the latest by June 1961. It is a happy augury that almost all states have given deep consideration to this question and five states have even formulated proposals to set up such units. The Government of India proposes to assist the establishment of these units as a central scheme so that in the early stages of the programme a certain measure of uniformity of approach and procedure is ensured. The point to remember is the need for expediting this measure so that at least by the second year of the Third Plan every state has an Evaluation Unit to carry on the work initiated by the Centre. I would request the conference to consider this question and recommend such steps as are necessary to implement this aspect of the programme without delay.

Introduction of Objective Based Tests in the External Examination

The next aspects to which we have to give attention is the introduction of the new form of testing in the external examinations. The Examination Unit will be supplying to the Boards and State Education Departments in the course of the next few weeks illustrative test items with suggestions as to how they are to be used,

This question is dealt with under item V of the agenda. Since the success of the reform lies in the change that we bring about in external testing, it is necessary that the Boards and Departments of Education focus their attention on achieving this change in a phased manner. The Central Unit has suggested a pattern of phasing to which the conference may give attention. What requires careful thought is the fact that the change in the form of examinations requires cooperation of not only the Boards but of the paper-setters, moderators, examiners, the curriculum makers, the textbook writers and the teachers of the secondary schools. Even a ten per cent introduction of the improved type of tests requires a corresponding effort at all these levels and I am sure you will appreciate the type of cooperation that is called for, in making each phase a success. I would further like you to consider the possibility of making the major part of the external examination patterned on the new approach by the end of the Third Plan.

Internal Assessment

Another aspect following as a corollary to the above is the question of improvement in internal assessment. Improvement in external examination will lack reality unless it is supported by a corresponding improvement in internal assessment which prepares the pupils throughout their school course for a new type of learning and testing. The Seminar on Examinations held at Bhopal as early as in 1956 gave considerable attention to this question and recommended a series of suggestions on how internal assessment could be introduced. As a consequence, several Boards have been trying various forms and degrees of internal assessment. Some have also introduced cumulative records in the schools. As far as internal assessment is concerned, it is seen that only four Boards have allowed the system with any measure of organisation and persistence. The Central Examination Unit recently made a study of the practices in these Boards the details of which are given under item VII of the agenda. A few other Boards are trying internal assessment on an experimental basis in the lower classes. This measure will now have to be taken up by all the remaining Boards. Even a target of 20 per cent introduction by the end of the Third Plan would be a fair achievement. I do not deny that there are several difficulties in the way, but we shall have to accept the challenge and find solutions. In an age where large numbers of pupils are

seeking secondary education and come to seek it with different abilities and for different purposes, it would be improper to judge their achievement and capabilities by a single examination. Justice demands that their progress should be watched and measured over the entire span of their career, and this requires a rational system of internal assessment.

Role of Training Colleges in the Reform

Another equally important measure to speed up this reform is the participation of training colleges in the work. Unless the new concept of teaching and testing becomes part of teacher preparation, it cannot be said to have taken firm roots and will continue to present serious problems in the future. Educational programmes strike firm roots if the teachers are prepared for them from the very inception of their professional life and not when their hardened attitudes have to be remoulded through subsequent orientation. The Central Examination Unit has, therefore, made efforts to see that the new concept of evaluation is introduced in the training college programme at the B.Ed. level. Intensive work has accordingly been done with the staff of selected training colleges to acquaint them with the significance of this approach. We should like to see it incorporated in the B.Ed. syllabus of all the training colleges by March 1963. This is a measure which requires the cooperation of Universities, State Departments of Education and the training colleges themselves and I would appeal to you to work out a suitable programme for this purpose.

Examination Failures

Finally, I would like to invite the attention of the conference to a question which has been vexing us for the past several years, and that refers to the large numbers of failures in the secondary school leaving examination. The problem takes on added significance in the context of what I have said earlier on the philosophy of examination reform. It is true that the results of 1960 register a slightly better performance than in previous years, but measured against the number which take the School Final Examination the wastage resulting from about fifty per cent failures is still large enough to cause concern. In this connection, we must remember that as we open the doors of primary education to every child and do not restrict admission in secondary schools, the upsurge at the

secondary level will continue to grow and will bring in a heterogeneous group of pupils. We shall necessarily have to evolve for them new techniques of evaluation so that every student gets rated according to his own capabilities and not with reference to a common yardstick prescribed by an external agency for a distant and absolute goal. The solution to these large failures, therefore, lies not merely in improving the performance in certain subjects or in modifying a few procedures but adopting such measuring scales as will gauge the pupil's development and growth according to his own native capacity and endowment. From this follows the inevitable corollary that we shall have to present a varied type of secondary education to pupils according to their differing needs. I firmly believe that the ultimate answer to this problem is the multipurpose school which seeks to provide each student with a type of education for which he is fitted, followed by a method of instruction suited to the objectives of the course, and culminating in a type of evaluation which measures just what the pupil sets out to achieve.

The question of examination reform is a most challenging enterprise and I fervently hope that all of us will take up the challenge in an appropriate spirit and see that through this reform we usher a meaningful revolution in the educational structure of our country. The immense wastage of manpower and, more than that, the emotional frustration and loss of confidence resulting from examination failures cannot be tolerated any longer. Let us resolve with a sense of urgency and determination to do everything possible to eradicate this wastage through measures which are educationally sound and otherwise feasible.

ITEM I : To receive report of the work done by the Central Examination unit from October 1959 to December 1960.

Presenting the item, Shri R. K. Kapur detailed the achievements of the Central Examination Unit during the last fifteen months. These include the development of test-pools, conducting state level and advanced workshops, orientation of teachers, intensive work with training colleges, studies in internal assessment, training course for state evaluation officers, seminars on Research in Evaluation, consultative services and publications. A detailed report of the work done by the Unit during the period under review was placed before the members.

The Conference recorded its appreciation of the work done by the examination unit and made the following recommendations for further action :

1. Examination reform required vast numbers of secondary school teachers to be oriented to the new technique. This was not possible for the central unit to carry out alone. It was, therefore, necessary for State Boards, State Education Departments and State Evaluation Units (when they get established), to take up the responsibility of organising intensive in-service programmes on a large scale so as to cover all the schools and teachers as early as possible.

2. It was also important to establish greater co-operation between Boards so as to ensure effective implementation of the reform. It would, therefore, be desirable to set up a Federation of Secondary School Boards of India on which the University Grants Commission could also be represented.

3. The Conference urged the Universities to take up the question of incorporation of the evaluation concept in the B.Ed. syllabus as early as possible and not later than March 1963.

4. A popular pamphlet on examination reform should be brought out by the Central Unit for wider dissemination among the public.

5. Basic literature on evaluation brought out by the Central Unit should be supplied in sufficient number, to

- (a) The State Director of Public Instruction/Education to be distributed to every secondary school in the State ;

(b) The State Boards, for distributing it to all their members.

The Central Unit should also take all possible measures to ensure a wider circulation of the articles and digests brought out by the Ministry of Education on Evaluation.

ITEM II : To consider the action taken by the State Examination Boards and the Central Examination Unit in implementing the Recommendations made at the first Conference.

Introducing the item, Prof. T.K.N. Menon, Director, DEPSE, spoke of the difficulties involved in taking action on the recommendations, which fell under two categories—one, those on which further action was to be taken by the State Boards of Secondary Education and the other, those on which further action was to be taken by the Central Examination Unit. Recommendations with which the Central Unit was concerned, Prof. Menon observed, had been implemented quite satisfactorily, while those which fell within the purview of the Boards, though not wholly implemented because of various reasons, had been carefully looked into.

Resolutions adopted at the last conference pertained to the following :

1. Performance in English.
2. Performance in Mathematics.
3. Automatic scrutiny of scripts in marginal cases.
4. Maintaining the passing level at 33 per cent.
5. Keeping the total number of subjects at six.
6. Condoning failures in English.
7. Eligibility to college courses even if a candidate failed in one subject.
8. Awarding grace marks according to a graded scale.
9. Publishing results of regular and private candidates separately.
10. Restriction of admission to private candidates.
11. Formulation of suitable principles of promotion in the lower classes.

These topics were taken up for further discussion by the conference.

Performance in English

It was strongly felt that the main defect resulting in the poor

performance in English lay not in the examination but in the teaching of English. The subject was not being handled properly in the lower classes where teachers very often lacked both requisite qualification and the necessary training. Improvement had therefore to start from the foundation upwards.

Mr. Hill of the British Council was of the opinion that the mere introduction of the structural syllabus was not a panacea for all the defects of teaching English. It was a way of orienting the material but it could not lead to improvement unless the method of teaching was improved at the same time. Efforts should therefore be concentrated on the proper training of the Junior High School teachers. If English was taught well in the first two years, the High School could look after itself pretty well.

It was generally accepted that the teachers of English both at the high school and middle stages should be oriented through in-service programmes and should be made familiar with the new techniques. Some of the States had undertaken this work of the intensive training of the teachers in collaboration with the British Council. U.P. had started the English teaching Institute at Allahabad. Madras had launched a state-wide scheme of training lower class English teachers in the new method. There was a further need for the expansion of such training schemes.

Performance in Mathematics

The conference discussed ways and means of reducing the number of failures in mathematics and agreed with the suggestions given in the agenda that (i) in-service training should be provided for mathematics teachers of the lower classes and (ii) that an analysis should be made of reports of examiners of the last few years bringing out the defects of the students' answers so as to enable the Department of Education to take necessary action.

Automatic Scrutiny of Scripts in Marginal Cases

As regards the rules for the automatic scrutiny of answer scripts, it was observed that there was wide variation in practice in this regard from Board to Board. The conference agreed in principle that it was necessary to move toward some kind of national uniformity and work out a widely acceptable formula in regard to examination procedures ; automatic scrutiny of marginal

cases was much desirable and all Boards might take it up with advantage.

Eligibility to college courses even if a candidate has failed in one subject

It was observed that in the General Certificate Examination of England the student could take the examination in five subjects or more, but entries in the certificate only showed that he had qualified in so many subjects. Thus the question of declaring any one as failed did not arise.

Restriction of admission to private candidates

Only a few Boards have so far framed rules to regulate admission of private candidates. Also, there was no uniformity in the rules followed at different places. The rules framed by Poona Board in this regard might be considered by the other Boards.

Formulation of suitable principles of promotion in the lower classes

It was felt by the conference that a sound method of promotion from class to class would go a long way in reducing the large number of failures in the final examination. Dr. Khair of Bombay was of the opinion that liberal promotion in subjects like Mathematics, English or Sanskrit was an injustice to the student himself. There were certain subjects in which it was possible to make up but in some others a thorough preparation at the lower classes was essential. The conference ultimately decided to leave this question to be tackled by the schools themselves.

The conference also had brief discussions on the following items :

1. Standards for passing and awarding of divisions and distinctions.
2. Keeping the total number of subject offerings at six.
3. Publishing of results of regular and private candidates separately.
4. Remedial teaching of backward students.

At the conclusion of the discussions, the following recommendations were finally adopted by the conference on the item :

1. Performance of pupils in English.

- (i) As more and more students seek secondary education, it will not be justified to expect an equal competence from

all in a subject like English which calls for special aptitude and ability ; nor will a mastery of the language be of equal utility to all the students in later life. Similarly in Mathematics also, the standards of attainment demanded by further courses and pursuits vary and it is not necessary to make every pupil strive to reach the same standard. In order to avoid such frustration, the Conference recommends a two level examination in English and Mathematics, an ordinary level for those who shed the subject at the end of the secondary school and a special level for those who pursue courses of science, technology etc.

- (ii) The method of the structural syllabus and controlled vocabulary of teaching English should be adopted by every State with the least possible delay and should be followed by improvements in the methods of teaching.
- (iii) Improvement of teaching English should be taken up in the lower classes as the first two years of the pupil's learning a new language are most crucial to further progress. It is therefore essential to raise the competence of teachers of these classes (primary or middle as the case may be) through in-service programme for (a) teachers of training schools (b) teachers of the lower classes. Short training courses for teachers of English in the secondary schools should also be organised.
- (iv) Content courses in English should be organised for teachers of English in the lower classes in order to give them greater confidence in handling the subject. In order to do so efficiently it is desirable to make the training course of these teachers to two years' duration, wherever it is not so.
- (v) Detailed guidance should be made available to the teacher of English in the form of suitable text books and guide books.
- (vi) The examination papers in English may be in two parts, one of which is completely of the objective or short answer type and the other of the essay type. As regards making evaluation of the essay type question as objective as possible, the Central Evaluation Unit may make a study of the experiment that is being tried in Madras.

2. *Performance of pupils in Mathematics*

- (i) The State Boards may undertake an analysis of the reports of the examiners of the last few years bringing out defects in the answers of students at the examinations and pass on this information to the Departments of Education as early as possible.
- (ii) In-service training of Mathematics teachers of the lower classes may be organised by the State Departments through suitable agencies.

3. *Automatic scrutiny*

The conference was of the opinion that some system by which marginal cases received scrutiny was desirable and should be adopted by all the Boards. It was, therefore, suggested that Board which has not done so already may consider introducing it.

4. The conference considered that a national uniformity in the system of declaration of divisions and distinctions achieved by candidates was even more important than ensuring uniformity in minimum pass level to maintain certain inter-state and national standards of admission into universities, employment etc. It, therefore, recommended the adoption of the following scale by all the Boards :

Distinction	75 per cent
First Class	60 per cent
Second Class	45 per cent
Pass	33 per cent

5. The conference considered the possibility and advantages of keeping the subject offerings at six or below and the phasing of the examination schedule so that a candidate had to take not more than one paper a day. It came to the conclusion that a more detailed study of the question should be undertaken by the Central Unit or individual Boards in the light of the practice prevailing in other countries. Some of the Training Colleges might be able to undertake pilot studies in the subject.

6. The conference observed with satisfaction that all the Boards except that of Kerala had adopted the system of publishing the results of regular and private candidates separately and that this helped to register the correct picture of the relative performance

of these two categories of candidates. While this was satisfactory in itself, what was of greater importance was to restrict the indiscriminate and wholesale admission of private candidates, if standards were to be maintained. The conference recommended that the rules framed on this subject by the S. S. C. Board, Poona might be tried in other States also.

7. *Free tuitions and remedial teaching for backward students*

- (i) State Education Departments may make special provision for running extra classes in schools to help backward pupils.
- (ii) Diagnostic tests may be prepared in certain key subjects such as English and Mathematics on the basis of which scientific guidance may be provided to pupils.
- (iii) In the case of external examinations, common mistakes located by examiners in the different subjects should be brought to the notice of the schools together with concrete suggestions for remedial measures.
- (iv) In subject seminars and workshops organised by various agencies, special stress may be laid on the use of test materials to improve achievement and diagnostic testing.

8. A suggestion was made that the entire question of examination results could be dealt with on the basis of merely announcing the performance of the pupil in the external examination with no attempt to declare him 'passed' or 'failed', leaving it to the universities, institutions or employers to lay down their own criteria of selection. The conference considered that this suggestion might offer a solution to the entire problem of examination failures and referred it to the Examination Sub-Committee of the All India Council for Secondary Education for further study in the light of practices in other countries.

ITEM III. To discuss the total programme of examination reform with special reference to action plan of implementation during Third Five Year Plan and the programme of work during 1961-62.

Introducing the item, Shri R. K. Kapur summarised the work done by the Unit and enumerated the projected targets during the Third Plan period. He also outlined in brief the programme of work for the year 1961-62 which fell under the following major heads :

1. Preparation of test material based on objectives of teaching different subjects, involving to the maximum extent possible the teachers of the secondary schools.
2. Work with the Examination Boards and incorporation of objective-based questions in external examination.
3. Preparation of learning experiences based on objectives in co-operation with teachers and training colleges.
4. Involvement of training colleges in the programme so that the concept is introduced in both pre and in-service programmes of teacher training.
5. Research investigation into the problems arising out of the reform, including those pertaining to internal assessment.
6. Publications on the subject.

Aspects of the programme like incorporation of objective-based questions in the external examination, curriculum revision, establishment of State Evaluation Units and setting up of a National Committee on educational objectives were discussed at length.

While discussing the question of establishing State Evaluation Units, it was observed by the members that the material developed by the Central Unit should be available to the State Units. Other necessary help and guidance should also be made available to the State Units by the centre. Details about the personnel, their salaries, etc. were discussed under item IV of the agenda.

In regard to the incorporation of the objective-based test material in external examinations, it was pointed out that a large body of teachers should be orientated in the new concept and

techniques of evaluation before introducing the new material in the Board examinations. The co-operation of the teacher was necessary at all stages of the programme. The programme of orientating teachers could be taken on a mass scale with the help of State Units, Central Unit and Extension Services Departments. It was also pointed out that the programme of translating objectives into day-to-day teaching and the development of learning experiences could be effectively carried out with the help of teachers and training colleges. This programme also, it was observed, should precede the introduction of objective-based questions in external examinations.

The members of the conference emphasized the need for preparing paper setters and examiners on the new lines before introducing the change at the Board examination. Simultaneously, public opinion would have to be educated to appreciate the changes that were to be brought about in the system of examination.

For all these purposes, it was strongly felt by the members that the State Governments and the Examination Boards should accept the programme of the examination reform without reserve.

The conference discussed at length the question of setting up a National Committee on educational objectives. The necessity of clarifying the functions of secondary education in the light of our growing democracy and a large percentage of the students terminating their formal education at this stage was emphatically expressed by the members. It was emphasized that the function of defining objectives of secondary education should be taken up as early as possible instead of postponing the task to the later part of the Third Plan.

Summarising the discussion, Shri R.R. Singh, Joint Educational Adviser, highlighted the importance of establishing a Standing Commission of educationists and others to look after the objectives of secondary education and link up different levels of education. He also emphasized that the objectives would have to be properly aligned with the changing pattern of the society.

After detailed discussion on all the major aspects of the programme, the conference passed the following recommendations.

The conference considered and accepted the total programme of examination reform already in implementation, its objectives and its targets and made the following recommendations for its fulfilment :

- (1) The pace of the reform should be considerably accelerated during the Third Plan through supporting and co-ordinating efforts by State Departments and Boards.
- (2) The large body of secondary school teachers should be mobilized to the fullest extent possible in development of tests.
- (3) As State Evaluation Units get established, the work of each unit should be made available to units in other States and a suitable system established for interchange of information.
- (4) The five year phasing suggested by the Central Unit for the reform of external examination may be adopted by the Boards and steps taken to see that all the interlocking parts of the machinery function successfully to achieve these year-wise targets. The following special efforts would be necessary.
 - (a) The literature on evaluation prepared by the Directorate should be given wide circulation among schools and teachers, if necessary, after it is translated into the regional languages.
 - (b) Brochures containing illustrative sets of learning experiences should be prepared by the Directorate in collaboration with selected lecturers of training colleges and teachers of progressives schools.
 - (c) Technical and administrative details should be worked out in regard to the gradual introduction of the improved form of testing in the external examination.
 - (d) Seminars and workshops should be organised for paper-setters and chief examiners of each subject in order to introduce them to the improved type of questions based on specific objectives.
- (5) It was of great importance to the success of the reform to ensure a system of continuous assessment as a joint enterprise of the central and state evaluation units.
- (6) The conference agreed that the objective-based evaluation procedures would have to be accompanied by corresponding changes in the curriculum and recommended that

the following steps be taken in the matter as a joint effort of the Central and the State Units :

- (a) State Evaluation Units when established should work in close co-operation with state Curriculum and Text-Book Committees.
 - (b) Literature on objectives and learning experiences in the different subjects should be supplied to the teachers in order to help them adopt objective-centered teaching.
 - (c) Intensive study and research should be undertaken for developing objective-based curricula in various subjects.
 - (d) The curricula thus modified should be tried out as a pilot project in selected schools before being implemented on a large scale.
 - (e) A suitable machinery closely associated with the state evaluation units and perhaps forming a part of it, should be set up in the states to maintain a close watch on the curriculum changes and to suggest necessary modification for further improvement of the standard of teaching and learning.
- (7) As it was essential to align the objectives of education with the changing pattern of a democratic socialistic society, and also to suggest co-ordinated solutions of various important questions of policy that periodically crop up in the field of education, the conference was of the firm opinion that a Standing National Committee or Commission comprising distinguished educationists should be set up as early as possible to work out
- (a) the objectives of education at various levels,
 - (b) objectives of secondary education in particular,
 - (c) the links to be established between different levels.

ITEM IV. To Evaluate the progress made in the establishment of State Evaluation Units and to consider steps to accelerate the measure.

Introducing this item Shri R. K. Kapur pointed out that the States of Andhra Pradesh, Kerala, Bihar, Rajasthan and Mysore had already formulated proposals for the establishment of state evaluation units and seven other states and territories were actively considering the matter. He stressed the urgent need for setting up these units so as to speed up the reform.

Organisational set-up of the State Units

It was pointed out that the set-up of State units need not be of uniform strength in all the States as the staff needed would depend upon the size of the State and also on the pace at which the State wished to implement the reform.

The minimum staff requirements for a State unit would be one Director, 2 to 4 Evaluation Officers and one Statistical Officer. One or two technical assistants such as computer and assistant statistical officer could be added later on.

The discussion, which followed, stressed the desirability of keeping the State Unit under the control of State Departments of Education. It was also suggested that an advisory body consisting of the Director of Education/Public Instruction, the Chairman and Secretary of the Board should be constituted for directing the activities of the unit and for ensuring maximum cooperation between the unit, the Board of Secondary Education and the State Department of Education.

Resolutions

The following resolutions were then passed by the Conference :

1. The conference stresses the urgency of setting up State Evaluation Units very early so as to implement the programme of Examination reform according to schedule.
2. With reference to the scales of pay of the staff of Units, the conference recommends that the scales should be in conformity with those in force in the respective states but not exceeding the central scales of pay.

3. The conference considers that in view of the need to mobilise the cooperation of various agencies in promoting the reform, it would be desirable to locate the State Units under the administrative control of the State Departments of Education. But, as far as their operational functions are concerned, they should work in close cooperation with the Boards of Secondary Education. The practice may of course vary from State to State according to the nature of the Boards of Education and the administrative relationship between the State Departments and the Boards.
4. In order to ensure coordination as envisaged the conference recommends the setting up of an Advisory body for each State Unit on which should be represented the Chairman and Secretary of the Board and the Director of Public Instruction/Education, of the State.

ITEM V : To discuss ways and means of using the test material compiled by the Central Evaluation Units for (a) Internal Assessment and (b) External Assessment.

Shri R. K. Kapur described briefly how the pool of test material had been developed in English, mathematics, social studies and science, incorporating the first two objectives, namely, knowledge and application of knowledge, in non-language subjects, and comprehension and written expression in English. It was proposed to supply these items to the Boards and to the State Departments of Education to serve as illustrative material and to prepare the schools and teachers for the final introduction of this type of objective-based testing in the examinations.

The following uses of this test material were suggested :

(a) For Internal Assessment

- (i) Incorporation of the test material by teachers in the home examinations.
- (ii) Using the material as illustration to prepare further test material.
- (iii) Improving classroom teaching by utilizing the kind of situations as used in the items for the development of desired abilities in pupils.
- (iv) Giving practice to pupils in responding to the new pattern of test questions.

(b) For External Assessment

- (i) Acquainting the paper setters and examiners with the kind of questions appropriate to test the two objectives.
- (ii) Improving the present pattern of questions and substituting questions more specifically based on objectives.
- (iii) Judging the suitability of the prescribed syllabi.

Further pools of items so as to cover all the topics in each of the subjects of the secondary school curriculum would be prepared by the Central and State Evaluation Units. The Central Unit proposed to supply the second pool of specimen test items during 1961-62, and on additional objectives in subsequent years.

The Conference next proceeded to study the implications of introducing the new type material in the Board examinations.

The following points were made by the members during the course of discussion :

1. The prepared test material should be made available to individual teachers.
2. Teachers should be oriented in the use of the material for improving teaching and home examinations.
3. The State Evaluation Units should be established as soon as possible so as to help in the orientation of teachers and in the further development of test pool covering all aspects of the syllabi in different subjects.
4. The co-ordination between the State Boards and the Departments of Education is very essential as change of the examination questions implies change in the teaching methods as well as evaluation procedures.
5. A phased programme of introducing the new type tests in the external examination may be worked out, sufficient time (about a year) being allowed for intensive orientation of teachers before the tests appear in the annual Board examinations.

Discussing the need for co-ordination between the State Boards and Departments of Education, it was pointed out that in Boards like Maharashtra and Gujarat, the Chairman is not the D.P.I. of the Education Department. It was, therefore, difficult for the Board to introduce internal assessment unless the Directorate of Education was convinced of its utility and worked in co-ordination with the steps taken at the Board level to introduce the reform.

At the conclusion of the discussion on the item, the conference recommended that as soon as the pool of specimen test items supplied by the Central Evaluation Unit reaches the State Secondary Boards and State Departments of Education, the following further steps should be taken :

1. Teachers should be oriented on a large scale in the use of the material for teaching and testing in the classroom.
2. Paper setters and examiners should be acquainted with the technique of writing and using objective-based tests.

3. The schools should be notified well in advance about the phased programme of introduction of the objective-based tests in the external examination.
4. Co-ordination should be effected between the State Boards and the Departments of Education in order to help the teachers introduce necessary changes in the teaching methods and evaluation procedures.

ITEM VI. To consider the need for developing learning experiences in keeping with the evaluation approach and steps to be taken to make them available to teachers.

While presenting the item, Prof. Menon pointed out that no examination reform can succeed unless it is supported and accompanied by improvement in the field of instruction. Good evaluation tools are based on well defined objectives. The realisation of these objectives in turn depends upon better teaching techniques and improved materials. This is naturally a slower and more difficult process and requires considerable preparation. Vital to this work is also the amplification of syllabus and the provision of clear directions for the teachers.

The co-operation of several agencies such as those detailed below is required for fulfilling this aspect of the reform :

- (1) Central Evaluation Unit
- (2) Training Colleges
- (3) Extension Services Departments
- (4) State Departments of Education
- (5) State Boards of Secondary Education
- (6) Experimental Schools
- (7) State Evaluation Units
- (8) Central and State Curriculum and Text-Book Bureaux.

The preparation of suitable learning experience was a very great task and it was not possible for the central unit to do it alone. The assistance of the Extension Services Departments would have to be taken in the effort. But as by the end of the Third Five-year Plan there will be 104 Extension Services Departments working in the country, these departments with the financial assistance from State Education Departments, can help in this task to a great extent.

Dr. Khair thought that the problem of large sized classes and teachers of average ability had to be reckoned with. He suggested that the use of audio-visual aids may help in the successful implementation of the learning experience programme.

Shri Srivastava (Bihar) suggested that the work can best be organised state-wise through selected teachers from the training colleges and with the help of the Evaluation Officers.

Shri Kapur emphasized the role of the subject teachers in the programme. Suitable handbooks should be prepared for the guidance of teachers. With their help teachers will be able to develop valuable learning experiences.

At the end of the discussion, the conference, passed the following resolutions :

The conference agrees that the development of learning experiences is an important aspects of the programme of the reform and suggests the following measures to be taken in the matter :

1. The co-operation of training colleges, Extension Services Departments, State Evaluation Units and Secondary School teachers should be fully obtained in developing learning experiences.
2. The central unit should provide leadership in the matter and supply the illustrative material as soon as possible to all the agencies concerned.
3. The collaboration of the Central and State curriculum and text-book organisations should also be obtained in this programme.

ITEM VII. To review the present position of internal assessment in the different States and to consider the difficulties experienced and measures to overcome them.

Introducing the item, Prof. Menon emphasized the need for constant appraisal of student progress in any good system of education and the role that internal assessment can play in this respect. He referred to the recommendations of Radhakrishnan and Mudaliar Commission as also those of the Bhopal Seminar in this connection. He reviewed the progress of internal assessment in different States, especially with the studies made by the Central Unit in the four Boards of Bihar, Punjab, Mahakosul (Jabalpur) and Vidarbha (Nagpur).

The conference discussed the following problems relating to the different aspects of internal assessment :

- (1) Introduction of internal assessment in States which have not introduced it so far.
- (2) Reporting internal assessment results.
- (3) Criteria for internal assessment.
- (4) Pre-requisites for the successful implementation of internal assessment programme.

I. Whether internal assessment should be immediately introduced in the States which have not yet introduced it or whether its introduction should wait till the completion of studies with respect to various problems of internal assessment as experienced in the States practising it.

Shri S. K. Sarkar (West Bengal) advocated that internal assessment should be introduced as rapidly as possible in States having no internal assessment because of its intrinsic value in the field of education. He referred to an experiment carried out in West Bengal in 25 selected schools of all categories which showed that the teachers generally were competent in most cases to assess pupil achievement.

Shri Sharma (Uttar Pradesh) argued that the introduction of internal assessment should wait till its value was

substantiated through studies and investigations in our own situation with the help of data available with the Boards having practised internal assessment for a number of years.

The concensus of opinion, however, was that in view of the accepted efficacy and educational value of internal assessment, it should be introduced in all the States as early as possible. In the meantime studies and researches should be undertaken to improve the tests and other products connected with internal assessment. The Directorate of Extension Programmes for Secondary Education should help the States through finance and technical assistance for carrying these studies.

II. How to report the results of internal assessment.

Except in Punjab, the practice at present is to add the internal assessment marks to those of the external examination. Punjab follows a system whereby internal assessment marks are scaled up or down to bring them in line with the external marks, wherever the internal and external marks, of a particular school differ by more than 10 per cent.

The conference felt that variation in internal and external marks may be due to several factors such as the content, coverage and criteria involved in the two types of assessment and was therefore to some extent natural. It was, therefore, of the opinion that internal and external marks should not be combined arithmetically as is being done at present. Instead they may be converted into percentages and shown separately side by side. A point of view was also expressed that internal and external assessments should have equal weightage and separate pass marks should be prescribed for both.

III. Criteria in which internal assessment should be based.

As internal assessment is concerned with the assessment of the total personality of the child, it should be based on worthwhile criteria suited to the conditions of our schools and the capacities of our teachers. These criteria may be determined and developed as a result of studies, experiments and research. The conference desired that there should be some experimental schools in each State where facilities should be made available to carry on such studies.

IV. Pre-requisites for the successful implementation of internal assessment programme :

(a) *Training of teachers.*

As teachers needed necessary background and practice in the handling of tools for internal assessment, it was suggested that facilities should be provided for this purpose through publication of literature on internal assessment, incorporation of the concept of internal assessment in the B.Ed. syllabus and organisation of an intensive programme for in-service training of teachers.

(b) *Studies and research :*

A programme of research should be undertaken with respect to the following problems as early as possible :

- (1) Co-ordination of standards between different schools.
- (2) Combination of marks of internal and external assessment.
- (3) Methods of reporting results and feed-back.
- (4) Criteria for internal assessment.
- (5) Attitude of teachers, pupils and parents with respect to internal assessment and so on.

The conference suggested that necessary financial and expert assistance should be provided to the State Boards for carrying on these studies.

(c) *Tools :*

It was suggested that standardised tests should be developed by the Central and State Units and provided to the teachers for internal use. This would help to co-ordinate standards of schools.

At the end of the discussion, the conference adopted the following resolutions :

- (1) Although a number of problems in connection with internal assessment still remained to be solved through study and research, in order to motivate students for regular study, and to afford a supplement to the external examination, the conference recommends that the Boards where internal assessment is not practised at present should also introduce it as early as possible. At this stage it is not considered necessary to lay down uniform procedures for the programme.

- (2) Further studies should be undertaken by the Boards which have introduced assessment, on the various problems and difficulties which have been encountered so far and the results of these studies should be made available to the other Boards in the country.
- (3) Expert assistance may be made available to those Boards which wish to make detailed studies of their practices by utilising the wealth of material already available with them.

ITEM VIII. To examine the secondary school examination results of the year 1960 in comparison with those of the previous years and suggest measures for further improvement.

Shri R.K. Kapur drew the attention of the conference to the following conclusions that emerged out of the study of results of March 1960 as compared with those of previous years :

- (1) The average pass percentage has hovered around 47.5 for the past several years though the pass percentage in March 1960 is slightly higher than that of the previous years.
- (2) The results of regular and private candidates present a striking contrast as revealed by the figures of pass percentages given below :

High School Examination, 1960

Regular 56.72 per cent

Private 38.87 per cent

Higher Secondary School Examination, 1960

Regular 55.10 per cent

Private 32.85 per cent

- (3) The total pass percentage and the pass percentage in English run almost parallel, while the results in Mathematics are generally higher than the total pass percentage. The cause for larger failures thus seems to be English rather than mathematics. Intensive measures will therefore have to be taken for the teaching and testing of English.

During the discussion that followed the double-shift system came in for criticism as one of the chief causes of the lowering of standards and the consequent fall in the pass percentage. It was however realised that under existing conditions of increasing demand for secondary education, it would be more practicable to consider possible improvements rather than the abolition of the system. Some of the suggestions made by the conference to improve the system were :

- (1) One headmaster and two assistant headmasters should be incharge of both the shifts.
- (2) Separate teaching and other staff should be provided for the two shifts.
- (3) Equal distribution of school time should be ensured between the two shifts.
- (4) Each shift should have morning sessions for three days in the week and afternoon sessions for the other three days.

The conference suggested that improvement of the total results should be achieved as quickly as possible, through the co-ordinated effort of agencies such as the State Education Departments Examination Boards, Training Colleges, Extension Services Departments, the Directorate of Extension Programmes for Secondary Education with the Central Evaluation Unit, State Evaluation Units (when they were set up) and Associations of teachers and headmasters. Some of these steps are :

- (1) Bringing about improvement in pupils' achievement in English and Mathematics.
- (2) Setting up state-level committees to survey and study the problem from year to year in an intensive manner and preparing a long-range plan of action.
- (3) Making pre-service training of teachers more effective so that teacher-trainees are trained in using improved techniques of teaching and testing.
- (4) Providing greater diversification of courses so that pupils are able to pursue lines of study for which they are most fitted.

The following resolution was adopted by the conference:

“The conference recommends that the following measures suggested by the Central Unit for bringing about improvement in the secondary school examination results should be communicated to the Boards and the State Departments of Education:

- (1) Bring about improvement in pupils' achievement in English and Mathematics. This will call for intensive in-service programmes through the co-ordinated effort of Extension Services Departments, the Directorate of

Extension Programmes for Secondary Education, Central Institute of English, Hyderabad and State Departments of Education.

- (2) Set up special state-level committees to survey and study the problem from year to year in an intensive manner and prepare a long-range plan of action.
- (3) Take necessary action to remedy the following defects which contribute in a greater or lesser degree to the final results :
 - a. Over-crowding in classes.
 - b. Double-shift system.
 - c. Heavy work-load on teachers.
 - d. Excessive co-curricular activities un-co-ordinated with the curricular programme.
 - e. Inadequate equipment.
 - f. Apathy on the part of teachers.
 - g. Low quality of text-books.
 - h. Liberal policies of admission and promotion.
 - i. Frequent transfers of teachers and headmasters in the case of government institutions.
 - j. Untrained and unqualified teachers.
- (4) The Training colleges should make their pre-service training more effective by gearing their programme to educational objectives. The teacher-trainees should also be given sufficient training to make them better examiners and should be taught the techniques of evaluation so as to improve their teaching.
- (5) Provide greater diversification of courses so that pupils are able to pursue those lines of study for which they are most fitted”.

Fourth Conference of Chairmen/Secretaries of Boards of Secondary Education and Directors of Education/Public Instruction to be held on the 10th and 11th January, 1961

AGENDA

- | <i>Item No.</i> | <i>Particulars</i> |
|-----------------|---|
| I. | To receive the report of the work done by the Central Examination Unit from October, 1959 to December, 1960. |
| II. | To consider action taken by the State Examination Boards and the Central Examination Unit in implementing the recommendations made at the last conference. |
| III. | To discuss the total programme of Examination Reform with special reference to the action plan of implementation during the Third Five-Year Plan and the programme of work during 1961-62. |
| IV. | To evaluate the progress made in the establishment of State Evaluation units and to consider steps to be taken to accelerate the measure. |
| V. | To discuss ways and means of using the test material compiled by the Central Evaluation Unit in :
(a) Internal Assessment ; and
(b) External Assessment. |
| VI. | To consider the need for developing the learning experiences in keeping with evaluation approach and steps to be taken to make them available to teachers. |
| VII. | To review the present position of internal assessment in the different States and to consider the difficulties experienced and measures to overcome them. |
| VIII. | To examine the secondary school results of the year 1960 in comparison with those of the previous years and suggest measures for further improvement, specially in English and Mathematics. |

MEMORANDUM

ITEM I. **To receive the report of the work done by the Central Examination Unit from October, 1959 to December, 1960.**

At the conference held last year, the programme as detailed below was approved for implementation during the following years :

1. To continue the programme of State-level workshops and orientation workshops.
2. To get the test material already collected by the Central Examination Unit translated into the regional languages with the help of selected teachers or training college lecturers ; the items so translated to be tried out, analysed and got ready for supply to the Boards.
3. To work with training college staff in introducing the teacher-trainees to the new methodology of teaching and testing.
4. To work intensively with a few selected schools to try out learning experiences in order to develop them in relation to the objectives.
5. To organise a training course for State Evaluation personnel and to take such steps as are necessary for the establishment of State Evaluation Units.

During the 15 months under report the Unit was not only able to complete the programme outlined above but was able to initiate certain new lines of action to further the progress of the reform. The main phases of work during this period are detailed below :

1. Preparation of test pools and try-out and administration of test material in selected schools and final selection of test items.

The pools of test items prepared during the previous period were translated into the regional languages and got printed for administration in schools. As a preparation for administration of tests, it was necessary to work with selected schools and their staff

and prepare them not only for the form of questions but also for the objectives involved in these tests, so that the teacher could adapt their instructions and suitably prepare pupils to develop the abilities demanded by these tests.

One hundred and sixty-six schools were selected for this try-out in the different States representing English, Hindi, Marathi, Gujarati and Tamil. About 250 pupils took each of these tests. The answer papers of the various tests were later corrected and the items were subjected to analysis with reference to their difficulty and discrimination value. Out of this process emerged a group of items which had stood the test of the screening with reference to criteria underlying them. The tests are being printed and will be supplied to the various Boards shortly to serve as illustrative material (Please also refer to Item V).

2. Work with Training Colleges

The long-range and permanent success of any reform in education depends upon how effectively the training institutions are brought into it, as they constitute key points having access both to pre-service and in-service training of teachers. This is no less true of examination reform where the training colleges have a very significant part to play. The original programme of action which was drawn up under the guidance of Dr. Bloom envisaged such major involvement of the training colleges with all their resources of teaching personnel for the furtherance of this work. In this connection, it might be pertinent to point out the contribution which training colleges are expected to make :

- (a) The preparation and training of future teachers in the evaluation approach so that teaching methods, material and testing procedures become objective based.
- (b) The training colleges may themselves adopt the evaluation approach in their methods of instruction and testing by clearly defining the objectives of the teacher training course.
- (c) The faculties of these colleges will become valuable resource personnel for conducting in-service programmes for secondary school teachers in their respective areas.

- (d) The lesson plans prepared in training colleges will develop into model learning experiences with reference to groups of objectives in the different subjects. It will also be possible for the training college faculty to undertake research studies into the development and organisation of effective learning experiences.
- (e) Training colleges are also potential centres where research on procedures related to evaluation could be developed and co-ordinated.

In the context of this background, the following programme was undertaken and completed by the Central Examination Unit during this period :

(i) *Initial contact with the Training Colleges*

Between October, 1959 and February, 1960 the Evaluation Officers were posted to the Extension Services Centers in the various regions where they held discussions with the training college staff and pupil teachers of 60 training colleges and contacted 500 members of the college faculties and 3500 B.T./B.Ed. students. Earlier, the Unit had prepared a note on the introduction of the evaluation approach in the B.Ed. syllabus and this had been circulated to the training colleges for consideration. During their stay with the colleges, the Evaluation Officers had an opportunity of discussing the note with the college staff.

(ii) *Orientation courses in evaluation for lecturers of training colleges*

During June, 1960 the Evaluation Officers conducted 10 workshops in the five regions. Each workshop was of 10 days' duration and involved lecturers of selected training colleges from the different States. The programme consisted of discussions and group work on the clarification of educational objectives, preparation of learning experiences and tests based on objectives, implications of the evaluation approach to the training college of programme and the role of training colleges in the total programme of examination reform. About 200 lecturers from 63 training colleges attended the course.

As a follow-up of this work, a questionnaire was issued to all the colleges which had sent participants to these workshops to find

out how far they had benefited by the programme and what type of follow-up work and guidance they required. The replies to the questionnaire revealed that most of the training colleges felt the need for continuing this activity by means of more intensive work with individual institutions. In fact, some of the participants had already made a beginning by introducing the evaluation approach in their work.

(iii) *intensive work in selected training colleges*

As stated above the workshop held during the previous period of four months had brought out the need for intensive work with individual training colleges. Accordingly, Evaluation Officers were deputed during the months of August, November and December, 1960 to some colleges for intensive work involving all the faculty and students-trainees, exploiting to the fullest extent the resources of each college to strengthen the programme of evaluation. Brisk and enthusiastic work was carried out on defining objectives, listing them in pupils' learning outcomes, preparing test items and formulating teaching procedures based on them. It was possible to cover about 20 training colleges during this period representing 11 States and involving 2,000 teacher-trainees and 184 staff members (*Please see Appendix I*).

(iv) *Incorporation of Evaluation Approach in the B.Ed. and B.T. syllabus*

As stated earlier the Evaluation Unit had circulated a note on the incorporation of the evaluation approach in the B.Ed. syllabus to the various colleges and invited their opinions. The suggestions and comments so received were again analysed and in the light of these, the note was revised and sent out again to the training colleges. A copy of this note may be seen at *Appendix II*. In this connection it may be of interest to note that the possibility of introducing the new approach in the B.Ed. curriculum is already being explored in colleges like the A.G. Teachers' College, Ahmedabad, the Government Training College, Porbandar, the R. V. Teachers' College, Bangalore, and the Government Training College, Kurnool. The Officers of the Unit have already started working intensively with these selected colleges and examine the experiences gained by them in implementing this programme. It is hoped to send the data so collected to other training colleges and universities for necessary guidance.

3. Workshops for Orientating Teachers to the Evaluation Concept and for Preparing Test Items.

The work of acquainting the secondary school teachers with the new concept of evaluation continued during this period. A series of workshops was held in the various region from October, 1959 to February, 1960. Three types of workshops were organised :

- a. orientation workshop,
- b. state-level workshops, and
- c. advanced level workshops.

Thirty-seven orientation workshops were held, involving nearly 800 teachers. Evaluation Officers utilised the opportunity to address headmasters' and teachers' conferences in the various regions and acquainted them with the concept of valuation.

Fifty-five state-level workshops were organised in the different states with the co-operation of the State Departments of Education. In addition to orientating teachers to the concept of evaluation, these workshops helped to prepare valuable test material which constitutes the second pool of test items to be supplied to the Boards.

As a follow-up of the State-level workshops held during the previous years, some of the outstanding teachers who had participated in them and in the orientation workshops, were invited to workshops of an advanced type where participants prepared test materials and learning experiences. Sixteen such workshops were held during this period covering different states.

For subject-wise and state-wise details of workshops, please see *Appendix III*.

4. Studies of Internal Assessment procedures

As a follow-up of the recommendations of the Bhopal Seminar and the recommendations of previous conferences, several Boards have already introduced some form of internal assessment at the secondary school level. The last conference of Secretaries of Boards have discussed the problems that had arisen out of this new measure and indicated the need for a further study by the Central Unit. Accordingly, the Central Unit undertook a

preliminary study of the procedures of internal assessment adopted in selected Boards of Secondary Education. A detailed report of this study is presented under item VII of the agenda. Some of the aspects of the internal assessment were also discussed by the seminars organised by the Directorate for considering research in evaluation to be undertaken by various agencies (Please see item 6 below).

5. Training Course for State Evaluation Personnel

It was recognised very early in the reform that it would be necessary to establish State Evaluation Units as early as possible to carry forward the reform according to schedule and in the light of local requirements. The last conference which had considered this problem recommended that State Units should be established by the year 1960-61 and the training courses should be organised by the Directorate on an all-India basis. Accordingly, the Directorate corresponded with the various states with regard to the establishment of State Units. Five states have formulated proposals in this regard and it is hoped that evaluation units will be established in these states in the first year of the Third Plan. As regards the organisation of the training course, a five-week course was organised at the Central Institute of Education, Delhi from the 16th of September, 1960. Fifteen States and territories deputed 27 officers to this course which was conducted by the Officers of the Central Unit with the help of Dr. Fletcher, T. C. M. Consultant on Evaluation. The Training Course was a comprehensive programme covering the concept of evaluation, its techniques, implications of the reform at the State-level, functions of the State Units, and co-ordination between State Units and the Central Unit etc. A copy of the programme indicating the specific item discussed during the course may be seen at *Appendix IV*.

6. Seminars on Research in Educational Evaluation

The experience of the past two years in implementing the programme of examination reform had brought up the need for undertaking research investigations into certain problems that had arisen during the period. It was felt that the most appropriate agencies which can be entrusted with this research would be the training colleges and progressive secondary schools interested in

the problem. The Directorate, therefore, decided to organise a series of short seminars involving selected lecturers and teachers from training colleges and secondary schools to locate problems which require research and to formulate research programmes. The first of these seminars was held at the S. T. College, Bombay, from August, 31 to September 4, 1960. Twenty-three participants from the training colleges and S. S. C. Board, Poona, Extension Centres and Secondary Schools from Maharashtra and Gujarat attended the seminar. The participants contributed valuable thinking to this subject.

This was followed by a second seminar of two-days' duration at Delhi in which co-ordinators of the southern and central zones, who had come to Delhi to attend a training course in audio-visual education participated. This seminar, brief as it was, helped in locating certain further problems in the area and in drawing up research designs on some of these problems.

7. Publications

In furtherance of the programme of disseminating the concept and technique of evaluation over a large cross-section of teachers and educationists the Examination Unit continued to publish a number of articles on evaluation and learning experiences in the Directorate's journal 'Teacher Education'. Digests of important books on evaluation were forwarded to the Secretaries of Boards. Other publications brought out by the Directorate are listed in *Appendix V*.

8. Consultative Services

The Officers of the Unit continued to render consultative services whenever required by training colleges or Boards of Secondary Education or Extension Services Centres. This helped the Unit in getting into touch with the current problems and the developments in the states.

The Conference may consider the above report in the light of targets set and make suggestions for future work.

APPENDIX I

Training Colleges in which Intensive work on Evaluation was done during 1960

<i>Training Colleges</i>	<i>No. of students Involved</i>	<i>No. of staff participated</i>
ANDHRA PRADESH		
1. Government Training College, Kurnool	120	10
2. Government Training College, Rajahmundry	117	8
BIHAR		
3. Teachers' Training College, Turki	125	3
4. Patna Training College, Patna	125	7
GUJARAT		
5. A. G. Teachers' College, Ahmedabad	125	14
MADRAS		
6. St. Xaviers Training College Palayamcottai	60	5
7. Meston Training College Madras	65	5
MADHYA PRADESH		
8. Government Training College, Raipur	64	11
9. Prantiya Shikshan Mahavidyalaya, Jabalpur	128	24
10. P.G., B.T. College, Bhopal	100	6

MAHARASHTRA			
11.	Azad College of Education, Satara	75	8
12.	S.M.T.T College Kolhapur	90	8
MYSORE			
13.	R.V. Teachers' College, Bangalore	108	8
PUNJAB			
14.	State College of Education, Patiala	195	16
RAJASTHAN			
15.	Vidya Bhavan, Udaipur	100	9
16.	Government Training College, Bikaner	126	10
UTTAR PRADESH			
17.	Isabella Thoburn College, Lucknow	20	6
18.	G.T. College for Women Allahabad	87	12
WEST BENGAL			
19.	Vinaya Bhavan, Santiniketan	65	7
20.	Government Training College, Hoogly	120	4
TOTAL		<hr/> 2015	<hr/> 184

APPENDIX II

A revised note on the incorporation of the evaluation approach in the B.Ed./B.T. Syllabuses

It is now being increasingly realised that a true evaluation of educational attainments should take into consideration the integral relationship between objectives, teaching and learning. This relationship has also been accepted as the basis of the ten-year phased programme of examination reform that is being implemented in the country.

The approach to evaluation holds great possibilities. On the one hand, it clarifies the teacher's understanding of the objectives to which his teaching is directed and on the other, it helps him to adopt such methods as are most suited to achieve those objectives. It follows, therefore, that teachers—those in service as well as future entrants—should be acquainted with the concept and procedures of evaluation. Teachers in service are gradually being oriented to the new ideas through various in-service programmes organised by the Directorate as part of its long-term plan for examination reform. It would however, strengthen the progress of the reform if teachers under training are also given an insight into it while they are still in the training colleges.

The subject of educational evaluation can be introduced in the training programme as part of the theory as well as of the practice of education. The concept of evaluation could be incorporated in the papers of the B.Ed. or B.T. examination, and the necessary practical work could be made a part of practice-teaching and included in the methodology papers.

Below are listed a few topics and practices to be adopted under three sub-heads (i) Theory (ii) Methods of teaching (iii) Practice teaching. These should, however, be taken to suggest only the scope of the ground to be covered rather than the form in which the adoption may be done. The topics suggested under theory may be incorporated in any of the theory papers wherever they can be best fitted. The items under heads II and III are suggestions on desirable practice which would help teacher trainees

actually to practise the new approach and thereby grasp all its implications.

It may be emphasized at this stage that the various steps involved under (III) should not be treated as unvarying as the Herbartian steps. The teachers should feel free to try their own approaches keeping in mind the underlying philosophy of evaluation. The new concept should not be allowed to grow into an obstacle to experimentation in methodology.

Again, the topics detailed below have been spelt out only for the sake of clarity and are not intended to add to the already heavy B.Ed. syllabus. In fact, some of the points in theory and practice can be conveniently integrated with the topics already existing in the present syllabi.

(I) Theory

1. Concept of Evaluation
2. Evaluation in Education
 - (a) Educational objectives, their importance and the need for defining them in terms of learning outcomes.
 - (b) Evaluation and its integral relationship with the objectives of teaching and learning experiences.
 - (c) Evaluation as a means of improvement in curriculum, teaching methods and pupil guidance.
3. Techniques of Evaluation with special emphasis on achievement and maintenance of pupil records.

(II) Methods of Teaching

1. Formulation of specific objectives in the subjects offered by the student-teacher for practice teaching.
2. Defining some important objectives in terms of expected learning outcomes.

NOTE : The above items could be taken up as group work.

3. Other topics such as the study of the syllabus, teaching methods and evaluation procedures, should be related to the objectives of teaching the subject. This will make the whole course integrated.

(III) Practice Teaching

1. Planning learning experiences on some of the units in the subjects offered by the student-teacher and trying them out.

NOTE : Such planning should indicate :

- a. The specific objectives desired to be achieved.
 - b. Expected learning outcomes.
 - c. Selection and organisation of content matter with reference to the contemplated outcomes.
 - d. Details of teacher and pupil activities.
2. Preparing, administering and scoring a test of at least twenty-five to fifty items on some units taught during the teaching practice.

NOTE : This test may be based on one or two units covered by the student-teacher during his practice teaching and it should aim at assessing the achievement of the specific objectives and outcomes kept in view by the teacher while teaching the topic.

3. Preparing a short report on the performance of the pupils including summarization of test results, interpretation of test data in terms of the objectives and suggestions for modifications in the content, methodology and other aspects.

SUGGESTED BOOKS FOR REFERENCE

1. Bloom, B.S. (Editor) *A Taxonomy of Educational Objectives* (New York, Longmans Green & Co).
2. Edward J. Furst. *Constructing Evaluation Instruments*.
3. Schwartz A. and Tiedeman, S.C. *Evaluating Students' Progress* (New York, Longmans Green & Co., 1957).
4. Smith and Tyler *Appraising and Recording Student Progress* (New York, Harper and Brothers).
5. Remmers H.H. and Gage, N.L. *Educational Measurement and Evaluation* (Revised Edition. New York, Harper & Brothers, 1953).
6. Travers R.M. *How to make achievement test* (Odyssey Press, 1950).

7. Directorate of Extension Programmes for Secondary Education
The Concept of Evaluation in Education.
8. Directorate of Extension Programmes for Secondary Education
Evaluation in Social Studies.
9. Directorate of Extension Programmes for Secondary Education
Evaluation in General Science.

APPENDIX III

Statewise and Subjectwise Evaluation Workshops conducted between October, 1959 and December, 1960

A. STATE LEVEL WORKSHOPS

State	English	Mathematics (General and Elective)	Science (General and Physics)	Social Studies and Geography	Hindi	Total
Punjab	—	1	2	1	1	5
Delhi	—	1	—	1	—	2
Rajasthan	—	1	1	1	1	4
Uttar Pradesh	—	—	—	3	—	3
Madhya Pradesh	1	1	2	—	1	5
Bihar	1	1	1	2	—	5
Orissa	1	—	1	1	—	3
Bombay	1	1	4	—	—	6
Andhra Pradesh	—	2	2	2	—	6
Mysore	1	1	3	—	—	5
Madras	1	1	1	1	—	4
Kerala	2	1	2	1	—	6
West Bengal	—	1	—	—	—	1
	8	12	19	13	3	55

B. ADVANCED LEVEL WORKSHOPS

State	English	Mathe- matics	Science	Hindi	Social Studies	Total
Punjab	1	1	1	—	1	4
Uttar Pradesh	—	1	1	1	1	4
Bombay	—	1	1	—	1	3
Mysore	—	1	1	—	1	3
Madras	—	—	1	—	1	2
	1	4	5	1	5	16

The total number of participants who attended the workshops shown under (a) and (b) was 852.

C. ORIENTATION WORKSHOPS

State	No. of workshops	No. of participants
Delhi	8	143
Uttar Pradesh	8	195
Bihar	4	67
Andhra Pradesh	1	30
Bombay	3	100
Mysore	3	60
Madras	5	85
Kerala	2	40
Punjab	3	60
	37	780

APPENDIX IV

Directorate of Extension Programmes for Secondary Education Training Course for State Evaluation Personnel

(16 September 1960 to 19 October 1960)

Central Institute of Education, 33, Chhatra Marg,
University Campus, Delhi-6.

Morning sessions (M) will be from 10.30 A.M. to 1.00 P.M.
and Afternoon sessions (A) will be from 2.00 P.M.
to 4.30 P.M.

S. No.	Items	No. of Sessions	Date & Time
1.	Inauguration of the course		16.9.60 (A)
2.	Purpose and scope of the training programme	1	16.9.60 (M)
3.	The present examination system—Historical background—strengths and weaknesses	2	16.9.60 (A)
	Critical analysis of its Shortcomings		17.9.60 (M)
4.	Concept of Evaluation—Evaluation in Education—Interrelationship between educational objectives, teaching and testing—External examinations and internal assessment	2	17.9.60 (A)
5.	(a) Formulation of general objectives of secondary education	4	19.9.60 (A) 20.9.60 21.9.60 (M)
	(b) Formulation of specific objectives of teaching different school-subjects.		

APPENDIX IV (Contd.)

S. No.	Items	No. of Sessions	Date & Time
	(c) Defining specific objectives in terms of expected changes in pupils		
6.	Techniques of educational evaluation for appraising the outcomes in relation to different objectives	5	21.9.60 (A) 22.9.60 23.9.60
7.	Developing test material for written examination based on selected objectives in different subjects	4	24.9.63 26.9.60
8.	Tests—planning and editing, preparation of specimen tests in selected subjects—consideration of validity, reliability, objectivity, etc.	4	27.9.60 28.9.60
9.	Educational statistics—central tendencies and variabilities—probability curve—norms—correlation—item analysis	4	1.10.60 3.10.60
10.	Administration of tests in selected schools	1	4.10.60
11.	Scoring—item analysis—test analysis, summarization and interpretation of test results—suggestions for improving various aspects of education	5	4.10.60 5.10.60 6.10.60
12.	Internal assessment—its concept and techniques—its role in total evaluation—maintenance of pupil-records	4	7.10.60 11.10.60 (A) 12.10.60 (M)

APPENDIX IV (Contd.)

S. No.	Items	No. of Sessions	Date & Time
13.	Standardisation of tests— use of standardised tests	3	10.10.60 11.10.60
14.	Implications of the proposed reform in the field of curri- culum, learning experiences and methods of teaching	3	12.10.60 (A) 13.10.60
15.	(i) Establishment of State Evaluation Units—their organization and functions	1	
	(ii) Action plan with refer- ence to implementing the examination reform at the State level—difficulties and possible solutions		14.10.60
	(iii) Co-ordination with the Central Evaluation Unit, co-ordination with other State Units, co-ordination of State Units with their respective examination Boards	4	15.10.60
	(iv) Co-ordination with train- ing colleges, curriculum and text book bureaus and such other educational agencies in the States		
16.	Designing and conducting experiments and research related to the examination reform	3	17.10.60 18.10.60
17.	Techniques of conducting workshops—Group dyna- mics	1	18.10.60
18.	Conclusion of the course		19.10.60

APPENDIX V

Publications on Evaluation brought out by the Directorate

1. The Concept of Evaluation in Education.
2. Evaluation in General Science.
3. Evaluation in Social Studies.
4. Evaluation in Secondary Schools, by Dr. B. S. Bloon.
(Second Edition)
5. Report of the first Seminar on Research in Evaluation.
6. Bibliography on Evaluation.
7. Progress of Examination Reform in India.
8. Studies of Internal Assessment in Secondary Schools.
9. Results of Board Examination, March 1960.
10. A consolidated report on the follow-up action taken by the Boards on the resolutions of the third Conference of the Secretaries.
11. A revised note on the incorporation of the Evaluation approach in B.Ed./B.T. Syllabus

MEMORANDUM

ITEM II. To consider the action taken by the State Examination Boards and the Central Examination Unit in implementing the recommendations made by the last Conference

The recommendations made by the conference held last year fall under two groups :

- A. Those on which further action was to be taken by the State Boards of Secondary Education.
- B. Those on which further action was to be taken by the Central Examination Unit.

A questionnaire was issued to the Boards in July, 1960 to obtain information regarding the action taken by them on the various recommendations. The data so collected as well as the action taken by the Central Examination Unit on the resolutions pertaining to it have been consolidated in Appendix I. A brief note on the follow-up action is given below for the consideration of the conference.

A. Resolutions on which action was to be taken by the Boards

These recommendations mostly relate to the question of failures at the School Final Examination, a problem which has been exercising the minds of educationists during recent years and to which the conference devoted considerable attention during its last meeting. The replies received from the Boards and data collected by the Central Unit bring out the following facts :

1. Total results

The average percentage of failures during the First Five Year Plan was 52.5 while during 1958-59 it was about 53. The overall percentage of failures in the examination of March, 1960, is 49.6 which is slightly less than those of the previous years. However, the main problem of large scale failures still persists and would require intensive tackling.

2. Performance in English

The last conference made the following recommendations with regard to the improvement of teaching and testing procedures in English :

- (a) The language competency of the English teacher should be raised.
- (b) An English syllabus based on controlled vocabulary and graded structures should be adopted.
- (c) Questions in examinations should test mastery of skills rather than the knowledge of content.
- (d) Suitable scoring procedures should be evolved to ensure maximum objectivity and uniformity.

It is observed that definite progress has been registered in respect of (a) (b) and (c) above. So far, five States have introduced syllabi on the structural pattern while three others have adopted it up to the middle stage. Suitable text-books have also been written on the suggested lines. As regards testing, there is a definite shift of emphasis from testing content to testing language skills. Other Boards are getting the position examined by special committees and contemplate early action. As regards scoring procedures, no specific departures have been reported by the State Boards. The only practice generally followed to ensure objectivity and uniformity seems to be to give detailed instruction for marking and to provide for the additional scrutiny of a certain proportion of answer books.

The following suggestions may be considered by the conference to further help the situation :

- (i) State Departments of Education in co-operation with the State Boards may draw up regular plans for orientating English teachers in the techniques of handling the syllabi based on controlled vocabulary and graded structures. The Directorate proposes to undertake a series of such orientation programmes in co-ordination with the Central Institute of English, Hyderabad during the Third Five Year Plan.
- (ii) Examination in English may consist of two papers, one of which is completely of the objective type and the other of the essay type. Wherever there is only one paper in English, one part may be of objective type questions administered separately, while other may be of essay type questions. Each essay type answer may be assessed by two examiners and the average taken as the final perfor-

mance. This is desirable for all subjects but is urgent in the case of English because language competency is crucial to success in the secondary examination.

3. *Performance in Mathematics*

Regarding this subject, the last conference recommended that :

- (a) Factors leading to poor attainment may be investigated.
- (b) Option should be given to students in answering questions from areas of their choice.
- (c) In-service training should be given to lowest class teachers of mathematics so as to provide proper motivation in children for studying the subject.

No extensive investigations envisaged under (a) have so far been possible although they are being contemplated by one or two Boards. Devices such as : (i) the staggering of secondary examination in two parts, one at the end of standard X and the other at the end of standard XI; (ii) instructions to heads of institutions, to provide more oral work and regular written assignments, have been adopted by a few Boards to improve the situation.

As regards providing 'choicc' in the mathematics paper, practice varies from 20 to 100 per cent. Some of the Boards seem to feel that providing choice among subject areas would encourage students to exclude some parts of the subject altogether and thus handicap them in further studies.

In-service training of teachers in mathematics is a matter that should be handled by the State Department of Education.

The Conference may consider the feasibility of the following suggestions :

- (i) The State Boards may underake an analysis of the reports of the examiners of the last few years bringing out defects in the answers of students appearing at the examinations and pass on this information to the Departments of Education as early as possible. (Please see item VIII where the question is dealt with further).

- (ii) In-service training of mathematics teachers of the lower classes may be organised by the State Departments through suitable agencies.

4. *Automatic scrutiny of scripts in marginal cases*

This is provided in States such as West Bengal, Uttar Pradesh, Orissa and Andhra Pradesh. Specific rules have been formulated by these Boards to ensure uniformity. In other Boards also, marginal cases are attended to either at the marking stage by examiners or deputy chief examiners or moderators ; or they are examined again before the tabulation of final results.

However, the practice of automatic scrutiny of marginal cases has not yet become general. Some States seem to feel that such a system entails certain risks which would be difficult to control. It is, therefore, suggested that the conference may re-examine the proposal, discuss the difficulties involved and propose a more suitable system. This is a problem that requires special attention since the number of marginal cases is increasing every year with the increase in the number of candidates appearing at the external examination.

5. *Maintaining the passing level at 33 per cent in all subjects.*

In several Boards, the passing level in the aggregate is 33 per cent while subject minima for passing is either 30 or 33 per cent. In the case of others it varies from 30 to 40 per cent. The Board of Rajasthan tried to raise the passing level from 33 to 36 per cent with a view to raise the standard, but after finding that this caused a fall in pass percentage, reverted again to 33 per cent. However, no uniformity in passing level has yet been realised. Boards seem to have varied thinking on the subject as may be observed from the detailed report.

The conference may suggest further means, if any, considered feasible, for maintaining uniformity of standards in passing by the different Boards.

6. *Keeping the total number of subject offering at six*

Vidarbha has brought the total number of subjects to six, while in West Bengal only five subjects are examined at the higher secondary school examination (two languages and three elective subjects). The S. S. C. Board, Poona, is considering a proposal to permit candidates to offer even less than six subjects at a time, provided

the number of subjects for the final certificate is completed in not more than three years and in five attempts. In Uttar Pradesh also the total number of subjects at the high school stage is six. One of the causes of failures most commonly staged is the over-crowding of subjects and their content. It would, therefore, be an interesting subject of study to see how far the number of subjects influences the pupil's intensive study and hence his performance in the examination.

7. *Condoning failures in English*

It appears from the data received that most of the Boards are not in favour of the proposal and English still remains as one of the compulsory subjects. Some Boards go even one step further in prescribing a higher passing level in English (35 to 40 per cent). At the same time it is observed that the overall pass percentage and the percentage of passes in English run almost parallel which would go to show that English is still one of the major factors deciding the fate of a candidate. This point deserves very careful consideration and is further dealt with under item VIII of the agenda.

8. *Eligibility to college courses even if a candidate has failed in one subject*

The last conference discussed the possibility of declaring eligibility for admission to college courses of those talented students who failed in one subject but who scored 35 per cent in the aggregate provided they do not offer at the college the subject in which they had failed.

This proposal does not appear to have received much attention. Only in one state, namely Mysore candidates who score 66 per cent and more in the aggregate but fail in one subject, are considered eligible for admission to the college courses. In Orissa, a candidate who scores 50 per cent marks in the aggregate is eligible to pass if he fails in any one subject by five marks or less.

It would be worth finding out at this stage as to how many such cases actually fall under this provision in different Boards and what kind of regulation should be framed so that talented students may get an earned advantage over their deficiency in one or two subjects. The conference may offer its opinion on this proposal.

9. *Awarding grace marks according to a graded scale*

The practice in this regard varies from state to state. some Boards have already adopted a system of giving grace marks according to a sliding scale while others give grace marks in an automatic manner. Such practices have been in vogue in many Boards for the last several years and no special difficulties seem to have come up.

The conference may consider whether it would not be desirable to effect some basic uniformity among the various Boards in this system, to ensure that grace marks are awarded on merit and in a rationalised manner.

10. *Publishing results of regular and private candidates separately*

All the Boards except Kerala have adopted the system of publishing the results of regular and private candidates separately and no difficulties have been reported by them in adopting the practice. The over-all figures of the pass percentage of regular and private candidates in the examinations of March, 1960, are given below

OVER-ALL PASS PERCENTAGE

Types of Candidates	High School Examinations	Higher Secondary School Examinations	Combined percentages of High and Higher Secondary School examinations
A. Regular	56.72	52.10	55.94
B. Private	38.87	30.10	37.93

For further details attention is invited to the pamphlet given under item VIII which deals with examination results of 1960.

The above table shows that the results of private candidates are much lower than that of the regular ones. Moreover, such separate figures present a clearer picture of the performance by the two types of candidates.

11. *Restriction of admissions to private candidates*

Only a few Boards have framed rules to regulate admissions of private candidates. In the case of Punjab and Gwalior, the

number of private candidates has exceeded that of the regular candidates. The rules framed by the Poona Board have helped in keeping down the number of private candidates to less than 16 per cent of the total candidates. The relevant extracts of the rules prescribed may be seen in Appendix II.

The conference may consider this further because of its bearing on maintaining standards in education.

12. Formulation of suitable principles of promotion in the lower classes

The practice in this regard varies from state to state. In many cases rules of promotion are framed by the head of the institution, while in others, State Departments of Education issue necessary instructions. It is extremely important to make children aware of the level of achievement expected of them in the external examination, and hence the need for definite rules for admission and promotion in all the school classes. It is, therefore, suggested that schools and Departments may take up this question seriously and formulate such rules as are required to maintain standards of promotion.

13. Free tuitions and remedial teaching for backward students

There is no provision at present for extra help to weak pupils in most states. The local inspectors in some states give instructions to schools in this regard. The most important and logical way of reducing the large incidence of failures would appear to be to improve teaching and give special help to the weak students. The following suggestions may, therefore, be considered.

- (i) State Education departments may make special provision for running extra classes in schools to help backward pupils.
- (ii) Diagnostic tests may be prepared in certain key subjects such as English and Mathematics on the basis of which scientific guidance may be provided to pupils.
- (iii) In the case of external examinations, common mistakes located by examiners in the different subjects should be brought to the notice of the schools together with concrete suggestions for remedial measures.

- (iv) In subject seminars and workshops organised by various agencies, special stress may be laid on the use of test materials to improve achievement and diagnostic testing.

B. Action to be taken by the Central Unit

The conference recommended that the Central Examination Unit should undertake the following :

- (1) That the Directorate should disseminate the concept of evaluation widely through digests, reviews and brochures.
- (2) The Central Unit should supply the Boards adequate test materials as early as possible.
- (3) State Evaluation Units should be established by 1960-61 and a training course should be organized for officers of these Units by the Directorate.
- (4) The Central Unit should undertake research in the problems arising out of internal assessment.

1. Regarding the first recommendation, the Directorate has, during the past 12 months, brought out a number of publications on evaluation and distributed them to the Boards, Directors of Public Instruction, training colleges, Extension Services Centres etc. The list of these publications is referred to under item I.

2. A detailed report for this has been given under Item I and the matter is also dealt with under Item V. The Central Unit expects to supply the first set of illustrative test items to the Boards very shortly.

3. Regarding the establishment of State Evaluation Units by 1960-61, the Central Evaluation Unit conducted a five week course for State Officers on Educational Evaluation in Delhi during September-October, 1960. Twenty-seven officers representing 12 States and 3 Union territories attended the Course. Further details about the action taken by the Central Unit may be seen under items I and IV.

4. Regarding studies on internal assessment, the Unit has completed a preliminary study and the subject is dealt with in detail under item VII. The position concerning the introduction of internal assessment as a part of the external examination is however, briefly summarised below :

There has been little change, since the last year, for no new Boards have introduced internal assessment in the final examination. The question is under active consideration of special committees appointed by some Boards. The Boards of Uttar Pradesh and West Bengal do not consider feasible to introduce the system due to certain practical difficulties, while others who have put the system into practice have indicated a few problems which they have experienced. These problems fall under four broad categories :

- a. Vagueness of criteria about internal assessment, and consequent laxity of assessment by teachers.
- b. A tendency to inflate marks in order to produce good results.
- c. The difficulty of adding marks of internal assessment to the marks obtained in external examination.
- d. Lack of proper understanding of the spirit and concept of internal assessment and its importance in supplementing the external examination.

The conference may consider these problems and suggest suitable measures. The subject is however, dealt with in detail under item VII.

APPENDIX I

Consolidated report of the action taken by the Secondary Education Boards on the resolution made by the third conference of secretaries of Boards held in September, 1959

INTRODUCTION

Following the recommendations made by the Secondary Education Commission in 1954 and the Bhopal Seminar on Examinations in 1956, the Government of India took several steps to bring about a reform of examination at the secondary level. A Central Examination Unit was established by the former All India Council for Secondary Education (and the present Directorate of Extension Programmes for Secondary Education) to provide leadership in initiating and implementing the reform, particularly on a mass scale. So great is the importance attached to the school final examination, that whatever changes are brought about in that system immediately permeate throughout the schools and the teaching procedures. Even the study habits of pupils are moulded and forged by the kind of questions that are set in the final examinations. Recognising the potentiality resting in the Boards of bringing about improvement in examinations, the Ministry of Education has been convening annual Conferences of Secretaries of Boards to periodically review the progress made in this subject and to plan further steps.

The Third Conference of the Secretaries of Boards held last year considered certain very important aspects of the reform and made large scale recommendations about further steps to be taken. In the following pages are consolidated the follow-up action taken by the Boards on the recommendations made by the last Conference.

1. Poor performance of Pupils in English and mathematics

Studies of results of successive examinations have repeatedly shown that a large number of pupils fail because they fail in English. Next only to English comes mathematics as the decid-

ing factor in a candidate's pass or failure. The last conference, therefore, devoted considerable attention to this question and made various suggestions to remedy the situation.

A. ENGLISH

- (a) State Education Departments should make planned and concerted effort to improve the language competency of the English teacher leading to better instruction in the subject.
- (b) Boards of secondary education should adopt as early as possible a syllabus in English based on controlled vocabulary and graded structures.
- (c) Boards should ensure that questions in English test mastery of language skills rather than knowledge of content.
- (d) Suitable scoring procedures should be evolved by the Boards to ensure maximum objectivity and uniformity in marking answer-scripts.

The Boards of Secondary Education have taken the following action on these suggestions :

a. Improving teacher competence in teaching English

All the States appear to have become more and more aware of the basic need to improve pupil performance in English and have taken various steps in the matter. States such as Orissa, Madhya Pradesh, Kerala, Mysore and Uttar Pradesh have organized short-term intensive courses, seminars and workshops on the subject. Improved text-books in English have been prepared and supplied for the use of teachers, in Vidarbha and Mysore. Special Inspectors of English have been appointed by the State Education Departments in Andhra Pradesh and Mysore, while in Orissa an expert on the teaching of English has been appointed by the Board of guiding teachers of the language.

In Uttar Pradesh, an English Language Institute has been established since 1956 and has produced substantial material on the techniques of teaching English which is being widely used by schools in the state. Diploma courses of 4 months duration and summer courses are also organized by the Institute. The Govern-

ment of West Bengal has decided to establish a similar institute in collaboration with the British Council.

The Boards in Delhi and Poona have referred the matter to their Directors of Education whereas in Rajasthan the matter is receiving the attention of the Committee on Improvement and Co-ordination of Standards.

b. Adopting a syllabus based on controlled vocabulary and graded structures.

The reports received from the State Boards indicate that a syllabus based on controlled vocabulary and graded structures is in force in the States of Andhra Pradesh, Gujarat, Madhya Pradesh, Maharashtra and Mysore. In Orissa, Uttar Pradesh and Vidarbha, the structurally graded syllabus is in use only at the middle school stage. Uttar Pradesh proposes to introduce a similar syllabus for the High Schools.

The Board in Rajasthan is bringing out its own text-books written on the new lines. In Kerala, the question is being examined by the Syllabus Revision Committee.

The West Bengal Examination Board has not yet adopted such a syllabus although the option of teaching English by the structure method exists since 1958 and suitable text-books have also been recommended for the purpose. The question of introducing such a syllabus is under the consideration of a Syllabus Advisory Committee in English set up by the Boards. A wider adoption of such a syllabus seems to be the want of local talent for drawing up a consistent and complete course and for preparing Readers on those lines. Teachers are also not trained in the use of the structure method and therefore cannot handle it efficiently.

c. Setting the paper for testing language skills rather than content

There appears to be a positive shift of emphasis in several Boards from testing content to testing language skills. The fact, however, still remains that questions based on testing knowledge of textual content still find a large place in the question papers of the external examination.

Reform in the nature of questions has been introduced in the Boards of Andhra Pradesh, Gujarat, Maharashtra and Uttar Pradesh. The practice of setting questions on explanations with reference to the context has been discontinued by the Boards of Gujarat and Maharashtra.

d. Ensuring maximum objectivity and uniformity in scoring

Uniformity in scoring is ensured through means such as follows :

- a. Detailed instructions on marking are issued to examiners in Maharashtra and Gujarat.
- b. A certain percentage of answer-books valued by examiners are scrutinized by the Head or Deputy Head examiners or Moderators.
- c. Objective-type tests are used in Kerala and partly in Uttar Pradesh.
- d. Scoring procedures are discussed at a meeting of assistant examiners and chief examiners as in Mysore.

The following measures have been suggested by the Poona Board to further improve the situation :

- a. Reducing the number of answer-scripts allotted to one examiner.
- b. Allowing more time for valuation of scripts.
- c. Increasing the percentage of valued answer-scripts for moderation.
- d. Making newly appointed examiners work directly under the chief examiner.

It has been pointed out that these measures, however, are not without financial implications.

In spite of all these efforts on the part of the boards the results of March, 1960 Examinations clearly show that the subject of English still continues as a single factor in deciding the fate of the pupil. As is apparent from Appendix I, the total pass percentages of the regular High and Higher Secondary School candidates and that in English run closely parallel. Such a position suggests that more intensive effort is necessary to improve the situation. An intensive movement to combat this problem as launched by Madras State may be of interest to others.

B. MATHEMATICS

As regards the poor performance in mathematics, the conference recommended that the Boards of Secondary Education should:

- (a) investigate the factors that contribute to poor attainment in mathematics and seek to remove them ;
- (b) examine the possibility of so structuring the examination that an examinee is free to answer questions on those sub-areas for which he has an aptitude, rather than every area of the subject and
- (c) provide in-service training to teachers of mathematics in the lowest classes, so as to make them competent in motivating children adequately to the study of mathematics right from the beginning.

The following action as reported by the Boards is summarized below:

a. Investigation into the factors that contribute to the poor attainment in the subject.

While no investigations as such have so far been possible, the following are the kind of measures reported by the Boards of Secondary Education :

- (i) In Rajasthan, the higher secondary examination in mathematics has been staggered into two parts, one in general subjects at the end of class X and the other in Electives, English and Hindi at the end of XI.
- (ii) In Uttar Pradesh a circular letter suggested to heads of all recognized institutions more oral work in lower classes, more written work under teacher's supervision, regular home assignments and special care in elucidating fundamental principles.
- (iii) Reference has been made in this matter to special committees in Andhra Pradesh, Madhya Pradesh and Delhi.

Mysore Board is contemplating to investigate into the matter in collaboration with the Directorate of Education Research Bureau.

As this is a matter which concerns teaching in schools, the objective of the resolution can be achieved only in co-ordination with the Department of Education.

b. Options to select questions on those sub-areas for which the student has an aptitude.

A perusal of the question papers set by the various Boards

reveals that question papers generally provide for choice to the candidates, although the amount and kind of choice varies from Board to Board. While in Madhya Pradesh the choice allowed is to the extent of 100 per cent, in West Bengal it is only to the extent of 10 marks in a paper. In the Poona Board, 30 per cent of the total number of questions in the paper can be omitted because of choice offered. The mathematics papers set by the Orissa Board allow for choice within questions but no choice on the whole.

The Boards of Secondary Education, Maharashtra, and West Bengal have pointed out that allowing choice among sub-areas would encourage students to exclude certain areas altogether which may not be desirable as a large proportion of those students go to college. For this reason, in West Bengal, examinees are required to answer questions compulsorily from different areas in mathematics.

c. In-service training to teachers of the lowest classes

No regular in-service training programmes for teachers of mathematics in the lower classes have been reported by the Boards, except for occasional workshops or seminars organised by the Directorate of Extension Programmes for secondary Education or their Extension Services Departments. Even those are not primarily for the teachers of lower grades and generally cater to local needs only.

The main difficulty seems to be that the lower classes are not within the jurisdiction of the Boards. The academic sub-committee in Madhya Pradesh is planning for providing such training programmes in co-ordination with the Education Department. The Orissa Board is soon appointing an expert in the teaching of mathematics who will look into the matter. The State Education Research Bureau Mysore, is attempting to evolve some simplified processes in motivating students for the study of mathematics from the earliest stages in collaboration with the State Educational and Vocational Guidance Bureau. Thus while there is enough awareness about the problem, no concerted effort has yet been possible.

2. Automatic scrutiny of answerscripts of marginal cases

The Boards in Andhra Pradesh, Orissa, Uttar Pradesh and West Bengal have provided for automatic scrutiny of answerscripts

in marginal cases. In Uttar Pradesh such a provision is made for those who fail in one subject only by not more than 5 per cent marks while automatic scrutiny is in operation in all cases in West Bengal. Besides, candidates who have failed in one subject only, whatever the extent of deficiency, get the benefit of re-examination of the paper in that subject before final preparation of the results. In Madhya Pradesh also, marginal cases are particularly examined before tabulating the results. In other Boards such as those in Mysore and Kerala, the examiners in the subject attend to all cases of border failures.

3. Maintaining a passing level of 33 per cent in all subjects

Rules regarding subject minima and aggregate minimum number of marks for passing differs from state to state, ranging between 30 per cent and 40 per cent with one exception. The following table indicates the minima prescribed by various states for declaring pass and fail :

TABLE I

<i>State</i>	<i>Passing level</i>
Andhra Pradesh	Higher Secondary School Examination, 30 per cent in each subject, 35 per cent in aggregate
Gujerat	35 per cent in each subject
Kerala	40 per cent in Regional language and English, 35 per cent in other subjects
Madhya Pradesh	26 per cent in English, but to clear that subject, 30 per cent marks is necessary as English is grouped with second language, 33 per cent for each subject in Pre-University Examination
Maharashtra	35 per cent in each subject
Mysore	35 per cent in all the subjects under compulsory group 30 per cent in the optional I and II divisions with 35 per cent in aggregate under the optional group

Orissa	30 per cent in each subject 35 per cent in aggregate
Punjab	33 per cent in each subject
Rajasthan	33 per cent in each subject
Uttar Pradesh	33 per cent in almost all the subjects
Vidarbha	33 per cent in groups of subjects 33 per cent in mother tongue 33 per cent in a group consisting of Hindi and English but 30 per cent in the individual subjects
West Bengal	30 per cent in individual subjects, and 40 per cent in the practical examinations, with 36 per cent in the aggregate in the case of Higher Secondary School Examination At the School Final Examination, 36 per cent in English and Major Indian Languages 30 per cent in other subjects 36 per cent in aggregate

The above table shows that the passing levels are different for different Boards, though they are very close to 33 per cent. There seems to be a tendency to prescribe higher level of passing for Higher Secondary Schools. Marked disparity is evident in the case of passing level in English in different Boards which ranges from 26 per cent to 40 per cent, which adds one more factor in making the pass percentages in English in different Boards un-comparable. As English remains to be a compulsory subject in many Boards and as failure in English is rarely condoned, the higher passing level in English is bound to come in the way of improving overall pass percentages. For example, the percentage of pupils found eligible for college admission shot up by about 7 per cent in Mysore when the passing level for the purpose in English was reduced from 40 per cent to 35 per cent in 1960.

4. Keeping the total number of subjects offering at 6 subjects

In Uttar Pradesh, the total number of subjects at the High School stage is 6, while in Vidarbha the Board has decided that

the number of subjects should be 6, three languages and three from any of the diversified groups. In West Bengal the total number of subjects for Higher Secondary Examination are 5, two languages and three from among electives, although for the School Final Examination the number of subjects are 8 with a provision for one optional subject.

Some Boards such as those in Rajasthan and West Bengal and the Punjab University have staggered the examination over the final two years, thereby reducing the load on the pupil at a particular examination.

The Examination Reform and Research Committee of the Poona Board has been considering a scheme of allowing the candidate to offer at the S.S.C. Examination even fewer subjects than 6 at a time, provided that the candidate is able to complete the minimum number of subjects for the final certificate in not more than 3 years and 5 attempts. As a consequence to this suggestion the committee feels that rather than reducing the level of passing in each subject from the existing 35 per cent to 33 per cent, it may be possible and desirable to increase it to, say, 40 per cent since the total burden on the candidate would be substantially reduced if the above suggestion is implemented.

5. Possibility of declaring eligibility for college courses for talented students sailing in one subject

The Third Conference of Secretaries of Boards recommended that the Boards should study the possibility of declaring eligible for college courses, talented candidate who may fail in one subject but score in the aggregate 55 per cent of marks provided they do not offer at the college the subject in which they have failed.

In connection with this proposal, only Orissa and Mysore have reported similar practices being in vogue in their Boards. Other boards have either referred the matter to sub-committees or have not found the recommendation under their preview.

In Orissa, a candidate receiving 50 per cent of marks in the aggregate is allowed to pass if he fails in any one subject by 5 marks or less, while in Mysore, the board recommends to the University, who according to the practice in vogue selects candidates for being declared eligible for admission to the college

courses, those candidates who score in aggregate 60 per cent and more but fail in one subject.

The very fact that this proposal has not caught the imagination of many boards suggests that further thinking and study is necessary over it. First of all, it should be found out how much percentage of pupils falling under this category fail to join the college because they fail in one subject inspite of their superior performance in others. Then only, the aggregate percentage and such other details may be worked out to form a rule which should provide maximum benefit to the really talented pupils who somehow remain efficient in a subject or two.

6. Ways of rationally awarding grace marks

Different rules govern the system of awarding grace marks in different boards, although most of the boards have definite formula to follow for such an award.

In Andhra Pradesh, there is no system of rationally awarding grace marks. The number of marks to be given as grace to the Higher Secondary College candidate is subject to the approval of the commissioner.

In the Boards in Gujerat and Maharashtra, there is a provision of both automatic condonation as well as grace marks on a rational basis. The system has been in vogue since the very commencement of the parent board of both the States before bifurcation took place and has, on the whole, been working fairly satisfactory. It enables a candidate who is really good at his studies but has, through accident or mis-chance failed in one or two subjects but has done well in other subjects to pass the examination on the basis of his general performance.

The board in Kerala has decided that marks upto three may be added to cover the deficiency in one or more subjects provided that the candidate has obtained pass marks in the concerned subjects or subjects in final internal assessment recorded in the S.S.L.C. book.

The Mysore board has to follow two types of rules for two different areas, it has to serve. According to the practice in vogue in the Ex-Mysore areas, the grace marks are awarded in an automatic manner, the number of such grace marks being decided by the Board

while finalizing the results of each examination. In the Bombay-Karnatak S.S.C. examination, 2 marks are automatically graced in two subjects only. There is gracing upto 10 marks for every percentage rise in the aggregate over 40 per cent.

The Boards in Uttar Pradesh and Rajasthan also have a rational system of awarding grace marks where as in Orissa, such a system is not found necessary in view of the steps being taken for the consideration of marginal cases.

7. Publishing the results of regular and private candidates separately

This is the one recommendation on which practically all the Boards have taken the necessary steps. This practice has helped the Directorate this year to analyse the results of the high and higher secondary examinations of March, 1960 in terms of regular and private candidates. The detailed analysis of the results has been published separately by the Directorate while three tables indicating overall as well as board wise pass percentages of regular and private candidates who appeared as high and higher secondary examinations have been given as annexures for ready reference.

8. Rules for restricting admissions to private candidates

It appears from the replies received that the term private candidates is used to mean differently by different boards. For many, private candidates are the unsuccessful candidates of the previous year appearing at an examination without having attended the school after the failure. Some other boards classify these as private candidates who have not been able to complete schooling of all the years of secondary stage, but intended to appear at the final examination after a certain lapse of time. Some other versions of this term also exist. Consequently, some boards like those in Gujerat and Maharashtra have been able to restrict the number of private candidates so that it does not go beyond 8 to 10 per cent of the total candidates appearing at an examination. On the other hand, the number of private candidates tend to equal and even exceed in the case of Punjab and Gwalior and other boards.

In Andhra Pradesh, only those who once appeared at the S.S.L.C. Public Examination through a recognised school are

eligible to appear subsequently as private candidates. Girl candidates can appear privately for H. S. C. Examination without undergoing any course in secondary schools.

The rules that govern admissions of private candidates in the Boards in Gujerat and Maharashtra (Poona) are worth studying and hence the relevant extracts are given as annexure IV.

In Kerala, candidates who are overaged, *i.e.* above twenty, and who had no regular schooling are allowed to appear for a selection examination and on passing that examination, they are allowed to appear for the S. S. C. examinations as overaged private candidates.

No candidate, in Rajasthan, is allowed to appear as private candidate at the Higher Secondary Examination of the Board except women candidates and the failures of the previous years. A committee has been set up by the board to examine the question of admission of private candidates to the High School Examination, whose recommendations are awaited.

In Mysore, in addition to the existing rules, a proposal to permit adult women between the ages of 20 and 35 to take the S.S.L.C. examination by private study, 2 years after passing the middle school examination, is under consideration.

In Uttar Pradesh and West Bengal also there are set rules but they have not been able to restrict the number of private candidates satisfactorily.

For the purposes of comparison, a table showing the numbers and percentages of regular and private candidates who appeared at examinations held by different boards in March-April, 1960 is given in annexure. It may be interesting to collect similar data of the last five years and after studying the trend, the factors that are responsible for it may be studied to take suitable measures.

9. Introducing internal assessment to supplement the results of external examinations

The boards in Bihar, Jabalpur, Kerala, Punjab and Vidarbha have already begun to give weightage to the pupil's internal assessment to supplement the performance in external examination in varying percentages. The board in Rajasthan has decided to give 10 per cent weightage in higher secondary examinations of 1962

and onwards. Other boards such as those in Andhra Pradesh, Mysore, Gujerat and Maharashtra are actively considering the question while the board in U. P. does not consider it feasible due to certain practical difficulties.

A preliminary study on this matter was undertaken by the Central Examination Unit during the year 1960, and its report is separately published.

10. Formulation of rules for yearly promotions in the secondary school

Such rules exist in the States of Andhra, Gujerat, Kerala, Maharashtra and Mysore. In Kerala, the basis of promotion is fixed by the Headmaster and has to be got approved from the District Educational Officers.

The promotion rests from class to class with the Headmaster on the basis of the principles laid down by him in the States of Madhya Pradesh and Orissa.

This part however, falls within the perview of the State Education Departments rather than the Boards of examinations.

11. Remedial teaching for backward pupils well in advance of the examinations

This matter also concerns the State Departments of Education.

In some States like Andhra Pradesh and Madhya Pradesh, the Inspecting authorities issue instructions to schools to arrange special coaching classes for backward pupils. In others also, the schools do arrange for extra help to pupils. However, it is mainly arranged for the pupils of the topmost classes while remedial teaching becomes more effective when it is begun right from lower classes.

ANNEXURE I

All India figures of Secondary School Examination results March, 1960

A. HIGH SCHOOLS

	Appeared	Passed	Percentage passed
Regular candidates	620,134	351,725	56·72
Private candidates	296,180	115,147	38·87
Total	916,313	466,872	50·95

B. HIGHER SECONDARY SCHOOLS

	Appeared	Passed	Percentage passed
Regular candidates	124,720	63,974	52·10
Private candidates	35,656	10,732	30·11
Total	160,346	75,706	47·21

C. GRAND TOTAL (HIGH+HIGHER SECONDARY SCHOOLS)

	Appeared	Passed	Percentage passed
Regular candidates	744,854	416,699	55·94
Private candidates	331,806	125,879	37·93
Total	1,076,660	542,578	50·4

ANNEXURE II

Secondary School Examination Results, March, 1960

A table showing Board/University wise pass percentages of regular and private High School candidates

S. No.	Name of Board/University	Percentage passed	
		Regular	Private
1.	Secondary Education Board, Hyderabad		
	(i) S.S.L.C.	37	22·6
	(ii) H.S.C. (Telangana area)	37·7	18·48
2.	Bihar School Examination Board, Patna	62·4	46·7
3.	Board of Secondary Educa- tion, Madhya Pradesh, Sub- office, Gwalior	43·1	23·03
4.	Secondary School Certificate Examination Board, Poona		
	(i) S.S.C.	49·71	16·10
	(ii) H.S.C. (Marathwada)	27·50	38·84
5.	Board of Public Examination, Trivandrum	37·9	29·6
6.	Board of Secondary Educa- tion, Madras	52·1	15·3
7.	Board of Secondary (Multi- purpose) Education, Jabalpur	73·3	28·2
8.	Vidarbha Board of Secondary Education, Nagpur	52·44	34·83

ANNEXURE II (Contd.)

S. No.	Name of Board/University	Percentage passed	
		Regular	Private
9.	Secondary Education Board, Bangalore		
	(i) High School (S. S. L. C. Ex-Mysore Area)	58·9	48·8
	(ii) S.S.C. (Bombay Karnatak)	52·1	46·2
	(iii) S.S.L.C. (Madras Karnatak)	66·7	10·7
10.	Board of Secondary Education, Orissa, Cuttack	68·9	29·3
11.	Board of Secondary Education, Rajasthan, Jaipur	54·00	30·02
12.	Board of Secondary Education, West Bengal, Calcutta	40·5	25·1
13.	Board of Higher Secondary and Intermediate Education, Allahabad	41·8	27·8
14.	Punjab University, Chandigarh	65·6	29·7
15.	Aligarh University, Aligarh	52·1	52·1
16.	Board of Secondary Education, Delhi	62·1	43·7
17.	Gauhati University, Gauhati	51·6	27·8
18.	University of Jammu and Kashmir, Srinagar	58·1	24·4

ANNEXURE III

Secondary School Examination results, March, 1960

A table showing Board/University wise pass percentages of Regular and Private Higher Secondary School Candidates

S. No.	Name of Board/University	Percentage passed	
		Regular	Private
1.	Secondary Education Board, Hyderabad		
	(i) H.S. and M.P.	28·00	—
	(ii) H.S.M.P.	45·00	26·4
2.	Bihar School Examination Board, Patna	6·01	—
3.	Board of Secondary Educa- tion, Madhya Pradesh, Sub- office Gwalior	37·5	36·6
4.	Secondary School Certificate Examination Board, Poona	36·92	—
5.	Board of Secondary (Multipurpose), Jabalpur		
	(i) A. Course M.P.H.S. Examination	86·14	56·76
	(ii) (Agr.) H.S. Course	90·90	50·00
	(iii) B. Course Pre-University H.S.	37·29	40·00
	(iv) B. Course Pre-University H.S. Art Course	50·02	51·14
	(v) B. Course Pre-University H.S. Commerce	48·8	54·5
	(vi) Kala Niketen (T) H.S.	69·00	—

ANNEXURE III (Contd.)

Sl. No.	Name of Board/University	Percentage passed	
		Regular	Private
6.	Vidardha Board of Secondary Education, Nagpur	68.3	22.00
7.	Secondary Education Board, Bangalore		
	(i) H.S. (Hyderabad Karnatak)	33.4	29.3
	(ii) H.S. (Hyderabad Karnatak) Multipurpose	24.2	10.7
	(iii) H.S. (Coorg)	45.1	—
8.	Board of Secondary Education, Rajasthan, Jaipur	40.4	39.91
9.	Board of Secondary Education, West Bengal, Calcutta	61.8	—
10.	Board of Higher Secondary and Intermediate Education, Allahabad	45.18	32.67
11.	Punjab University, Chandigarh	94.45	—
12.	Board of Secondary Education, Delhi	69.00	50.4
13.	University of Jammu and Kashmir, Srinagar	52.8	—

ANNEXURE IV

Extract from the rules regarding private candidates prescribed by the S.S.C. Examination Board, Poona

Applicants will be permitted to appear for Examination as private candidates subject to their fulfilling the following conditions and subject to their producing the required documents in support of their applications :

- (i) The applicant must have passed the V.F. or the P.S.C. Examination or the Annual Examination for the New Standard VII or the Old Standard III or must have been promoted to the New Standard VIII or the old Standard IV of a recognised Secondary School.
- (ii) The applicant must have completed the age of 19 years at the time of the Examination.
- (iii) A period equal to the number of years the applicant would have ordinarily taken to appear for the S.S.C. Examination if he had continued in the school and appeared as a regular candidate plus one more year, must have elapsed since the applicant's leaving the school. If the candidate was detained in any standard at the time of his leaving the school, he shall be deemed to have completed that Standard in the subsequent year and the number of years he would ordinarily have taken to appear for the S.S.C. Examination, will be counted accordingly.

NOTE : Notwithstanding anything contained in conditions (i), (ii) and (iii) of para, 5 above, a candidate who will have completed the age of 53 years on the date of the Examination may be permitted to appear for the Examination provided he has not been on the roll of a recognised school for 12 months preceding the Examination.

Persons who have once completed all requirements for admission to the S.S.S. Examination including the prescribed attendance of 100 days in the top standard of the recognised High School or

those who would have continuous service as full-time primary or secondary teachers in a recognised school for period of one academic year preceding the Examination, need not apply for permission as private candidates, as they are eligible for admission to the Examination under Regulation 27 of the S.S.C. Examination Regulations.

Candidates who have once appeared for the S.S.C. Examination of this Board, the Matriculation Examination of the University of Bombay or the S.L.C. Examination of the Government of Bombay, can be admitted to the Examination as ex-students only. Ex-students should not, therefore, apply for permission to appear as private candidates.

Private candidates and teacher candidates will not be eligible for the award of any of the prizes from the Board's funds.

ANNEXURE V

**Board/University wise number of regular and private students
who appeared in High School Examination, March, 1960**

S.No.	Name of Board/University	Appeared	
		Regular	Private
1.	Secondary Education Board, Hyderabad		
	(i) S.S.L.C.	34,878 86·6%	5,649 13·4%
	(ii) H.S.C. (Telengana area)	10,708 61·3%	6,752 38·7%
2.	Bihar School Examination Board, Patna	56,117 61·3%	30,993 35·6%
3.	Board of Secondary Educa- tion, Madhya Pradesh, Sub-office, Gwalior	12,993 49·8%	13,213 50·4%
4.	Secondary School Certificate Examination Board, Poona		
	(i) S.S.C.	1,11,806 92·7%	8,738 7·3%
	(ii) H.S.C. (Marathwada)	5,501 85·1%	963 14·9%
5.	Board of Public Examination, Trivandrum	58,184 72·5%	22,086 27·5%
6.	Board of Secondary Educa- tion, Madras	51,774 94·5%	3,017 5·5%
7.	Board of Secondary Education (Multipurpose), Jabalpur	1,544 48·3%	1,649 51·7%
8.	Vidarbha Board of Secondary Education, Nagpur	15,193 74·0%	5,237 26·0%

ANNEXURE V (Contd.)

S.No.	Name of Board/University	Appeared	
		Regular	Private
9.	Secondary Education Board, Bangalore		
	(i) High School (S.S.L.C. Examination, Mysore area)	22,686 78·8%	6,109 21·2%
	(ii) S.S.C. (Bombay Karnat- tak)	11,008 90·1%	1,212 9·9%
	(iii) S.S.L.C. (Madras Karnatak)	4,498 90·1%	446 9·9%
10.	Board of Secondary Education Orissa, Cuttak	6,971 63·4%	4,026 36·6%
11.	Board of Secondary Education Rajasthan, Jaipur	20,845 53·8%	17,882 46·2%
12.	Board of Secondary Education West Bengal, Calcutta	48,008 47·0%	52,812 52·4%
13.	Board of H.S. and Interme- diate Education, Allahabad	1,68,724 79·0%	44,729 21·0%
14.	Punjab University, Chandi- garh	52,105 47·0%	58,770 53·0%
15.	Aligarh University	221 27·5%	583 72·5%
16.	Board of Secondary Education, Delhi	4,617 96·2%	183 3·8%
17.	Gauhati University, Gauhati	14,950 64·1%	8,371 35·9%
18.	University of Jammu and Kashmir	6,830 71·3%	2,744 28·7%

MEMORANDUM

ITEM III : To discuss the total Programme of Examination reform with special reference to action plan of implementation during the Third Five-Year Plan and the Programme of work during 1961-62.

The Conference is invited to consider the programme in its totality as well as the details for the year 1961-62. Outlined in brief the entire programme falls under the following major heads :

1. Orienting teachers and educationists to the concept and technique of evaluation.
2. Location of objectives for each subject of the secondary school curriculum.
3. Preparation of test items based on objectives of teaching each subject, involving to the maximum extent possible the teachers of the secondary schools.
4. Preparation of learning experiences based on those objectives. This will involve both teachers and training colleges.
5. Involvement of training colleges in the programme so that the concept is introduced in both pre-and in-service programmes of teacher training.
6. Curricular revisions and modifications found necessary for realising the new objectives of teaching and testing.
7. Research investigations into the problems arising out of the reform.
8. Publications on the subject.

The work done during the past two years and a half may be briefly summarised as follows :

1. Two objectives have been specified and test pools have been constructed through workshops of secondary school teachers. The items will be supplied to the Boards as illustrative material shortly.
2. A large number of secondary school teachers have been oriented to the new concept through various types of workshops.

3. A large number of training colleges have been involved in extensive and intensive programmes (for details please see item I). Steps have also been taken for the incorporation of evaluation concept in B.Ed. syllabus.

4. Initial steps have been taken for initiating research in problems relating to examination reform.

5. Certain studies arising out of the reform have been undertaken by the Directorate, as per example, Studies on Internal Assessment.

6. Steps have been taken for the establishment of State Evaluation Units. A training course for 27 officers drawn from 15 States and Territories was organised during September-October 1960.

7. A large number of publications have been brought out to acquaint teachers and educationalists with the concept and technique of the new reform.

The following aspects of the Programme for the future call for special mention. The Conference is invited to consider them in detail and make necessary suggestions and recommendation of their successful implementation.

1. Incorporation of objective-based questions in the external examination

- (a) This has to be done in a phased manner so that in gradual stages we convert the pattern of external examination into objective-based testing. The following phasing is suggested :

External examination of	March 1961—62	10 per cent
—do—	March 1962—63	15 per cent
—do—	March 1963—64	25 per cent
—do—	March 1964—65	50 per cent
—do—	March 1965—66	100 per cent

This requires at every stage preliminary work with schools and teachers so that the teaching and learning processes get adjusted to the new requirements. The first set of illustrative test items will be supplied to the Boards by February 1961. The Directorate will also send with the test items an accompanying note explaining ways and means of using the items. This material should be

passed on to the schools so that they may get accustomed to using such items in their internal assessment.

- (b) The second instalment of test material will be supplied to the Boards between July and September, 1961.
- (c) The literature on evaluation prepared by the Directorate should be given wide circulation among schools and teachers, if necessary after due translation into the regional languages. This may be done by the State Departments, State Boards or the Extension Service Centres.
- (d) Brochures containing illustrative sets of learning experiences should be prepared by the Directorate in collaboration with selected lecturers of training colleges or teachers of progressive schools and supplied to the schools during the academic year 1961-62.
- (e) Technical and administrative details should be worked out in regard to the gradual introduction of the improved form of testing in the external examination.
- (f) Seminars and workshops should be organised for paper-setters and chief examiners of each subject during 1961-62 in order to introduce them to the improved type of questions based on specific objectives.
- (g) The Central Unit in co-operation with the State Units and Boards should undertake a study of the impact of the reform year after year on the teaching practices in schools and suggest necessary modifications, if any, in the implementation of the programme.

2. Curricular revision

The objective-based evaluation procedures require corresponding development in objective centred teaching both of which will ultimately need corresponding changes in the curriculum. This is a programme of work that has to be graded over a period of time and that requires constant study by a team of competent persons. It is, therefore proposed to establish a curriculum unit to look after the curricula modifications found necessary from time to time. The following further steps will also be necessary.

- (a) State evaluation units when established should work in close co-ordination with State curriculum and text-book Committee.

- (b) Literature on objectives, learning outcomes and learning experiences in the different subjects should be supplied to the teachers in order to help them adopt objective-centred teaching.
- (c) Intensive study and research should be undertaken for developing objective-based curricula in various subjects.
- (d) The curricula thus modified should be tried out as a pilot project in selected schools before being implemented on a large scale. Other implications of the curricula should also be examined before such large-scale implementation.
- (e) A suitable machinery closely associated with the State Evaluation Units and perhaps forming a part of it, should be set up in the state to maintain a close watch on the curricular changes and to suggest necessary modifications for further improvement of the standards of teaching and learning.

3. Establishment of State Evaluation Units

This has to be done urgently, if the programme which we have already launched is to progress successfully. (please see item IV.)

4. Setting up a National Committee on Educational Objectives

In a growing democracy, the purpose of secondary education cannot be expected to remain static. As the work on learning experience is developed and curricular revisions are initiated, new educational purposes are bound to emerge. These are too important to be left to chance. It will, therefore, be necessary to set up a National Committee consisting of a small group of competent educationists, who will assist in working out :

- (a) The implications of changes in society for secondary schools ;
- (b) Implications of the basic attitudes of the nation for the school, and
- (c) The nature of the learning process and its implications for the school, etc,

Based on the recommendations of the Committee, a model syllabus will have to be worked out specifying objectives, content, evaluation techniques, etc. This syllabus could then be suitably translated into practical stages.

It appears that the work will have to be taken up in the last two years of the Third Five Year Plan.

APPENDIX I

Functional targets of the State Evaluation Units during the first year of their existence.

1. Collection of objective-based test-material for internal and external examinations

(i) Work in the following subjects in the first phase of the programme :

1. Science
2. Mathematics
3. Social Studies
4. English

(ii) For the first three subjects work on the following two objectives :

1. Acquisition of knowledge
2. Application of Knowledge

For English, the work may be centred round the following two objectives :

1. Skill in written expression
2. Comprehension

(iii) Collect the material hitherto developed by the Central Examination Unit in the above subjects and objectives. Study the topics concerned in the material and plan for collecting more material on the remaining topics according to the State syllabus.

(iv) Conduct about 15 workshops to collect test material utilizing the services of the Central Unit, training college lecturers and competent teachers as resource personnel.

(v) Screen, tryout and finalize the material for use in internal examinations.

2. Orientation of Teachers

(i) Conduct about 20 workshops with the help of training college personnel and Extension Services Department and orientate about 500 to 700 teachers in the programme.

- (ii) Help the training colleges in orientating pupil teachers in the new concept and techniques of evaluation. The number of teachers thus orientated will at least be 500.

3. Translation of Material into Regional Language

- (i) Translate test-items received from the Central Unit with the help of competent teachers who are already orientated in evaluation.
- (ii) Translate the brochures also if necessary with the help of Training College lecturers and Extension Centres.

4. Publish test-items for circulation to schools. Publications of the Central Unit may be used for wider circulation in the schools of the State.

5. Co-ordination with Central Unit

- (i) Get material from the Central Unit in exchange of the material produced by the State Unit.
- (ii) Obtain guidance and service from the personnel of the Central Unit in various subjects.

6. Examination Board

- (i) Work out technical details regarding the introduction of objective-based test-items in external examination.
- (ii) Work with examiners and paper-setters.
- (iii) Work with curriculum & text-book committees.
- (iv) Initiate some research & surveys in collaboration with Examination Boards and schools.

APPENDIX II

A Tentative Programme of work of the Central Evaluation Unit during 1961-62

1. Collection of a further pool of Test Material

- (a) Screening about 2000 more items in different subjects and finalizing them for supplying to the Boards and schools.
- (b) Selecting two more objectives in each subject, particularly from the area of skills and personality traits (for internal assessment)
- (c) Conducting workshops for developing assessment material for
 - (i) the first two objectives already concerned (this will be done with the help of school teachers)
 - (ii) the other two objectives (this will be done in co-operation with the psychological and vocational guidance bureau in addition to the schools)
- (d) Obtaining material from State Evaluation Units.

2. Conducting Evaluation Workshops

- (i) For the collection of material based on the first two objectives, each evaluation officer will conduct 5 workshops at State-level and Advanced-level. These workshops will be conducted in collaboration with the State Evaluation Units wherever they are established.
- (ii) For the preparation of the material on the other two objectives, Evaluation Officers will conduct in all 12 workshops in teams.
- (iii) For training teachers of selected schools where the new material will be tried out the heads of these selected schools will be separately orientated in the new concept.

3. Helping the Boards in introducing objective-based test-items in their External Examination

- (i) To work out technical details for this programme.

- (ii) To provide consultative services to the boards to plan out the phased programme introducing items based on specific objectives during the Third Plan period.

4. State Evaluation Units

- (i) To conduct State-level workshops in collaboration with the personnel of the State Evaluation Unit. Each person of the State Unit will work in at least 3 workshops in association with the members of the Central Unit.
- (ii) To provide consultative services to the State Evaluation Units which get established during 1961-62 in helping them organize their activities.
- (iii) To supply all the literature and test material to the State Units.

5. Working with Training Colleges

- (i) Selecting 30 more training colleges for Zonal Workshops for their lecturers.
- (ii) Working intensively with the individual training colleges after the Zonal Workshops.
- (iii) Working with the training colleges which have not been concerned from the first group of selected colleges during 1960-61.
- (iv) Establishing working groups on learning experience from the selected lecturers in the subject of general science, social studies, mathematics and English.

6. Training of Personnel

If any demand from the State is received, then a second course to train personnel in evaluation will be conducted for a period of 5 to 6 weeks inviting about 30 participant from different States.

7. Research on Evaluation

- (i) Five more seminars on research in Educational Evaluation will be conducted during 1961-62.
- (ii) The seminars already conducted will be followed up to promote research.
- (iii) Taking up some problems so far located in internal assessment for study and research.

8. Publications

- (i) A brochure on learning experiences.
- (ii) Test material—second lot.
- (iii) Role of training colleges in the Examination Reform.
- (iv) Brochure on evaluation in physics, maths. geography.
- (v) Brochure on evaluation in English.
- (vi) Analysis of the examination results of March/April, 1961.
- (vii) Reports of research seminars.

9. Consultative Services

- (i) To the Examination Boards.
- (ii) To State Evaluation Units.
- (iii) To the training colleges which have taken up intensive work on evaluation.
- (iv) To other bodies connected with curriculum, text-book, research etc.

10. Other Activities

- (i) Orientation Workshops in those States which have not yet so far concerned, and those where the State Units are not established.
- (ii) Intensive work with selected schools for the tryout of objective-centred teaching and testing.
- (iii) Publishing articles in Teacher Education periodically.
- (iv) Establishment of evaluation library and testing section.
- (v) Conferences and seminars for education inspectors and other administrators.
- (vi) Helping Extension Service Departments to utilize the movement of objective-centred teaching.

ITEM IV : To Evaluate the progress made in the establishment of state Evaluation Units and to consider steps to accelerate the measure

As pointed out at the time of the last conference, the establishment of State Evaluation Units is of imperative need for implementing the subsequent phase of examination reform in the States. Information regarding the steps taken by the different States in this matter is given in Appendix I. States such as Andhra Pradesh, Kerala, Bihar, Rajasthan and Mysore have already formulated proposals for the establishment of these units and it is hoped that they will come into being during 1961-62. Proposals to establish such units are under consideration of the respective Governments of seven other States and Territories. In the meanwhile it is necessary for the conference to consider ways by which the programme can be accelerated so that at least by the end of the second year of the Third Plan all State Evaluation Units would get into position. As a preliminary step, the Directorate has already conducted a training course for officers from 15 States and Territories during September-October, 1960. This may have to be followed by similar courses so that each State is well-equipped with a fair-sized body of informed personnel on the subject. The organisation and functions of the State Evaluation Units, their relationship with other bodies and with the Central Unit may be seen at Appendix II.

The Conference may consider this matter which occupies a very vital place in the entire programme and suggest suitable measures to expedite the establishment of State Units.

APPENDIX I

1. Andhra Pradesh

The State Government has appointed an 'Examination Reform Committee' for suggesting ways and means for implementing the recommendations made by the Bhopal Seminar and other subsequent seminars and conferences on the subject. In addition, the State Bureau of Vocational and Educational Guidance, which is functioning in the State since 1st July, 1958, has taken up the construction of attainment tests for being made available to the secondary school in the State.

2. Assam

No information has so far been furnished regarding the establishment of the State Evaluation Unit by the State Government. However, it is learnt that the Assam Government has a proposal to depute one officer for training in examination and evaluation in the U.S.A. or U.K.

3. Bihar

State Evaluation Unit has not yet been set up in Bihar. However the Department of Education, has formulated a proposal for the establishment of an Examination Research Bureau during the Third Five-Year Plan period. This proposal is pending due to lack of financial assistance from the Centre. The officers of the Bureau will be recruited after the scheme has been formally sanctioned.

4. Delhi

The Board of Higher Secondary Education, Delhi, recommended some time ago to the Delhi Administration that an Evaluation Unit be established so as to bring about the reform in the examination system as recommended by the Directorate of Extension Programmes for Secondary Education. Report of further action taken in the matter is awaited.

5. Gujarat

No information has been received so far from the Gujarat State in connection with the establishment of a State Evaluation Unit.

6. Himachal Pradesh

No information has been received so far.

7. Jammu & Kashmir

No information has been received so far.

8. Kerala

The Director of Public Instruction has sent up proposals to the State Government regarding the establishment of the State Evaluation Unit. The main proposals made therein are :

- (i) the appointment of two or three Evaluation Officers ;
- (ii) obtaining material such as electrical calculating machines, manual calculating machines, test materials, books etc. from the Central Government ;
- (iii) obtaining the help of an Evaluation Officer from the Central Evaluation Unit for a period of six months for setting up the Evaluation Unit.

The proposal from the State Government has not yet been received by the Directorate of Extension Programmes for Secondary Education.

The State Government has, however, already established a Bureau of Educational Research and Services for conducting studies on examination reform. It has been proposed to attach the State Evaluation Unit to this Bureau. The two officers deputed for training are attached to this Bureau.

9. Madhya Pradesh

No information has been received so far.

10. Madras

The Department of Education has sent their views regarding the formation of the State Evaluation Unit to the Government for consideration.

11. Maharashtra

(a) Vidarbha Board

The Board has appointed a small committee to work out details for the formation of Evaluation Unit for the Vidarbha Board.

(b) Poona Board

No information has been received so far in connection with the establishment of a State Evaluation Unit. However, the Board has set up a Research and Investigation Section since July, 1955. The Section takes up problems for study and investigation, as suggested from time to time by the Examination Reform and Research Committee of the Board. It has completed eight projects relating to the statistical analysis of the results of the S.S.C. Examination.

12. Manipur

The Manipur Administration has no separate Board of high and higher secondary schools. The schools in the territory are affiliated to the Gauhati University. In the circumstances, it has been suggested by the Director of Education, Manipur, that the Unit which may be established in Assam, may be considered to represent the Manipur Territory for this purpose.

13. Mysore

The Secretary of the Secondary Education Board and Deputy Commissioner for Examinations, Mysore State, has sent up proposals to the Education Department in connection with the establishment of a State Evaluation Unit and for deputing two officers for training. No further information has been received.

14. Orissa

An Evaluation Unit has been set by the Secondary Education Board since February, 1959. It also functions as a Research Bureau. Its specific functions are to promote measures of reform in examination at the State level, as suggested by the Centre and to carry on research in connection with the reform. The Unit has prepared tests on general science.

15. Punjab

The matter of establishing an Evaluation Unit at Chandigarh is under the active consideration of the State Government.

16. Rajasthan

Proposals have been sent by the Additional Director of Education Rajasthan, to the Government of India, regarding the establishment of an Evaluation Unit in the State. The proposal

indicates the personnel required with the scales of pay involved, and the financial liabilities for setting up the Unit. It has been suggested that atleast 60 per cent financial assistance should be given by the Centre and that all equipment for the Unit should be supplied by the Central Government. Training will also be necessary in the case of the Director and Evaluation Officers. It has also been proposed that if an officer is sent for training, the Central Evaluation Unit should undertake to provide a substitute for him for the period of his absence from the Unit.

17. Tripura

The schools in this territory are very few and they are affiliated to the Board of Secondary Education, West Bengal. The examination reform in this territory will, therefore, be conducted by State Evaluation Unit, West Bengal when it is established.

18. Uttar Pradesh

The Department has set up some time ago an informal Examination Unit at the Government Central Pedagogical Institute, Allahabad, which worked in collaboration with the Board of High School and Intermediate Education, U.P. and made some valuable contribution. In view of the suggestions made by the Directorate of Extension Programmes for Secondary Education for the establishment of a State Evaluation Unit, the proposals have now been formulated for the inclusion of that scheme under the Third Plan. If the scheme materializes, the State Unit is expected to commence functioning early in the Third Plan.

19. West Bengal

The question of setting up a State Evaluation Unit is being considered by the Director of Public Instruction in consultation with the authorities of the Board of Secondary Education, West Bengal.

A Bureau of Educational and Psychological Research has already been set up in the West Bengal since 1953.

APPENDIX II

Organisation and functions of State Evaluation Units

I. Purpose

The major purpose of establishing State Evaluation Units is to undertake the responsibility of implementing examination reform in their respective states in close collaboration with the Central Evaluation Unit. Measures related to the proposed reforms in the field of examination will be planned, initiated and carried out by the State Evaluation Units. They will bear the major burden of reforms in their respective States.

II. Functions

The following are the main functions suggested for the State Evaluations Units :

1. To develop objective-based test-material in various subjects for internal and external examination and also for the purpose of standardisation and research.
2. To help the Secondary Examination Board in their states in implementing the phased programme of examination reform.
3. To undertake a scientific study of the system of internal assessment determining procedure and methods of incorporation.
4. To try out the test material for analysis and improvement.
5. To standardise tests for internal assessment and research.
6. To translate the material obtained from the Central Evaluation Unit into their regional languages and to adapt it to the conditions prevailing in the States.
7. To produce and publish literature pertaining to examination and related topics in regional languages.
8. To help schools in using standardised and other material in improving internal assessment.
9. To help their State Education Departments, Training Colleges and schools to modify curricula, instructional

material and methodology of teaching in keeping with the proposed reform in examination.

10. To conduct studies and researches on problems specific to their States regarding Evaluation.
11. To evaluate the impact of the changes in examination when they would be effected, and to keep modifying the system periodically so as to make it most effective and efficient.

N.B. The State Evaluation Units will carry out all the functions such as above in close co-operation and consultation with the Central Evaluation Unit. They will also help the Central Unit in various studies, researches and several other programmes.

III. Personnel

The number of persons manning the State Evaluation Unit cannot be uniformly decided for all the States. It depends upon the size of a State, the pace with which a State can move ahead in introducing the reform and such other factors. Moreover, with the increase in the span of activities, the Unit may be correspondingly augmented. However, some suggestions regarding personnel of the Unit may be made as below only for the initial phase of the programme. These numbers may, therefore, be treated as minimum requirement in the beginning of the Unit.

Director	1
Evaluation Officers	2 to 4 according to the size of a State
Statistical Officer	1

One or two technical assistants such as computer or Assistant Statistitian may be added a little later.

The necessary clerical and other staff may also be provided in sufficient number.

The general qualities of the Director and Evaluation Officers may be as follows :

The Director should have intensive training and considerable experience in the field of Educational Evaluation and Measurement and also Educational Research. He must have initiative and resourcefulness to direct such a major reform of vital consequences.

He should be able to plan and execute proposed reform with full vigilance and farsightedness. He should also be able to discover problems, and design and direct researches on them.

The Evaluation Officers should also have sufficient training in this field. They should represent different subject areas of secondary school curriculum so that they may be useful in dealing with various subjects whenever necessary.

The educational qualifications for these personnel may be decided by the States keeping in view the importance of a vital task of Examination Reform.

Relationship with other Bodies

The State Evaluation Units should function as an integral part of the Board of Secondary Education or its equivalent body and under the administrative control of the State Department of Education.

They should also have representation on various committees such as those in charge of revising curricula, text books etc.

Relationship with other State Units

With Central Unit acting as a clearing house, the State Units could also take up research on a co-operative basis to save duplication and exchange research experience with one another.

MEMORANDUM

ITEM V : To discuss ways and means of using the test material compiled by the Central Evaluation Unit for (a) Internal Assessment and (b) External Assessment.

As has been explained in other contexts, one of the major tasks undertaken by the Central Unit during the past two years has been to prepare pools of test material on selected objective in each subject so as to make them available to the State Boards. The first set of test material in mathematics will be given to the members at the time of the Conference. Similar material in English, science and social studies will be shortly supplied to the Boards. These tests pertain to the fundamental objectives, knowledge and application of knowledge in non-language subjects and comprehension and written expression in the languages. The test items included in this pool do not seek to cover a topic or a subject area exhaustively nor do they make a complete test in any particular area. They are only intended to serve as illustrations of how educational outcomes relevant to these two objectives could be assessed through specific situations that the tests provide.

How the test items were developed, screened, tried out and analysed before they were finally selected for inclusion in this pool is briefly described in the introductory note appended herewith. As the material was developed by teachers who actually handled the prescribed syllabi in the various subjects and as the items had already been administered to students in a typical cross-section of high and higher secondary schools, the items may be claimed to have stood fair trial. Teachers may find some of the questions somewhat unfamiliar, specially in the case of the students who are totally un-initiated into this type, but we are confident that they will observe the difference in the pupil's reactions after some of the material has actually been introduced in the classroom.

It is proposed to supply these items to the Boards and to the State Departments of Education to serve as illustrative material and to prepare the schools and teachers for the final introduction of this type of testing in the external examination.

Use the Material

Given below are some of the ways in which these samples test items could be used.

(a) *For internal assessment*

The test material could be used by teachers in internal assessment and for bringing about improvement in their classroom teaching in the following ways ;

- (i) Incorporating the test material in their home-examination,
- (ii) Using the material as an illustration to prepare more test items,
- (iii) Using the material for preparing similar tests in other subjects, other than those in which illustrations are provided,
- (iv) Utilising some of the situations presented in the test items in teaching, so as to develop certain abilities in pupils,
- (v) Providing practice to pupils in response to the new pattern of test items.

(b) *For external Assessment*

- (i) Acquainting the paper setters and examiners with the kind of questions which are set for certain objectives,
- (ii) Improving the present type of questions and substituting them with items which test specific behaviours under knowledge and application,
- (iii) Judging the suitability or otherwise of the prescribed syllabi recommended by the State Boards.

The supply of illustrative items as detailed above will have to be followed up by the following further steps :

1. Further pools of items should be developed so as to cover the topics in each of the subjects of the secondary school curriculum more widely. This will be done by the Central Unit and the State Evaluation Unit when established.
2. The Central Examination Unit propose to supply further sets of test-items early during 1961-62.
3. Teachers will have to be oriented on a large scale to the new approach and in the use of test material.

4. State Boards should take early steps to get the tests on these lines introduced in the external examination according to the phased programme already discussed under item III.

5. Substantial co-ordination will have to be effected between the State Boards and Departments of Education so as to help the teachers introduce necessary changes in their teaching methods and evaluation procedures. Such changes will have the start even from the middle school stage.

The Conference may consider this question and make suitable recommendations for an effective use of these illustrative items and a suitable follow-up of the work so as to enable an introduction of the new type of testing in the external examination to the extent of not less than 10 per cent in the final examination of March 1962.

APPENDIX X

Introductory note to Test Items

Development of the Pool.

The material supplied herewith is a simple collection of illustrative test items in English, mathematics, social studies, geography, general science and physics. They pertain to two objectives—knowledge and application of knowledge in the case of non-language subjects and comprehension and written expression in the case of the languages. The items given in pool cover neither a topic or content area nor do they make a complete test in any particular area. They only serve to illustrate how educational outcomes relevant to these selected objectives could be assessed through specific situations.

The basic material out of which this test pool took shape was worked out by selected teachers at state-level workshops conducted by the officers of the Evaluation Unit during 1958 and 1959. The items were then carefully scrutinised—first to ensure correctness of content and next clarity and precision of language.

Try-out and analysis.

Before supplying the material to the Boards it was considered desirable to ascertain how the items worked in the classroom with the pupils. Some of the items were, therefore, tried out in selected schools. For this purpose questions selected in different subject areas were pooled in the form of tests suitable for administration. Schools were selected in different regions of the country and were prepared for the administration of the test by intensive work with the teachers and students. Nearly 50 short test were developed and were tried out in more than 100 schools. Nearly 10,000 students came under these tests which were administered generally in classes IX and X of the higher secondary schools. In some cases it was even possible to try out the tests in class XI also.

The responses of pupils to these tests were next analysed by the Examination Unit to determine the difficulty level and discrimination value of the items. In the case of multiple-choice tests, the appropriateness of distractors was also examined. Items which

were found to be unsatisfactory or inadequate were removed from the pool. It may be mentioned here that a number of items proved to be somewhat difficult mainly because the students were unfamiliar with the new pattern of questions. Schools where students had been given appropriate background knowledge of the new form of questioning fared better in these tests than others. It can, therefore, be concluded that a greater exposure of students to testing of this type during the course of classroom instruction would help them to take the tests with greater confidence.

It has to be confessed that there is no objective evidence to support the validity of these tests with regard to the specific pupil behaviours which they are expected to bring about. The behaviours indicated along with each question are at present based on the pooled judgment of the subject experts. It is hoped that there will be an over-all agreement on the behaviours of most of the tests.

Use of the Test Pool.

The test pool supplied could be used in several ways by the Boards, teachers and schools.

1. Teachers could use some of the questions while dealing with a topic in the classroom and build similar questions on topics or aspects of the topics not covered by the pool. Use of such questions in daily classroom work would not only familiarise the pupils with the new pattern of questions but would also help the teacher to assess whether and how far the objectives have been realised.

2. The test situations included here would also give teachers an idea of the kind of learning situations which provide the necessary experience to pupils in order to bring about desired behaviour changes. The pool would thus contribute in no small measure to raising the quality of classroom instruction.

3. Boards of Secondary Education and Departments of Education could publicise this material over as wide a circle of schools and teachers as possible and encourage the teachers to use this and similar material in their home examinations.

4. Examining Boards and Universities could bring the material to the notice of the members of their special committees, paper setters and others concerned in order to find ways and

means of introducing this type of questions in the external examinations. Introduction of such questions by the Boards is one of the most potent incentives to a similar introduction in the classroom.

Conclusion

The underlying principle in the preparation of this material has been that evaluation is not an end in itself but is an integral part of the entire educational process. At every stage in the process of constructing these items teachers were confronted with the question, 'What are we trying to measure, or in other words what are the specific objectives of teaching a subject as expressed in terms of understandings and abilities'. The point that was brought out clearly again and again was that any evaluating instrument should aid in the work of the school ; otherwise it was of little educational value. The overall purpose of evaluation is to improve instruction and good tests should only give not a correct picture of the way in which the students learn but also the strengths and weaknesses of a particular curriculum pattern. It is hoped that this publication will help practising teachers to adopt better evaluation procedures to produce improvement in classroom instruction and better student growth—the ultimate goal of all educational efforts.

MEMORANDUM

ITEM VI : To consider the need for developing learning experiences in keeping with the evaluation approach and steps to be taken to make them available to teachers.

The development of learning experiences geared to the new evaluation approach is a very significant aspect to examination reform to which we shall have to pay considerable attention in the next phase of our work. As has been repeatedly pointed out in several contexts, the reform in which we are engaged is based on the fundamental assumption that educational testing is integrally linked with learning experiences and teaching procedures. Real evaluation cannot function in isolation and no programme of examination reform can succeed unless it is supported and accompanied by improvement in the fields of instruction and curriculum design. Good evaluation tools are based on well defined objectives. The realization of these objectives in turn depends upon better techniques and improved materials. This is naturally a slower and more difficult process than clarification of objectives or the development of tests and requires a lot of preparation. Vital to this work is the amplification of the syllabi and the provision of the clearer directions for the teachers. The syllabi at present are not adequately spelt out and do not give helpful indications to the teacher for developing worthwhile learning experiences. It, therefore, follows that along with the development of learning experiences should be undertaken a simultaneous programme of revision and modification of the curriculum in order to serve the new objectives of teaching and testing.

The co-operation of several agencies such as these detailed below is required for fulfilling this aspect of the reform :

1. The Central Examination Unit.
2. Training Colleges.
3. Extension Services Departments.
4. State Departments of Education.
5. State Boards of Secondary Education.

6. Experimental Schools.
7. State Evaluation Units.
8. Central and State Curriculum and Textbook Bureaus.

The following steps will have to be taken by these agencies either individually or in co-operation with each other.

1. The Central Evaluation Unit will have to provide a strong leadership in this matter. During the recent intensive work with training colleges the Unit has been attempting to develop model learning experiences with the help of the method masters of the colleges. After due screening and, if necessary, trying out in selected schools, this pool will serve as illustrative material to Extension Services Departments, State Departments of Education, Training Colleges and other agencies.

2. The State Evaluation Units, when they get established, will have to take over the responsibility of developing further learning experiences suited to the syllabi in their respective States. This work will have to be done in collaboration with State Boards of Education, State Department of Education and selected school teachers.

3. Among the various agencies listed above, perhaps the most important is the training college. From the very outset it was envisaged that the training colleges would play a major role in this aspect of the programme. During their contact with over 40 training colleges in recent months officers of the Unit have had an occasion to note that several colleges are eager to adopt objective-based teaching. Learning plans based on these lines have also been drawn up in these colleges which are now organising teaching practices in harmony with this approach. Research projects on the development of learning experiences based on objectives are also being taken up by some of the colleges. This programme will have to be expanded and strengthened so as to involve all the training colleges.

4. The Extension Services Departments constitute another very significant agency in developing learning experiences. Through workshops for selected teachers and study circles, these Centres would be able to develop pools of learning experiences and to try them out in the classroom. The assistance of the training college faculty would of course be needed for this work. It may be

pointed out in this connection that some of the Extension Services Departments have already begun to organise workshops exclusively for developing learning experiences.

5. As curricular revisions are an important step in the development of learning experiences, the programme will have to be worked out in close collaboration with the Central and State Curriculum and Textbook organizations. It would also be worthwhile for all the State and Central agencies to develop handbooks for teachers of the different subjects giving them guidance in developing learning experiences. This work will also be done by the curriculum and special committees of State Education Boards wherever they are functioning.

6. As a corollary to curricular modifications, an elaboration of the syllabi indicating objectives and appropriate units which will help teachers in the developing worthwhile learning experiences will also have to be provided.

7. It would be necessary to select a few experimental schools which could take up the work of developing learning experiences as special projects. These institutions could be given necessary financial assistance in carrying out the experiments and in publishing the results. Details of these projects will have to be worked out carefully, and guidance and supervision provided for these schools through suitable agencies.

8. Suitable literature would have to be brought out on learning experiences by the Central and State Units. The Central Unit should take up the publication of sample learning experiences for the use of training colleges and Extension Services Departments. The latter could also take up the publication of learning experiences in the form of small booklets for distribution in their respective regions.

9. State Departments of Education could also help in the dissemination of these ideas to the schools through the Inspectorate.

The Conference may consider this very important question and suggest suitable measures which could be taken up for its successful implementation.

Class-work, assignment, monthly tests, regularity and neatness.	15 per cent.
(ii) Personal qualities like initiative, ingenuity, etc.	5 per cent.

Procedure of reporting internal assessment marks :

The marks are recorded and duly checked by the District Assessment Committees and then they are reported to the Board, prior to the final examination.

Procedure of Combination of internal and external assessment marks.

These marks are arithmetically added for declaring the results. But passing separately in both internal and external examination is a condition precedent for success.

Comparison of internal and external marks.

- (1) The range of marks is very low in the case of internal assessment as compared to the external examination.
- (2) There is a wide gap between standard deviation of the internal and external marks.
- (3) There are gaps showing block distribution of marks.
- (4) The pass percentages has in some cases gone up. But the average performance shows a tendency towards recession.

MAHAKOSHAL :

Objectives

- (1) To assess students on their overall achievements and not on the results of written sets at public examination only.
- (2) To ensure sustained interest in home work.
- (3) To ensure participation in co-curricular activities.
- (4) To promote regularity in attendance.

Year of introduction	1958
Weightage	100 per cent in general science and social studies and 20 per cent in the remaining subjects.
Criteria	Academic performance in the subject 10 per cent.

Participation in co-curricular activities 5 per cent.

Regularity of attendance in the subject 5 per cent.

Position with regard to cumulative record cards :

They are developed and maintained.

Procedure of reporting the internal assessment marks.

Marks are reported to the Board only once, prior to the final examination.

Procedure of combining internal and external assessment marks.

The marks are arithmetically added.

Comparison of internal and external marks.

- (1) Internal assessment marks are piled at the higher end of the distribution.
- (2) The range of internal assessment marks is lower than that external marks.
- (3) The correlation between the two ranges from low negative to high positive value.

PUNJAB :

Objectives

- (1) To make students work regularly.
- (2) To improve discipline in schools.

Year of introduction

1958; to be counted in the examination held in March 1960.

Weightage

20 per cent marks in core subjects and 25 per cent in electives. From 1961, it is 20 per cent in all subjects.

Criteria

Periodic test and home work.

Procedure of reporting the internal assessment marks.

The marks are reported to the Board three times a year, and a consolidated report is finally sent, prior to the examination.

Procedure of combining internal and external marks :

If the average of the internal assessment marks deviates by more than 10 per cent from the school average of the external exa-

mination marks in the subject, the internal assessment marks are scaled up or down to bring them to the level of the external examination marks.

VIDARBHA :

Objective :

- (1) To give weightage to the students' day-to-day work and eliminate the element of chance.

Year of introduction

1958

Weightage

20 per cent in all subjects.

Criteria

Periodic Tests.

Since 1961, other criteria such as participation in co-curricular activities, personality traits, etc. will be considered.

Position with regard to cumulative record cards.

C.R. cards are developed and maintained.

Procedure of reporting the internal assessment marks.

Marks are reported to the Board once, prior to the external examination.

Procedure of combination of internal and external assessment marks :

The marks are added arithmetically for declaring the results.

Supervision and guidance :

The Board has power to check the records of internal assessment in schools.

Comparison of internal and external marks.

- (1) Correlation between the two sets of marks is consistently very high.
- (2) Spread of internal assessment marks is normal and compares very well with that of external examination marks.

This study, general and preliminary as it has been, has helped to highlight some of the more common difficulties and to indicate the direction in which possible solutions lie.

1. Criteria for internal assessment :

One of the criteria generally observed is the periodical test. Other criteria have not yet been fully explored. In certain other cases, criteria which are given weightage have not been specifically laid down or clearly defined.

It would be necessary to work out a common definition of internal assessment to have a certain uniformity of criteria. Investigation should also be carried out to develop objective procedures and to evolve criteria agreed upon in the light of a common definition.

2. Feed-back by internal assessment :

Internal assessment is not fully utilised for bringing about improvement in teaching and learning. It is, therefore, necessary to work out procedures by which the results of internal assessment are given back to the schools and methods of fully utilising them are carefully developed. The Central Unit proposes to bring out a booklet on the use of assessment results to improve teaching and learning.

3. Maintenance of cumulative record cards :

Although many Boards have introduced these cards, the objectives for which they are introduced have not yet been made clear to teachers and as a consequence the cards are not properly developed or effectively maintained and utilised.

It is necessary to undertake an analytical study of these cards, the purpose for which they have been evolved and how far they have been able to achieve these purposes. This will have to be followed up by workshops and seminars where the objectives, uses and interpretation of these cards will be clarified to teachers. Manuals of instruction for the use and interpretation of these cards should also be prepared in the various States.

4. Tools for internal assessment :

Standardised achievement tests, interest, inventories etc, have not yet been made available in adequate number to our schools. Various training colleges and Psychology Bureaus have constructed and standardised a large number of achievement and other types of tests. These resources will now have to be mobilised to see how

far they could be utilized at the state and national level and what further work is necessary.

A study of the specific requirements of tests for internal assessment should be made by the Central Unit in co-operation with the Central Bureau of Educational and Vocational Guidance, on the basis of which a programme for further development of material should be drawn up. This will avoid duplication of work.

The co-operation of other agencies such as State Bureaus of Guidance, Bureaus of Psychology, Research Bureaus, State Evaluation Units and Training colleges should also be utilised. The training colleges have great potential in this matter.

5. Technical competence of teachers :

Teachers are not yet familiar with the concept and techniques of internal assessment. They will now have to be fully acquainted with both. This problem may be solved to some extent by supplying literature brought out by the Central Unit to the secondary schools in the country.

6. Co-ordination of standards of marking between different schools :

At present the standard of marking in internal assessment varies widely from school to school. It is necessary to bring about some uniformity in procedure of internal assessment by laying down suitable criteria for the purpose. The system of appointing reviewing committees followed in Bihar could well be adopted by other Boards and States to guide the schools in bringing about rationalised procedures of internal assessment and in maintaining minimum standard of evaluation.

7. Combining marks of internal assessment with those of external examination.

At present internal assessment marks are added arithmetically to the pupils' achievement in the external examination. The Punjab University adopts a system of scaling up and down on a certain basis, but even this system is not without its weaknesses. Studies will have to be undertaken to develop more scientific procedures of combining pupils' achievement in these two types of assessment.

8. Basis for declaring final results :

In the case of those Boards where the pupils' achievement in the internal assessment and external examination are not combined, the declaration of grades in the final results may present difficulties. It is, therefore, necessary to work out a common formula to serve as a basis of declaring the results.

The conference may consider this aspect of the examination reform and make recommendations on the following.

(a) All Boards should begin to give weightage to internal assessment to supplement the pupils' achievement in the external examination.

(b) Boards which have already introduced this system should evolve more scientific procedures to rationalize the programme.

(c) Boards which have been following the system of some time should initiate certain studies and surveys on specific aspects of internal assessment and make available the data so collected to other Boards in the country.

(d) A common definition of internal assessment and criteria on which it should be based should be worked out.

MEMORANDUM

ITEM VIII. To examine the secondary school results of the year 1960 in comparison with those of the previous years and suggest measures for further improvement.

The last Conference of Secretaries of Boards discussed at great length the problem of the large incidence of failures at the secondary school examination and made various recommendations to bring about improvement in the position. The All-India Council for Secondary Education at an earlier meeting had also devoted considerable attention to this question. The problem is, however, so complicated and persistent that intensive and persistent efforts over a period of years would be required to solve it. It would also be necessary to maintain a close comparative study of the results of the Final Examination from year to year to ascertain the progress and to work out suitable remedial programmes. As a first step in this matter some of the conclusions which have emerged out of the results of March, 1960 are placed before the Conference for consideration.

1. Over-all pass percentage of school final examinations of the last few years.

Year	No. appeared (in thousands)	No. passed (in thousands)	Pass per cent-
I	II	III	IV
1950-51	492·5	241·1	48·8
1951-52	585·5	261·1	44·7
1952-53	724·8	334·8	46·2
1953-54	818·6	397·6	48·5
1954-55	830·0	400·0	48·2
1955-56	920·0	429·5	46·7
**			
1958-59	940·0 (Approx.)	440·2 (Appprox.)	46·5(Approx.)
1959-60	1076·7	542·6	50·4

** Full figures for the years in between are not available.

It will be observed from the above table that the average pass percentage has hovered around 47·5 for the last several years, although the pass percentage in March, 1960 is slightly higher than that of the previous years.

2. Comparison of the performance of regular and private candidate in the Case of high and higher secondary school examinations of March, 1960.

The picture is, however, slightly different when we view the results of regular and private candidates separately, as shown in the abstract given below :

Comparison of the performance of regular and private candidates in the High School and Higher Secondary School Examinations of March 1960.

Candidates	High School (percentage)	Higher Secondary School (percentage)	Difference
A. Regular	56·72	52·10	4·62
B. Private	38·87	30·10	8·77
Difference	17·85	22·00	

Attention is also invited to table I in the pamphlet on "Examination Results of March, 1960". (Please see Appendix I) The pass percentage of regular candidates in the high school examination is 56·72 while that of regular candidates in the higher secondary school examination is 52·10, which is higher than the over-all pass percentage of the previous years. The corresponding figures for private candidates are 38·87 and 30·10 respectively. This supports our previous conclusion that it is more logical to publish the results of these two categories of students separately. Again, tables II to V given in Appendix XV indicate that the number of private candidates in some of the Boards has been steadily increasing from year to year. Some steps will have to be taken for restricting these numbers and also for diagnosing the reason for the rise. This point has also been dealt with under Item II.

3. Comparison between the total pass percentage of regular candidates of high and higher secondary school examinations and the pass percentage in English and mathematics.

At the last year's conference it was observed that English and mathematics are the two subjects which directly affect the total number of failures in the final examinations. The board-wise total pass percentage of regular high school students along with that of English and mathematics is given in Appendix II. Appendix III gives similar data with regard to the regular higher secondary school candidates.

The data given in these appendices show that the total pass percentage and the pass percentage in English maintain almost parallel levels, while the results in mathematics are generally higher. This would seem to indicate that the real trouble spot for most failures is English rather than Mathematics and, therefore, measures will have to be taken to improve the teaching and testing of English. It may, however, be observed that the performance of higher secondary school pupils is superior in English as compared with that of high school pupils.

In the light of these data the Conference may consider measures to improve the total results as rapidly as possible. This will, of course, involve the co-ordinated effort of several agencies such as State Education Department, Examination Boards, Training Colleges, Extension Services Department, the Directorate of Extension Programmes for Secondary Education with the Central Evaluation Unit, State Evaluation Units when they come up, and Associations of Teachers and Headmasters. Some of the steps will be as follows :

1. Bring about improvement in pupils' achievement in English and mathematics. This will call for intensive in service programmes through the co-ordinated effort of Extension Services Departments, the Directorate, Central Institute of English, Hyderabad and State Departments of Education.
2. Set up special State-level committees to survey and study the problem from year to year in an intensive manner and prepare a long-range plan of action.

3. Take necessary action to remedy the following defects which contribute in a greater or lesser degree to the final results :
 - a. Over-crowding in classes.
 - b. Double-shift system.
 - c. Heavy work-load on teachers.
 - d. Excessive co-curricular activities un-co-ordinated with the curricular programme.
 - e. Inadequate equipment.
 - f. Apathy on the part of teachers.
 - g. Low quality of textbooks.
 - h. Liberal policies of admission and promotion.
 - i. Frequent transfers of teachers and headmasters in the case of Government institutions.
 - j. Untrained and unqualified teachers.
4. The Training Colleges should make their pre-service training more effective by gearing their programme to educational objectives. The teacher-trainees should also be given sufficient training to make them better examiners and should be taught the techniques of evaluation so as to improve their teaching.
5. Provide greater diversification of courses so that pupils are able to pursue those lines of study for which they are most fitted.

APPENDIX I

1. Analysis of the school examination results of March, 1960.

The All India Council for Secondary Education at its first meeting held in July, 1959 considered at great length the problem of large failures at the secondary school examination every year and suggested certain remedies. Following the recommendations of the Council the Central Examination Unit made a study of the results of the secondary school examination held in March, 1959 and located factors which seem to contribute to these failures. The findings of this study were placed before the third conference of secretaries of boards in September, 1959. The conference made several recommendations and suggestions to improve the situation. These recommendations were forwarded to the Boards of Secondary Education for such action as was possible. The Central Examination Unit followed up the previous studies with an analysis of the results of the examination held in March, 1960 in order to see whether any improvement had been effected or not. Data were, therefore, collected from the Boards on the following aspects of the examinations :

1. The number of regular, private and total candidates who appeared at the high and higher secondary school examinations ;
2. The number of regular, private and total candidates who passed these examinations ;
3. The corresponding pass percentages ;
4. Pass percentage in English and mathematics.

The data thus obtained were analysed and classified under the following heads :

1. An over-all view of the results of all the Boards together.
2. Pass percentage of regular high school candidates.
3. Pass percentage of regular higher secondary school candidates.
4. Pass percentage of private high school candidates.

5. Pass percentage of private higher secondary school candidates.
6. Performance of pupils in English and mathematics.

The following paragraphs seek to give an analytical picture of the results of this year.

The over-all view

It is observed that 10,76,660 students appeared in the high and higher secondary school examinations held by the 18 Boards and Universities in the country. Out of these 5,42,578 pupils were declared successful. This works out to 50·5 per cent. The following table gives further detail about the over-all pass percentage of the regular and private candidates of the high and higher secondary school examinations.

TABLE I

A. High School Examinations

	Appeared	Passed	Percentage passed	Remark
Regular candidates	620,134	351,725	56·74	
Private Candidates	296,180	115,147	38·87	
Total	916,314	465,872	50·95	

B. Higher Secondary School Examinations

	Appeared	Passed	Percentage passed
Regular candidates	124,720	64,974	52·10
Private candidates	28,874	9,485	32·85
Total	1,53,594	74,459	48·48

C. Grand Total (High School and Higher Secondary Examinations)

	Appeared	Passed	Percentage passed
Regular candidates	744,854	416,699	55·94
Private candidates	3,25,054	124,632	38·34
Total	10,69,908	541,331	50·06

It will be observed from the above Table that the over-all pass percentage of regular candidates is much higher than that of private candidates in each case. The results of the candidates of both the categories put together show a drop in the pass percentage of 6 to 7 per cent. Private candidates are seen to constitute nearly 33 and 22 per cent respectively of the total number of candidates taking the high and higher secondary school examinations. It would, therefore, appear necessary to exercise some restriction on the growing numbers of private candidates and to check the tendency of students appearing as private candidates.

The average pass percentage of the secondary school examination during the First Five Year Plan was about 47.5. In 1959 it was about 47 per cent. Compared to these percentages the result of 50.4 per cent in 1960 presents a slightly brighter picture. The comparative percentages for regular candidates of high and higher secondary schools are 56.72 and 52.10 respectively and are even more encouraging.

II. Performance of regular high school students.

Table II gives the Board-wise figures of regular high school candidates who appeared in the examination of March, 1960.

TABLE II

S. No.	Name of Board/ University	Appeared	Passed	Percentage
1.	Secondary Education Board, Hyderabad.			
	(i) S.S.L.C.	34,878	14,901	37.00
	(ii) H.S.C. (Telengana area)	10,708	4,040	37.7
2.	Bihar School Examination Board, Patna.	56,117	34,475	61.4
3.	Board of Secondary Education, Madhya Pradesh Sub-office, Gwalior.	12,993	5,503	43.1

TABLE II (Contd.)

S. No.	Name of Board/ University	Appeared	Passed	Percentage
4.	Secondary School, Certificate Examination Board, Poona.			
	(i) S.S.C.	11,806	55,575	49·71
	(ii) H.S.C. (Marathwada)	5,501	1,513	27·50
5.	Board of Public Examination, Trivandrum.	58,184	22,049	37·9
6.	Board of Secondary Education, Madras.	51,774	27,004	52·1
7.	Board of Secondary Education. (M.P.) Jabalpur.	1,554	1,132	73·3
8.	Vidarbha Board of Secondary Education, Nagpur.	15,193	7,968	52·44
9.	Secondary Education Board, Bangalore.			
	(i) High School S.S.L.C. Examination, Mysore Area)	22,686	13,368	58·9
	(ii) S.S.C. (Bombay Karnatak)	11,008	5,749	52·1
	(iii) S.S.L.C. (Madras Karnatak)	4,498	3,003	66·7
10.	Board of Secondary Education, Orissa, Cuttack.	6,971	4,800	68·9
11.	Board of Secondary Education, Rajasthan Jaipur.	20,845	11,267	54·0
12.	Board of Secondary Education, West Bengal, Calcutta.	48,008	22,077	40·5

TABLE II (Contd.)

S. No.	Name of Board/ University	Appeared	Passed	Percentage
13.	Board of Higher Secondary and Intermediate Education, Allahabad.	1,68,724	70,539	41·8
14.	Punjab University, Chandigarh.	52,105	34,190	65·7
15.	Aligarh University.	221	164	52·1
16.	Board of Secondary Education, Delhi.	4,617	2,745	62·1
17.	Gauhati University.	14,950	7,712	51·6
18.	University of Jammu and Kashmir.	6,803	3,951	58·1

This Table shows that the pass percentages range from 27·50 to 73. The following Table indicates the frequency of examinations falling within different ranges of pass percentages.

TABLE III

Pass percentage	Examinations
Less than 50	8
50 to 60	8
60 to 70	5
Above 70	1

It will be observed that 18 Boards and Universities conducted 22 examinations for the regular high school students. Table III shows very clearly that if 70 per cent were fixed as the first target to be obtained in the improvement of results then practically every Board has to strive to reach this standard. Even 60 per cent target will find 16 Boards falling short of the mark, 8 Boards being very much below the level. As a large majority of students fall under

this category concerted efforts are obviously required to improve standard without delay.

III. Performance of regular higher secondary candidates.

Table IV gives the pass percentages of regular higher secondary students in 21 different examinations conducted by 12 Boards and one University.

TABLE IV

Pass Percentage of Regular Higher Secondary Candidates.

S. No.	Name of Board/ University	Appeared	Passed	Percentage passed	Remarks
1.	Secondary Education Board, Hyderabad.				
	(i) H.S. and M.P.	1,077	299	28.00	
	(ii) H.S.M.P.	2,757	1,250	45.00	
2.	Bihar School Examination Board, Patna.	188	113	60.1	
3.	Board of Secondary Education, Madhya Pradesh Sub-office Gwalior.	7,794	2,924	37.5	
4.	Secondary School Certificate Examination Board, Poona.	837	309	36.92	
5.	Board of Secondary (Multipurpose) Jabalpur.				
	(i) A Course M.P.H.S. Examination.	2,101	1,810	86.14	
	(ii) (Agr.) H.S. Course.	55	50	90.90	
	(iii) B. Course Pre-University, H.S.	1,078	401	37.29	

	(iv) B. Course Pre- University H.S. Arts Course.	2,247	1,129	50·02
	(v) B. Course Pre- University H.S. Commerce.	232	113	48·08
	(vi) Kala Niketan (T) H.S.	58	40	69·00
6.	Vidarbha Board of Secondary Education, Nagpur.	777	529	68·03
7.	(i) Secondary Educa- tion Board, Banga- lore H.S. (Hydera- bad Karnatak)	1,899	667	33·4
	(ii) H.S. (Hyderabad Karnatak) Multi- purpose.	884	216	24·2
	(iii) H.S. (Coorg.)	133	61	45·1
8.	Board of Secondary Education, Rajasthan, Jaipur.	5,685	2,296	40·4
9.	Board of Secondary Education, West Bengal, Calcutta.	10,061	6,226	61·8
10.	Board of H.S. and Intermediate Education, Allahabad.	70,037	31,642	45·18
11.	Punjab University, Chandigarh.	10,862	10,259	94·45
12.	Board of Secondary Education, Delhi.	6,277	4,333	69·00
13.	University of Jammu and Kashmir.	518	307	52·8

The data shown in Table IV are seen to be not very different from that of regular high school students. The percentage ranges

between 24.2 and 90.90. The results in Punjab are even higher, namely 94.45 but this represents the core subjects only. The results of the other 20 examinations fall under the following levels of range :

TABLE V

Pass Percentage	Examination
Below 40	6
40 to 50	5
50 to 60	2
60 to 70	5
Above 70	2

It is, thus, seen that the range of pass percentage in respect of regular higher secondary candidates is very wide. Six Boards fall below 40 per cent while 5 fall between 40 and 50 and another 5 between 60 and 70. This phenomenon would appear to require further investigation regarding course content, difficulty of question papers, scoring procedures and passing levels of different boards.

IV. Performance of private high school candidates.

The Board-wise picture of the performance of private high school candidates is shown in Table VI.

TABLE VI

Pass Percentages of Private High School Candidates.

S. No.	Name of Board/ University.	Appeared	Passed	Passed percentage	Re-marks
1.	Sec. Education Board, Hyderabad. H.S.C. (Telengana area)	6,752	1,247	18.48	
2.	Bihar School Exami- nation Board, Patna.	30,993	14,491	46.7	
3.	Board of Sec. Educa- tion, Madhya Pradesh, Sub-office, Gwalior.	13,213	3,044	23.03	
4.	Secondary School Certificate Exam. Board, Poona.				
	(i) S.S.C.	8,738	1,407	16.10	
	(ii) H.S.C. (Marath- wada)	963	374	38.84	
5.	Board of Public Exam. Trivandrum.	22,086	6,553	29.6	
6.	Board of Sec. Edu. Madras.	3,017	462	15.3	
7.	Board of Secondary (Multipurpose) Jabal- pur.	1,649	466	28.2	
8.	Vidarbha Board of Sec. Education, Nag- pur.	5,337	1,858	34.83	
9.	Secondary Education Board, Bangalore.				
	(i) High School (S.S.- L.C. Ex. Mysore area)	6,109	2,985	48.8	

	(ii) S.S.C. (Bombay Karnatak)	1,212	350	46.2
	(iii) S.S.L.C. (Madras Karnatak.)	448	48	10.7
10.	Board of Secondary Education, Rajasthan, Jaipur.	17,889	5,399	30.2
11.	Board of Secondary Education, Orissa, Cuttack.	4,026	1,176	29.3
12.	Board of Secondary Education, West Ben- gal, Calcutta.	52,812	10,686	25.1
13.	Board of H.S. & Inter- mediate Edu. Allahabad.	44,729	12,442	27.8
14.	Punjab University, Chandigarh	58,770	17,501	29.7
15.	Aligarh University, Aligarh.	583	304	52.1
16.	Board of Secondary Education, Delhi.	183	80	43.7
17.	Gauhati University, Gauhati.	8,371	2,331	27.8
18.	University of Jammu and Kashmir.	2,741	664	24.4

It will be seen from this table that out of the pass percentages that range from 10.7 to 52.1 of the 22 examination results, only one is above 50 per cent as against 14 in the case of regular high school candidates.

V. Performance of private higher secondary candidates.

Table VII gives the pass percentages of private candidates who took the higher secondary examinations in different Boards during March, 1960.

TABLE VII

Pass Percentage of Private Higher Secondary Candidates

S. No.	Name of Board/ University	Appeared	Passed	Passed percent- age	Re- mar- ks.
1.	Sec. Education Board, Hyderabad.				
	(i) H.S.C. (Telengana area)	6,752	1,247	18.48	
	(ii) H.S.M.P. School leaving Certificate. (Telengana Area.)	698	185	26.4	
2.	Board of Secondary Education, Madhya Pradesh, Sub-Office Gwalior.	161	59	36.6	
3.	Board of Secondary (Multipurpose) Jabal- pur.				
	(i) A. Course M.P. H.S. Examination	37	21	56.76	
	(ii) Agr. H.S. Course	2	1	50.00	
	(iii) B. Course Pre- University H.S. Course.	55	22	40.00	
	(iv) B. Course Pre- University H.S. Arts Course.	264	135	51.14	
	(v) B. Course Pre- University H.S. Commerce.	11	6	54.50	
4.	Vidarbha Board of Secondary Education Nagpur.	100	22	22.00	

5.	Secondary Education Board, Bangalore.			
	(i) H.S. (Hyderabad Karnatak)	1,226	380	29.3
	(ii) H.S. (Hyderabad Karnatak) Multi-purpose.	231	31	10.7
6.	Board of Secondary Education, Rajasthan, Jaipur.	669	267	39.91
7.	Board of H.S. & Intermediate Education, Allahabad.	25,001	81,70	32.67
8.	Board of Secondary Education, Delhi.	369	186	50.4

This table shows that the results of this category of candidates range between 10.7 and 56.75 per cent. Although in the case of 4 out of 14 examinations the percentage is above 50, the point loses significance when the actual number involved is considered. For example, in one examination, only 2 candidates appeared of which 1 passed while in another 11 appeared and 6 passed. Even in the case of the examination where the pass percentage is the highest, only 37 candidates appeared. Another interesting point is that out of 35,626 candidates who appeared privately in all the eight Boards, as many as 25,001 belong to one Board. Consequently the pass percentage of this Board (32.67) has become the determining factor of the total pass percentage (30.1). When the position is reviewed after excluding that board, the average pass percentage of the remaining boards drops down to 25. This would seem to indicate that it is more difficult for private candidates to pass out of the higher secondary examinations than the high school examinations.

VI. Performance of pupils in English and mathematics.

Table VIII shows the Board-wise pass percentage in English and mathematics of regular and private candidates who appeared in the high and higher secondary school examinations.

TABLE VIII

Pass percentage in English and mathematics.

S. No.	Name of Board/University	Name of examination	Percentage of passes in English		Percentage of passes in Mathematics		Remarks
			Regular/	Private	Regular/	Private	
1.	Secondary Board, Hyderabad.	(i) S.S.L.C. High school.	Reg. 46·00	Pri. 34·00	Reg. 67·00	Pri. 55·00	
		(ii) H.S. & M.P. School Leaving Certificate.	31·00	—	53·00		
		(iii) H.S.C. (Telengana area)	35·4	14·8	60·9	36·8	
		(iv) H. S. M. P. School Leaving Certificate (Telengana area.)	36·9	11·1	85·7	35·2	
2.	Bihar School Examination Board, Patna.	(i) Higher Secondary.	71·8		Elementary Maths.	62·3	
		(ii) High School.	64·3		Advance Maths. Ele. Maths. Adv. Maths.	86·1 78·0 77·6	
3.	Board of Sec. Education, Madhya-Pradesh Gwalior.	(i) High School.	51·85	23·85	79·82	54·02	
		(ii) Higher Sec. School.	59·75	38·1	55·04	51·14	

4. Secondary School Certificate Exam. Board, Poona.	S.S.C.	Lower level Higher Elem. Alge * Arith.				
		42·76	76·40	71·65	76·80	
		*43·69 (Regular & Private both.)				
	H.S.C. (Marath- wada.)	22·06 (R & P)			38·72 (R & P)	
5. Board of High School. public Exam. Tri- vandrum.	H.S.M.P. School Certificate Exam. Bo- ard, Poona.	36·46 (R & P)			67·27 (R & P)	
	6. Board of Madras.	S.S.L.C.	40·00	42·00	(42 Composite State average Maths.)	
	7. Board of Secondary (Multipurpose) Edu. Jabalpur.	(i) A. Course M. P. H. S. Ex- amination.	89·44	82·75	81·22	76·92
		(ii) Agr. H. S. Course.	75·00	50·00	80·00	50·00
(iii) 2 year High School Course.		79·61	32·07	88·97	59·65	
(iv) B. Course Pre-University H.S. Course.		63·41	72·22	45·83	30·30	

	(v) B. Co- urse Pre- University H.S. Cou- rse.	46·21	52·65	—	—
	(vi) B. Co- urse Pre- University H.S. Com- merce.	58·69	62·05	—	—
	(vii) Kala Niketan	55·02	—	85·05	—
	(T) H. S.				
8. Vidarbha Board of Secondary Educa- tion, Nag- pur.	(i) High School.	85·00	51·5	61·7	42·9
	(ii) H. S. School.	68·00	31·32	79·00	25·71
9. Secondary Edu. Bo- ard, Banga- lore.	(i) High School. S.S.L.C. (ex. Mysore area) S.S. C. (Bom- bay Kar- nataka)	61·4	53·6	80·2	72·8
	S. S.L. C. (Madras Karnataka)	49·9	38·2	72·7	38·9
	(ii) Higher Secondary. (Hyd. Kar- nataka)	28·0	27·1	46·3	46·6
	Higher Se- condary. (Hydera- bad Carna- taka Mul- tipurpose)	34·2	46·6	66·4	59·9

	Higher Se- condary (Coorg.)	58·6 (64)			82·0 (46)			
10.	Board of Secondary Education, Orissa, Cuttack.	High Sc- hool	48·5	15·5	60·5	24·2		
11.	Board of Secondary Education, Rajasthan.	HighComp. School Opt.	64·29 61·39	43·92 44·79	86·74 76·62	55·75 63·68 (Opt.)		
		H.S. Comp- School Opt.	36·46 74·45	32·47 75·00	— 51·96	— 49·02 Opt.	Comp.	
12.	Board of Secondary Education, West Ben- gal, Calcu- tta.	High Sc- hool Higher Sec. School.	43·1 74·4	30·4 —	74·2 81·5	67·9 —		
13.	Board of H.S. & In- termediate Education, Allahabad.	High School. Interme- diate(Hi- gher Sec.)	I 52·2 48·6	II 42·4 54·79	III — 56·7	I 69·7 62·93	II 50·0 37·9	III — 36·3
14.	Punjab University, Chan- digarh.	High School. HigherSe- condary SchoolCo- re Subjects.	73·2 82·38	39·8 H.H. & Arith.	78·2 95·86	48·2 87·3 54·1		
15.	Aligarh University, Aligarh.	High School.	74·2	52·1	81·9	55·0		
16.	Board of Secondary hool	High Sc- High-	64·3 77·8	53·6 58·6	69·6 85·7	60·6 69·00		

	Education, her Delhi.	Sec. School.				
17.	Gauhati University, Gauhati.		39·6	18·00	56·00	20·00
18.	University of Jammu and Kash- mir.	High School. Higher Se- condary School.	80·8	53·2	62·00	51·8
			64·7	—	88·8	—

It is observed that the pass percentage in English and mathematics is better in the case of regular candidates than in the case of private candidates. Again the performance of higher secondary school students is generally superior to that of the high school pupils. It is also seen that the performance in mathematics is generally better than that in English when the results in English are compared with the corresponding over-all results given earlier in different tables. It will be observed that the results in English maintain a close parallel with the over-all pass percentage of any examination. This would seem to support our previous observations that English is the sole factor in deciding the pass or failure of a candidate in the entire examination.

Summary.

1. To over-all percentage of 1950 registers a slight improvement over that of the previous years. The improvement is, however, not very significant and more intensive efforts are necessary to ensure further improvement.

2. The practice of declaring results of regular and private candidates separately has helped in developing a more realistic picture of examination results.

3. It is generally more difficult to pass a higher secondary examination as a private candidate than the high school examination.

4. The success or failure of a pupil is largely determined by his success or failure in English. Urgent and intensive measures are, therefore, necessary to bring about improvement in this subject in an effort to improve the general results.

5. Mathematics does not seem to be as much responsible as English in deciding the incidence of failures.

APPENDIX II

Total pass percentage of regular high school students and the corresponding pass percentage in English and mathematics at March 1960 examinations.

S. No.	Boards of Secondary Education	Total pass percentage	Pass percentage in English	Pass percentage in mathematics
1.	Secondary Education Board, Hyderabad.			
	(i) S.S.L.C.	37·00	46·00	67·00
	(ii) H.S.C. (Telengana Area)	37·70	35·4	60·9
2.	Bihar School Examination Board, Patna.	61·4	64·3	78·00
3.	Board of Secondary Education, M.P. Gwalior.	43·1	51·85	79·02
4.	Secondary School Certificate Examination Board, Poona.			
	(i) S.S.C.	49·71	42·75	71·65
	(ii) H.S.C. (Marathwada)	27·50	22·06*	38·78*
5.	Board of Public Examination, Trivandrum	37·0	—	—
6.	Board of Secondary Education, Jabalpure.	73·3	70·61	88·97
7.	Vidarbha Board of Secondary, Education, Nagpur.	52·44	65·00	61·71
8.	Secondary Education Board, Bangalore.			
	(i) S.S.L.C. (Mysore Area)	58·90	61·4	80·2

APPENDIX II (Contd.)

S. No.	Board of Secondary Education	Total pass percentage	Pass percentage in English	Pass percentage in mathematics
	(i) S.S.C. (Bombay-Karnatak)	52.10	49.9	72.2.2
	(iii) S.S.L.C. (Madras-Karnatak)	66.70	63.4	59.1.1
9.	Board of Secondary Education, Madras.	52.1	40.0	42.0.0
10.	Board of Secondary Education, Cuttack.	68.9	48.5	60.5.5
11.	Board of Secondary Education, Rajasthan.	54.0	64.29	86.7.74
12.	Board of Secondary Education, West Bengal, Calcutta.	40.5	43.1	74.2.2
13.	Board of High School and Intermediate Education, Allahabad.	41.8	52.2(I)	69.7.7(I)
14.	Punjab, University, Chandigarh.	65.6	73.2	78.0.02
15.	Aligarh University, Aligarh.	52.10	74.2	81.9.9
16.	Board of Secondary Education, Delhi.	62.10	64.3	69.3.3
17.	Gauhati University.	51.60	39.9	56.0.00
18.	Jammu and Kashmir University, Srinagar.	58.1	80.8	62.0.00

* Percentage of both regular and private candidates.

APPENDIX III

Total pass percentage and pass percentages in English and mathematics of regular students who appeared at the higher secondary examination held in March 1960.

S. No.	Boards of Secondary Education	Total pass percentage	Pass percentage in English	Pass percentage in mathematics
1.	Secondary Education Board, Hyderabad.			
	(i) H. S. and M. P. (School Leaving Certificate)	28·00	31·00	53·00
	(ii) H.S.M.P. (School Leaving Certificate)	45·00	36·9	85·7
2.	Bihar School Examination Board, Patna.	60·1	71·8	62·3
3.	Board of Secondary Education, Madhya Pradesh, Gwalior.	37·5	59·75	55·04
4.	Secondary School Certificate Examination Board, Poona.	36·92	36·46*	—
5.	Board of Secondary Education, Jabalpur.			
	(i) A course M.P.H.S. examination.	86·14	89·44	81·22
	(ii) Agriculture H. S. course.	90·90	75·00	80·00
	(iii) B. Course pre-university H.S.	37·29	63·41	45·83
	(iv) B. course pre-university H. S.	50·02	46·21	—
	(v) B. course pre-university H.S. commerce.	48·08	58·69	—

APPENDIX III (Contd.)

S. No.	Boards of Secondary Education	Total pass percentage	Pass percentage in English	Pass percentage in mathematics
	(vi) Kala Niketan (T) H.S.	69·00	55·02	85·05
6.	Vidarbha Board of Secondary Education, Nagpur.	68·03	68·00	79·00
7.	Secondary Education Board, Bangalore.			
	(i) H.S. (Hyderabad Karnatak)	33·4	28·0	46·3
	(ii) H.S.M.P. (Hyderabad Karnatak)	24·2	34·2	66·4
	(iii) H.S. (Coorg)	45·1	58·6	82·0
8.	Board of Secondary Education, Rajasthan, Jaipur.	40·4	36·46	—
9.	Board of Secondary Education, West Bengal, Calcutta.	61·8	74·4	81·5
10.	Board of H. S. and Inter. Education, U.P., Allahabad.	45·18	48·6 (I)	62·95 (I)
11.	Punjab University, Chandigarh.	94·45	82·38	95·86
12.	Board of Secondary Education, Delhi.	69·00	77·8	85·7
13.	University of Jammu & Kashmir, Shrinagar.	52·8	64·7	88·8

* Percentage of both regular and private) candidates.